Department of Computer Science and Engineering

CS8493 - