CS609-System Programming
(Solved Macq's)
TOPIC 93 to 190

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1. The GetCommandLine() function returns the command line as a single_____
   - Float variable
   - Integer Array
   - Integer Variable
   - Character string Topic 101
2. Simple job management shell will allow _____ commands to run.
   - Two
   - Five
   - Three Topic 104 (jobbg,jobs,kill)
   - Four
3. In job management shell the shell uses ____ specific file keeping track of process ID and other related information
   - Shell
   - Process
   - System
   - User Topic 104
4. Process identify can be obtained from the _____ structure.
   - CreateProcess()
   - CREATE_PROCESS()
   - PROCESS_INFORMATION Topic 93
   - GetProcessInfo()
5. If the system is _____ time is multiplexed among multiple processes in an interleaved manner.
   - Uniprocessor system Topic 99
   - Linear processor system
   - Multicore processor system
   - Multiprocessor system
6. If a system is _____ then windows scheduler can run process threads on separate processors.
   - Uni processor
   - Linear processor
   - Single core processor
   - Multiprocessor Topic 99
7. FILETIME parameter of GetThreadTime() function is a ____ bit value.
   - 32
   - 8
   - 16

- 64 Topic100

8. Closing the child process handle _____ the process.
   - Does not create
   - Create
   - Destroy
   - Does not destroy Topic 93
9. Closing the child process only closes the access of the _____.
   - All parent process
   - Parent process Topic 93
   - All children processes of parent process
   - Child process
10. In windows, there are _____ ways to get command line parameter for a process.
   - Two Topic 96
   - Four
   - Five
   - Three
11. Ip ApplicationName handle's value _____ be NULL.
   - Should
   - Should not According to me
   - May
   - May not
12. Control of a running fiber can be given to another fiber by using --------- function.
   - GetCurrentFiber()
   - SwitchToFiber() Topic 129
   - CreateFiber()
   - ConvertThreadToFiberEx()
13. A thread can enable fiber operation by calling _____function.
   - GetCurrentFiber()
   - SwitchToFiber()
   - CreateFiber()
   - ConvertThreadToFiberEx() Topic 129
14. Inherited handles are _____ copies that a parent and child might be accessing.
   - Connected
   - Similar
   - Distinct Topic 118
   - Related
15. A fiber can obtain its identity by calling _____function.
   - GetFiberData()
   - GetCurrentFiber() Topic 129
   - GetFiberId()

- GetFiberIdentify()

16. The _____ function is used to obtain the process handle using the process ID.
    - openProcesses()
    - GetCurrentProcess()
    - OpenProcess() Topic 93
    - OpenprocessID()
17. Parent process usually creates a _____ handle if parent and child process require ____ access rights.
    - Duplication, same
    - Duplication, different Topic 94
    - New, same
    - New, different
18. There are ------ APIs to manage fiber.
    - 10
    - 9
    - 7 Topic 129
    - 8
19. One process can finish another process using the function _____
    - FinishProcess()
    - CreateProcess()
    - ExistProcess()
    - TerminateProcess() Topic 95
20. The simplest form of synchronization can be achieved through___ construct.
    - Run
    - Halt
    - Lock
    - Wait Topic 96
21. The single object for which the process waits is activated by _____.
    - IpHandle
    - bWaitAll
    - hHandle Topic 96
    - nCount
22. The array of handles for which the process wait is activated by _____
    - IpHandle Topic 96
    - hHandle
    - nCount
    - bWaitAll
23. _____is the number of objects in an array. Should not exceed MAXIMUM WAIT OBJECTS
    - IpHandle

- hHandle
- nCount Topic 96
- bWaitAll

24. _____is the timeout period for wait. 0 for no wait and INFINITE for indefinitewait.
    - IpHandle
    - hHandle
    - nCount
    - dwMilliseconds Topic 96
25. _____handle describes if it's necessary to wait for all the objects to get free
    - IpHandle
    - hHandle
    - nCount
    - bWaitAll Topic 96
26. How many The possible return values are___
    - 2
    - 3
    - 4
    - 5 Topic 95
27. The timeout period for wait() function is measured in _____.
    - Millisecond Topic 96
    - Kilo hertz
    - Mega hertz
    - Microsecond
28. Its not a good idea to use _____ within the program as it will not give it a chance to release resources.
    - createProcess()
    - TerminateProcess()
    - ExitProcess() Topic 95
    - FinishProcess()
29. A new fiber can be created by using_____
    - ConvertThreadToFiberEx()
    - ConvertThreadToFiber()
    - CreateFiber() Topic 129
    - GetFiber()
30. In Environment Block, IpName is a ____ name.
    - Stack
    - Array
    - Process
    - Variable Topic 97

31. In Environment Block, GetEnvironmentVariable() function returns _____ in case of failure.
    - 0 Topic 97
    - NULL
    - -1
    - UNDEFINED
32. In Environment Block, PATH is an example of an environment _____
    - Stack
    - Array
    - Process
    - String Topic 97
33. An Environment Block is associated with _____ process(es) in the system.
    - Some
    - No
    - Each and every Topic 97
    - Exactly one
34. In Environment Block (EB), each string is _____
    - Five character long
    - Null terminated Topic 97
    - Undefined
    - Empty
35. The wait() function is limited to _____ handles.
    - 32
    - 8
    - 64 Topic 98
    - 16
36. A _____ value will cause a thread to move from the running state to the ready state.
    - Negative
    - INFINITE
    - 1
    - 0 Topic 127
37. Fiber which is shared to different threads_____
    - Should not access private data
    - Should not access global data
    - Should access thread specific data
    - Should not access thread specific data Topi 128
38. Fibers are scheduled by the _____
    - Hardware
    - Operating system
    - Application Topic 128

- BIOS

39. IPC stands for
    - Inter process communication My Point of View
    - Inter privacy communication
    - Information process communication
    - Information and privacy communication
40. The sleep function allows a thread to move the ____ to the ____ state.
    - Running, Suspended
    - Running, terminated
    - Running, ready
    - Running,wait Topi 127
41. The function SwitchToThread() provides a way for a thread to yield its processor to another _____ thread if there is one that is _____ to run.
    - Ready, Running
    - Running, Running
    - Ready, Ready Topic 127
    - Running, Ready
42. The time period in sleep function is specified in _____.
    - Seconds
    - Milliseconds My point of View
    - Nanoseconds
    - Microseconds
43. Default stack size for a thread is _____.
    - 1MB Topic 126
    - 1 Byte
    - 1 Bit
    - 1KB
44. A scheduler will move a _____ threads to the _____ state if the threads time slice expires without the thread waiting.
    - Waiting, Waiting
    - Running, Ready Topic 125
    - Running, Waiting
    - Waiting, Ready
45. When a thread is suspended it goes into _____
    - Terminated state
    - Waiting state
    - Suspended state
    - Ready state Topic 125
46. A thread that is ready but do not have required resource will go into _____
    - Running state

- Suspended state
- Waiting state My point of View
- Execution state

47. The scheduler will run the _____ priority ____ thread when a processor becomes available.
    - Highest, ready Topic 125
    - Lowest, ready
    - Highest, running
    - Lowest, running
48. If there are no THREAD_PRIORTY_TIME_CRITICAL thread, the process will run _____ first.
    - THREAD_PRIORTY_LOWEST
    - THREAD_PRIORTY_NORMAL My point of View
    - THREAD_ORIORITY_BELOW_NORMAL
    - THREAD_PRIORTY_IDLE
49. Which of the following priority is the highest class in the thread?
    - THREAD_PRIORTY_ABOVE HIGHEST
    - THREAD_PRIORTY_TIME_CRITICAL My point of View
    - REALTIME_ORIORITY_CLASS
    - THREAD_PRIORTY_HIGHEST
50. The range of relative thread priorities is between_____.
    - 0 to 1
    - 0 to 4
    - -2 to +2 (+-2) Topic 123
    - -1 to +1
51. Which of the following thread priorities will run first?
    - Thread with THREAD_PRIORTY_ABOVE_NORMA My point of View
    - Thread with THREAD_PRIORTY_BELOW_NORMAL
    - Thread with THREAD_PRIORTY_ _IDEAL
    - Thread with THREAD_PRIORTY_NORMAL
52. In windows, most common processes have _____ priority class
    - HIGH_PRIORTY_CLASS
    - IDLE_PRIORTY_CLASS
    - NORMAL_PRIORTY_CLASS My Point View
    - REALTIME_PRIORTY_CLASS
53. The value returned using TIsSetValue() function is in the form of _____
    - BOOL My Point of View
    - INT
    - LPVOID
    - DWORD

54. In Thread Local Storage (TLS) arrangement, row represents _____ while column represent _____
    - Thread TLS Index Topic 123
    - Process Number, TLS Index not sure
    - TLS index, Thread
    - Thread, process Number
55. Which of the following function frees the specified index numbers?
    - TIsClear()
    - TIsFree() Topic 123
    - TIsReSet()
    - TIsDelete()
56. API is used to allocate the index and it returns the TLS index in theform of the double word
    - TIsClear()
    - TIsAlloc() Topic 123
    - TIsReSet()
    - TIsDelete()
57. _____Provided valid indexes are used, The programmer can access TLS spaceusing these simple GET/SET APIs
    - TlsGetValue ()
    - Both A and C Topic 123
    - TlsSetValue ()
    - TIsDelete()
58. In the form of failure, TIsAlloc() function returns_____.
    - DWORD
    - 0
    - -1 Topic 123
    - BOOL
59. Which of the following is a correct statement?
    - Every worker work with multiple processors on multiple processor
    - Every worker work as a separate thread on a separate processor Topic 122
    - Every worker work as a separate thread on a single processor
    - Every worker work with multiple processors on single processor
60. Which of the following is an optimal situation?
    - After certain limit processor speed can also be enhanced
    - After certain limit processor speed cannot be enhanced Topic 122
    - Multiprocessing is not responsible for multiple flows of execution
    - Output of parallel program should not be same when it is serialized
61. Which of following statement is incorrect?
    - Program performance can be scaled without any certain limit.

- Program performance can be enhanced by using multithreading.
- Program performance can be enhanced with Parallelism.
- Program performance scales automatically, up to some limit.

62. Four threads are created i.e. thread 0, thread 1, thread 2, and thread 3 and are running to sort a large file, select the most appropriate statement?
    - Wait for thread 1 to complete and merge it with thread 2.
    - Wait for thread 0 to complete and merge it with thread 2.
    - Wait for thread 1 to complete and merge it with thread 0. My point of view
    - Wait for thread 2 to complete and merge it with thread 0.
63. Why a file is always mapped before accessing it?
    - To access it just like accessing some data from main memory My point of view
    - To make it secure
    - To reuse it any time
    - To access it in the form of LinkedList
64. Once all the threads are created, then can be run using _____ function.
    - ResumeThread()
    - ReadyThread()
    - RunThread() Topic 121
    - StartThread()
65. The basic difference between boss-worker thread model and client-server model is _____
    - In boss worker all the thread are run at the boss's end, but in client-server model, each client run a different thread
    - In the client-server all the thread are run at the server end, but in the boss worker model, each worker runs different thread Conceptual
66. Which of the following is not a thread model?
    - Peer-to-peer Topic 119
    - Pipeline
    - Boss-worker
    - Client-server
67. In client server model, rather than_____ work is done _____
    - Concurrently, sequentially
    - Problematic, Efficiency
    - Sequentially, Concurrently Topic 119
    - Linear, Straight
68. In which of the following models, work moves from one thread to the next thread?
    - Peer-to-peer Model
    - Pipeline Model Topic 119
    - Boss-worker Model
    - Client-server Model

69. The _____ flag is set to be _____ in the CreateProcess() function, which will determine whether child process will inherit copies of parent open handles.
    - bInheritFlag, FALSE
    - bInheritHandle, TRUE My point of View
    - bInheritFlag, TRUE
    - bInheritHandles, FALSE
70. Inherited handles are _____ copies that a parent and child might be accessing
    - Similar
    - Connected
    - Distinct Wikipedia
    - Related
71. The get.JobNumber() function looks into the file for a vacant place. If no place is available, It appends a new record at the_____
    - Next
    - Start
    - Middle
    - End My point of View
72. In getting a job number, the job Management Shell uses a number of job management functions to manage jobs information within the _____ life.
    - Process
    - User Topic 103
    - Shell
    - System
73. Fiber management occurs at the _____ level.
    - Hardware
    - User space Topic 128
    - Kernel
    - BIOS
74. In Asynchronous input/ Output _____.
    - Input from the keyboard will be taken after the song is ended.
    - Song cannot be played until the other operations are not completed.
    - Song can be played with other operations being executed same time.

      Topic 119 also Conceptual (correct Accordingly)

    - Two operations cannot be run at the same time.
75. The first two parameters in argc will be _____ and ____ respectively.
    - Process name, pattern which is to be searched Topic 118
    - Inputted file names, pattern to be searched
    - Pattern to be searched, process name
    - Inputted file names, process name

76. Total number of files inputted, can be obtained with _____-
    - Argc-1
    - Argc-2 Topic 118 (Confusion kindly Correct Accordingly)
    - Argc-3
    - Argc
77. C Library Threading functions are _____ than windows library functions but not _____
    - Simpler, Hard
    - Hard, Simpler
    - Diverse, Simpler
    - Simpler, Diverse Topic 118
78. LIBCMT is a _____
    - BIOS Library for thread
    - Java Library for threads
    - C Library for threads Topic 118
    - Windows Library for threads
79. _____function is used to extract ____ from a string.
    - gettok(), Token
    - getTok, String
    - strtok(), String
    - strtok(), Token Topic 118
80. The return type of _beingthreadex() function _____
    - is HANDLE, but we need to type caste it for further processing.
    - Is not HANDLE, but we cannot type caste it for further processing.
    - is not HANDLE, we need to type caste it for further processing.

      Topic 118 Conceptual
    - is HANDLE, but we don't need to type caste for further processing.
81. _____ library function are thread safe than _____ library functions.
    - C, java
    - Java, C
    - C, Windows Topic 118
    - Windows, C
82. Windows treats threads as _____.
    - Objects Topic 116
    - Threads
    - Processes
    - Classes
83. When a thread exits, the thread _____ is deallocated and the handle referring to the thread in invalidated.
    - Stack Topic 113
    - List

- Queue
- Array

84. ResumeThread() function will _____.
    - Decrease the value of suspend count Topic 112
    - Reset the value of suspend count
    - Increase the value of suspend count
    - Not affect the value of suspend count
85. By default, the value of Suspend count, when creating a thread, is_____.
    - 2
    - 1
    - 0 Topic 112
    - -1
86. Which of the following version of windows was not compatible with GetProcessIdOfThread() function?
    - Windows 2003
    - Windows 7
    - Windows NT
    - Windows XP Topic 115
87. Which of the following function can be used to map a process with a thread?
    - GetProcessIdOfThread() My Point of View
    - DWORD ResumeThread (HANDLE hThread)
    - DWORD SuspendThread (HANDLE hThread)
    - GetThreadOPendingFlag()
88. A thread will execute if and only if its Suspend Count value is _____
    - Non zero
    - Above 1
    - 0 Topic 115
    - 1
89. Threads can also be treated as parent and child although the _____ is unaware of that.
    - Kernel
    - Thread
    - Program
    - Operating system Topic 112
90. Threads share resources within a _____
    - Code
    - Program
    - Thread
    - Process Topic 110
91. Threads uses the space assigned to a _____
    - Thread

- Process Topic 111
- Code
- Program

92. In a multi-threading system, multiple threads may exist within a single _____
    - Thread
    - Process Topic 109
    - Code
    - Program
93. _____ is an independent unit of execution within a process.
    - Thread Topic 109
    - Process
    - Code
    - Program
94. A job object is used to _____ process execution time and obtain user time statistics.
    - Limit Topic 108
    - Write
    - Read
    - Open
95. The getJobNumber() function looks into the file for a vacant place. If no place is available, it appends a new recover of the file.
    - Start
    - Next
    - Middle
    - End My Point of View
96. In job Management Shell, the shell uses _____ specific file keeping track of process ID and other related information.
    - User Topic 104
    - Process
    - Shell
    - System
97. In finding a Process ID, the FindProcessId() obtains the process ID of the given job number. It simply looks on job number and _____ the record at the specific location.
    - Sums
    - Executes
    - Reads Topic 106
    - Writes
98. Simple job management shell will allow _____ commands to run.
    - Two
    - Three Topic 104 (Jobbg, jobs, kill)
    - Four

- Five

99. In listing background jobs, the job management function uses display jobs () function. This function _____ a file
    - Run
    - Start
    - Process
    - Open Topic 105

100. In Job Objects, firstly a job object is created using CreateJobObject(). It _____ a name and security attributes.
    - Writes
    - Closes
    - Uses Topic 107
    - Throws

101. Control of a running fiber can be given to another fiber by using _____ function.
    - GetCurrentFiber()
    - SwitchToFiber() Topic 129
    - CreateFiber()
    - ConvertThreadToFiberEx()

102. A thread can enable fiber operation by calling_____ function.
    - GetCurrentFiber()
    - SwitchToFiber()
    - CreateFiber()
    - ConvertThreadToFiberEx() OR ConvertThreadToFiber() Topic 129

103. Fiber can obtain its identity by calling _____ function.
    - GetFiberData()
    - GetCurrentFiber() Topic 129
    - GetFiberId()
    - GetFiberIdentity()

104. There are _____ APIs to manage fibers.
    - 10
    - 9
    - 7 Topic 129
    - 8

105. A new fiber can be created by using_____
    - ConvertThreadToFiberEx()
    - ConvertThreadToFiber()
    - CreateFiber() Topic 129
    - GetFiber()

106. The wait() function is limited to _____ handles
    - 32

- 16
- 8
- 64 Topic 98

107. Windows OS does not have any structure that keeps track record of the _____ processes.

- Child
- Grand-child
- Parent
- Parent-Child My point of View

108. In comparison of DLL, executable library files are linked at _____ time.

- Link
- Run
- Compiler My Point of View and GOOGLE
- Load

109. Interlocked functions are _____to use.

- Simpler, Faster but hard
- Simpler, Faster and easy Topic 135
- Not simpler but faster and easy
- Simpler easy but slow

110. Thread should not change the _____ environment.

- Process Topic 137
- Hard disk
- Integer
- Ram

111. Which of the following function can be used to map the process with thread?

- DWORD Resume Thread (HANDLE hThread)
- DWORD Suspend Thread (HANDLE hThread)
- GetProcessIdOfThread() My Point of View
- GetThreadIOPendingFlag()

112. Mutexes, Semaphores, Events, and Critical Section are the four synchronization objects provided by _____.

- Software
- RAM
- Windows Topic 138
- processor

113. Like every other resource, threads are also treated as_____

- Code
- Object Topic 112
- Program
- Thread

114. The process Execution times uses the API GetCommandLine() to get the command line as a single _____.
- Bool
- Float
- String Topic 102
- None

115. lpApplicationName _____ be NULL.
- May
- Should
- Should not My point of View
- May not

116. Volatile stage is a _____ level facility.
- Compiler or windows Topic 133
- Programmer
- BIOS
- Hardware

117. CRITICAL_SECTION Objects do not have_____.
- Loops
- Handler Topic 139
- Variables
- Process

118. CRITICAL_SECTION Objects do not have___and are not shared among the____.
- Handler
- Both A and C Topic 139
- process
- Process

119. _____ variables should not be accessible globally.
- String
- Locally required Topic 139
- Long
- Integer

120. Thread IDs and handles can be obtained using functions quite similar to the ones used with_____
- Process Topic 114
- Program
- Thread
- Object

121. A thread can be signaled from which of the following?
- ResumeThread()

- CloseThread()
- CreateThread()
- ExitThread() OR TerminateThread() Topic 117

122. If there are 129 objects, how many times we will have to call the wait () function?
- 4
- 6
- 3 My Point of View
- 2

123. ResumeThread() function will ___
- Increase
- Decrease Conceptual
- None of given
- Both

124. If you want to create 4 thread i.e, thread 0, thread 1, thread 2, and thread 3, they all must be created at _____ state.
- Suspended Topic 120
- Blocked
- Running
- Ready

125. It must be ensured that _____ thread(s) is/ are not modifying ____ data at same time.
- Many, Many
- 1, Many
- Many,1 Topic 131 Conceptual
- 1,1

126. The result of concurrent processing and normal processing _____
- Yield same output
- Is always different
- Is always same
- May differ in some cases My point of View

127. In memory architecture and barriers, before writing the value s back to memory, the processor usually keeps them in _____
- Hard disk
- Memory card
- Processor
- Cache Topic 134

128. _____ are used to ensure that memory is accessed in the desired order.
- Memory barriers or memory fences Topic 134
- Memory paths or memory houses
- Multi processors

- Memory blocks or memory chains

129. Turning off _____ may adversely affect the performance but sometimes may _____ the program.
- Usability, faster
- Optimization, slow Topic 133
- Performance, slow
- Security, faster

130. Turning off Optimization may adversely affect the performance but sometimes may slow the program. ANSI C provides a qualifier _____ for this purpose.
- Volatile Topic 131
- Non-volatile
- Both A and B
- None of Given

131. The volatile qualifier does not guarantee that the modifications will be visible to _____ in a desired order.
- Processors Topic 134
- User
- Ram
- Hard disk

132. The _____ functions provide memory barriers.
- Interlocked Topic 139
- User define
- Interchange
- Intermediate

133. Interlocked increment () takes a 32-bit signed variable as an arguments, which should be placed in memory at the _____ boundary.
- 4-byte Topic 135
- 8-byte
- 16-byte
- 2-byte

134. If a variable with a volatile scope only needs to be incremented, decremented, or exchanged, interlocked functions are the _____ choice.
- Last
- Best Topic 135
- 2nd last
- Worst

135. _____are most suited if variable with volatile scope only need to be incremented,decremented and exchanges
- Interlocked functions Topic 135
- Local

- Global
- None

136. The most basic of Interlocked Functions
- Interlockedincrement()
- InterlockedDecrement()
- Both A and B Topic 135
- None of Given

137. How many Basic Function of Interlocked()
- 1
- 2 Topic 135
- 3
- 4

138. If any needed variables are not initialized, then create _____ threads until variables are initializes.
- Suspended Topic 137
- Double
- Slow
- Fast

139. In thread safe code, _____ conditions are avoided.
- Race Topic 137
- Loop
- Local
- Global

140. When more than one thread can run the same code without introducing synchronization issues, it is said to be _____
- Thread safe Topic 137
- Local
- Threaded
- Initialized properly

141. InterlockedIncremen64() and interlockedDecrement64() can be utilized on 64-bit systems if the addend is paced at the _____ boundary.
- 8-byte Topic 135
- 4-byte
- 2-byte
- 16-byte

142. _____ have a performance disadvantage since they create a memory barrier.
- Interchanged function
- Interlocked function Topic 135
- Intermediate function
- Interlocked memories

143. If a _____ is used to store thread-specific data, other threads will also use it.
- Small variable
- Large variable
- Global variable topic 136
- Local variable

144. Make a variable_____ if we know it includes thread-specific information.
- Static
- Local Topic 136
- Global
- Random

145. According to the criterion for good thread code, _____ storage should not be used for the purpose of local storage.
- Hard disk
- Global Topic 136
- Cache
- Ram

146. If we know the information in a variable will be used by other threads, we can make it _____.
- Global Topic 136
- Local
- Main
- Auto

147. When using thread synchronization objects, there are always inherent risks associated with them such as _____
- Lower power
- Multi clocks
- Load
- Deadlocks Topic 137

148. A thread waits for other threads to ____ using the waitForString0bject() or waitForMultipleObjects() methods.
- Wait
- Terminate Topic 138
- Start
- Update

149. The part of the code that can only be executed by one thread at a time is referred to as the _____
- Process section
- Loop section
- Top section
- Critical section Topic 139

150. Only _____ can be in the CRITICAL_SECTION variable at a time
- Odd threads
- Many threads
- One thread Topic 139
- Even threads

151. Which function is used to initialized the CRITICAL_SECTION.
- InitializeCriticalSection() Topic 139
- DeleteCriticalSection()
- Both A and B
- None of Given

152. Which function is used to Delee the CRITICAL_SECTION.
- InitializeCriticalSection()
- DeleteCriticalSection() Topic 139
- Both A and B
- None of Given

153. Multiple threads may call EnterCriticalSection() but only _____ thread is allowed to enter the critical section while the rest areblocked.
- One Topic 139
- Two
- Three
- Foure

154. A call to LeaveCriticalSection() must match a/ an____
- EnterSection()
- Variables
- EnterCriticalSection() Topic 139
- CriticalSectionPart()

155. CRITICAL_SECTION object do not have _____
- Process
- Variables
- Handles Topic 139
- Loops

156. EnterCriticalSection() can be called by ____ but only one of them is allowed to enter the critical section, while the others are blocked.
- Two threads
- One thread Topic 139
- Half thread
- Many threads

157. Using the critical section construct is ____ and intuitive.
- Easy Topic 140
- Difficult

- Short
- Long

158. It would be ____ to use different objects in the same thread or across numerous threads that share the same data.

- Easy
- Incorrect Topic 141
- Correct
- Difficult

159. For mutual exclusion to work, _____ variables must be protected by a single object across all threads.

- Integer
- Important
- Shared Topic 141
- specific

160. Within the critical section, all the variables must be guarded by _____

- Critical object
- All objects
- A single object Topic 141
- Double object

161. What is the limit for object to be waited for waitForMultiple Objects () function in window?

- 63
- 65
- 62
- 64 Topic 141

162. Producer consumer problem is a classical problem in_____

- Critical Section
- Conical collection
- Mutual Exclusion Topic 142
- None of given

163. The producer periodically _____ a message.

- Creates Topic 142
- Delete
- Update
- None

164. The producer also computes a simple_____ of the message

- Checksum Topic 142
- Contents
- Update
- None

165. _____is a short form of Mutual Exclusion
- Mechanism
- Checksum
- Mutex Topic 143
- All of the given

166. Which of the following Windows functions used to manage mutexes.
- CreateMutex()
- ReleaseMutex()
- OpenMutex()
- All of the given Topic 144

167. Home Many windows Function are used to manage mutex.
- 1
- 2
- 3 Topic 144
- 4

168. lpMutexName is the name of the mutex.
- True Topic 144
- False

169. OpenMutex() is used to _____ and _____ named mutex
- Existing,open
- Open,Existing Topic 144
- Open,Delete
- Exsiting,Delete

170. However, abrupt termination of a thread indicates a serious programming flaw. Mutex waits can_____
- Time In
- Time Out Topic 146
- Has
- Does Not

171. If NULL is returned it indicates dose not failure.
- True
- False Topic 144

172. Semaphore maintains a count
- True Topic 147
- False

173. A semaphore is in a signaled state when the count is greater than.
- 1
- -1
- 0 Topic 147
- None of given

174. Semaphore is_____ when the count is 0.
- Signaled
- Un-signaled Topic 147
- Release
- None of the given

175. Which of the following are used in semaphore Count?
- CreateSemaphore()
- CreateSemaphoreEx()
- OpenSemaphore()
- All of the Given Topic 147

176. cReleaseCount gives the count after the release and must be greater than____.
- 1
- -1
- 0 Topic 147
- None of given

177. Events are classified as either
- manual-reset
- auto-reset
- Both A and B Topic 150

178. A _____ event can signal several waiting threads simultaneously and can be reset.
- manual-reset Topic 150
- auto-reset

179. An _____event signals a single waiting thread, and the event is reset automatically.
- manual-reset
- auto-reset Topic 150

180. If bInitialState is TRUE, the event is set to a_____state
- Signaled Topic 150
- Un-Signaled

181. If the event is manual-reset, it remains signaled until a thread explicitly calls ResetEvent().
- True Topic 150
- False

182. How many ways to use Events?
- 1
- 2
- 3
- 4 Topic 151

183. Windows operating system is a multithreaded _____ that provides support for real time applications and multiprocessors.
- Hardware
- User space
- Kernel Topic 153
- BIOS

184. Program design and performance can be simplified and improved by
- Odd threads
- Many threads
- Threads Topic 153
- Even threads

185. _____Synchronization is a way to coordinate processes that use shared data
- Shell
- Process Topic 153
- System
- User

186. Which of the following Synchronization objects.
- Critical Section
- Semaphore
- Mutex
- All of the Given Topic 153

187. The_____functions provide a simple mechanism for synchronizing access to a variable that is shared by multiple threads.
- Interlocked Topic 155
- Local
- Global
- None

188. Memory allocation is then performed using using _____rather than using_____
- HeapAlloc() and HeapFree(),malloc() and free() Topic 56
- malloc() and free() and HeapAlloc() and HeapFree(),

189. Each thread that performs memory management can create a Handle to its own heap using _____
- HeapCreate() Topic 156
- HeapAlloc()
- HeapFree()
- None of the given

190. Threads allocate memory and free memory using _____functions respectively
- malloc () and free () Topic 156
- free () and malloc ()

191. How may aspects compare the performance on the Basis.
- 1
- 2
- 3 Topic 157
- 4

192. Which of the Following aspects that are used to compare the Performance.
- Real-Time
- User-Time
- System-time
- All of the given Topic 157

193. MX(Mutexes) version costs more than _____ times than IN
- 2 times
- 2 to 30 times Topic 158
- 1 to 30 times
- 3 times

194. CS (Critical Section) version costs _____ times more than IN
- 2 to 30 times
- 2 times Topic 158
- 1 to 30 times
- 3 times

195. For older version of windows CS was not scalable.
- True Topic 159
- False

196. Critical Section works in_____
- Hardware
- User space Topic 161
- Kernel
- BIOS

197. How many methods of Lightweight Reader Writer Locks.
- 1
- 2 Topic 163
- 3
- 4

198. Which of the following methods of Lightweight Reader Writer Locks
- Exclusive Mode
- Shared Mode
- Both A and B Topic 163
- None of given

199. How many APIs which are used to access SRWs in Exclusive mode.
- 1

- 2 Topic 164
- 3
- 4

200. When a thread is created almost _____space is reserved for that thread and with increasing threads memory area is piled up.
- 1 MB Topic 166
- 1 KB
- 1 Bit
- 1 Byte

201. If you_____ the threads the you can lose the benefits of parallelism and synchronization
- Minimize Topic 166
- Maximize

202. Which of the following optimization technique?
- Use of semaphore throttles
- Asynchronous I/O
- Using I/O completion ports
- All of the Given Topic 166

203. Every process has a dedicated_____ pool.
- Odd threads
- Many threads
- Threads Topic 172
- Even threads

204. The thread pool is used to _____the number of application threads and provide management of the worker threads
- Increased
- Reduce Topic 172
- Constant
- Equal

205. How many types of call back Function.
- 1
- 2 Topic 173
- 3
- 4

206. How many sorts of parallelism?
- 1
- 2 Topic 177
- 3

- 4

207. Which of the following parallelism define every loop iteration can execute concurrently.

- Loop parallelism Topic 177
- Fork-join parallelism

208. _____the control flow divides (like the shape of the fork) into multiple flows that join later

- Loop parallelism
- Fork-join parallelism Topic 177

209. Each process has its own process affinity mask and a system affinity mask.

- True Topic 180
- False

210. How many Bits vector of MASK?

- 1
- 2
- 3 Topic 180
- 4

211. Which of the follwing Bits vector of MASK?

- System Affinity Mask
- Process Affinity Mask
- Thread Affinity Mask
- All of the Given Topic 180

212. IPC stand for_____

- Internet process control
- Inter-process Communication Topic 180
- Inter-parameter control
- None of the Given

213. How many Types of Pipe?

- 1
- 2 Topic 181 (Anonymous Pipes, Named Pipes)
- 3
- 4

214. File-like object called Pipe can be used for IPC.

- True Topic 181
- False

215. Which of the following are correct statement of Anonymous Pipes?

- Simple anonymous pipes are character based and half duplex. Topic 181
- They allow network wide communication.

216. Which of the following are correct statement of Named Pipes?

- There can be multiple open handles for a pipe
- They allow network wide communication.
- Much more powerful than anonymous pipes
- All of the Given Topic 181

217. Anonymous pipes allow _____(half-duplex) communication
- one-way Topic 182
- two-way

218. The default set of cbPipe is____
- 0 Topic 182
- 1
- 2
- 3

219. Named Pipe is____
- Directional
- Bi-Directional Topic 184
- Tri-Directional
- None of the Given

220. The pipe name would be like this.
- \\.\pipe\[path]pipename Topic 187
- \\servername\pipe\pipename

221. Which of the following connection sequences for the Client.
- The client connects with a server
- Communicates with the server using CreateFile()
- Performs Read and Write operations and ultimately disconnects
- All of the given Topic 190

222. Which of the following connection sequences for the Server.
- Communicates with the client.
- As a result ReadFile() returns FALSE
- The server-side connection is disconnected
- All of the given Topic 190

223. Which of the following Returns information whether the pipe is in blocking or non-blocking mode, message oriented or byte oriented, number of pipe instances, and so on.
- SetNamedPipeHandleState()
- GetNamedPipeHandleState() Topic 188
- GetNamedPipeInfo()
- None of the given

224. Which of the following Allows the program to set the same state attributes. Mode and other values are passed as reference so that NULL can also be passed indicating no change is desired.

- SetNamedPipeHandleState() Topic 188
- GetNamedPipeHandleState()
- GetNamedPipeInfo()
- None of the given

225. Which of the following Determines whether the handle is for client or a server, buffer sizes, and so on.
- SetNamedPipeHandleState()
- GetNamedPipeHandleState()
- GetNamedPipeInfo() Topic 188
- None of the given

226. Call_____to disconnect from the handle
- DisconnectNamedPipe() Topic 189
- WaitNamedPipe()
- ConnectNamedPipe()
- All of the given

227. _____ is used to synchronize connections to the server
- DisconnectNamedPipe()
- WaitNamedPipe() Topic 189
- ConnectNamedPipe()
- All of the given

228. _____are the security attributes as discussed previously
- lpSecurityAttributes Topic 186
- nOutBufferSize
- dwOpenMode
- nMaxInstance

229. _____and _____give the size in bytes of input and output buffer
- nOutBufferSize and nInBufferSize Topic 186
- nInBufferSize and nOutBufferSize

230. which of the following determines maximum number of pipe instances?
- lpSecurityAttributes
- nOutBufferSize
- dwOpenMode
- nMaxInstance Topic 186

231. which of the following indicates whether writing is message oriented or byte oriented?
- dwPipeMode Topic 186
- nOutBufferSize
- dwOpenMode
- nMaxInstance

232. _____ is the default timeout period.

- nDefaultTimeOut Topic 186
- nOutBufferSize
- dwOpenMode
- nMaxInstance

233. The period (.) stands for local machine.
- True Topic 186
- False

234. In mutex which type of data structure that stores the resource should also be used to store the mutexes because mutexes correspond to the resources.
- Different Topic 154
- Same
- Equal
- None of the Given

235. Only the_____ Scheduler decides which thread has the priority according to its scheduling policy.
- Hardware
- Application
- OS Topic 154
- BIOS

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236._____API is used to create a new heap.
- createHeap()
- HeapCreate()
- BuildHeap()
- NewHeap()

237. If threads have separate memory space, then it will reduce_____
- Memory contention
- Access speed
- Direct memory access
- Memory density

238._____is an appropriate API to dispose-off a heap handle.
- shudderHandle()
- DestroyHandle()
- DeleteHeap()
- HeapDestroy()

239. A process can have_____ heap(s).
- the most one

- only one
- Only two
- Many

240. ReadFile() and writeFile() functions perform much_____than memory mappedfile processing

- Slower
- Faster
- Convenient
- Nimble

241. Which of the following controls the paging file?

- The pager
- Direct memory access
- Memory mapped I/o
- Virtual memory management system

242. While using memory mapped I/O there is/are_____to manage buffers forrepetitive operation on the file operations.

- Needed
- Not needed
- Useful
- Mandatory

246. In order to make a program more efficient,_____heap(s) may be required.

- partial
- only one
- several
- Minimum number of

247. There are_____parameters taken by the HeapCreate() API.

- 3
- 2
- 1
- 4

248. The parameter “flOptions” in the HeapCreate() API is a combination of _____ flags.

- 2
- 4
- 3
- 1

249. are the APIs for heap memory allocation.

- Heapcreate ()and HeapRealloc()
- Allocheap () and HeapRealloc()
- HeapAlloc() and HeapRealloc()
- HeapAlloc() and HeapRealloc()

250. For a non-growable heap, the value of dwbytes in heap memory alloction is_____

- 0*7FEE8
- 0*7FDD8
- 0*AAAA8
- 0*7FFF8

251._____is the first step to allocate heap in a program.

- HeapDestroy()
- HeapFree()
- Release and handle
- Get heap handle

252. The function heapSize() returns the size of a block, or_____in case failure.

- NULL
- 1
- -1
- 0

253._____is used to deallocate the entire heap.

- HeapDestroy()
- HeapFree()
- HeapTruncate()
- HeapDelete()

254. Sorting is performed in the _____

- RootHeap
- RecHeap
- ProcHeap
- NodeHeap

255._____stores the root address.

- RootHeap
- RecHeap
- ProcHeap
- NodHeap

256. There are_____number of standard input out devices.

- 3
- 5
- 4
- 2

254. Every lockfileEx() function that is successful must be followed by a call to

- DeletelockEx()
- RemovelockEx()
- UnlatchlockEx()
- UnclockfileEx()

255. Try and catch keywords_____required for vectored exception handlers.

- Are not
- Are
- Must be
- Are occasionally

256. In the context of vectored exception handling the zero value of firsthandler parameters shows that the handler being used wil be the_____one to execute.

- Third
- Last
- Second
- First

257. In the vectored exception handler, the value of firsthandler parameter specific the _____in which the handler will execute.

- Order
- Speed
- Allocation of stack
- Accuracy

258. Windows checks for a vectored exception handler at the _____place when avectored is set up followed by unwinding the stack.

- Second
- Third
- First
- Fourth

259. _tcscmp() is_____function to compare the strings.

- A generic
- n ASCII
- Not a generic
- A Unicode

260. hich of the following functions is used to generate a sound beep for 0.7 secondswith the frequency if 750?

- Beep (750,800)
- Beep(700,750)
- Beep(750,700)
- Beep(750,0.7)

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261. A program can be terminated by passing_____from keyboard

- Ctrl +p
- Ctrl +N
- Ctrl +C
- Ctrl +Z

262. The return type of WINAPI Handler() function if _____

- Void
- Static integer
- Static bool
- Static float

263. #include<io.h> is used for _____

- Input output operation
- Working in CLI
- Memory allocation
- Multitasking

264. Windows OS keeps_____version of each API.

- One
- Interpreted
- Two
- Complier

265. The options function have_____arguments

- 5
- 4
- 7
- 6

266. If invalid file handle is passed as a parameter to the closeFile API, then it will return_____

- Empty string
- 1
- File handle
- False value

267. In MicrosoftUNIX library, all I/O function are named with_____prefix.

- Semicolon
- Dot
- Underscore
- Colon

268. In lockFileEx() function, the OVERLAPPED data structure contains_____ datamembers.

- 3

- 5
- 2
- 4

269. File lock can be_or _____

- Read-only, write-only
- Read-only, write-only
- Read-locked, write only
- Read-only, read-write

270. The read operation does not conflict with the _____

- Existing shared lock
- Remove operation
- Write operation
- Existing exclusive lock

271. Before encountering a/an_____lock, the read or write operation can complete itsrequest partially

- Exclusive lock
- Shared lock
- Mutually exclusive lock
- Conflicting lock

272. If process-A has a shared lock on a file, and process-B tries to read without a shared lock then the read attempt will _____

- Return exception
- Succeed
- Return a shared lock
- Fail

273. UNIX system stores information in_____directory similar to the registry entry

- /etc
- /reg
- /key
- /root

274. Catfile() function takes __parameters.

- 3
- 5
- 4
- 2

275. __empire is considered to be pioneers of encryption as they used basic encryptionalgorithms to encrypt secret conversation in a war.

- Persian

- Chines
- Roman
- Mughal

276. Roman empire use____ algorithm to encrypt secret conversation.

- CTR
- Ceaser cipher
- Brute force
- Cryto graph

277. The text that we are going to encrypt is called_____ test so it is denoted by

- Personal, p
- Secret, w
- Proposed, p
- Plain, p

278. We represent that text by the symbol_____in the encryption formula.

- E
- B
- A
- C

279. The formula of ceaser chopper is _

- C = (E + W)mod26
- E = (P +n) mod27
- E = (D +n)mod27
- C = (P + n) mod26

280. We use MoveFileEx() to_the existing file

- Copy
- Rename
- Over write
- Delete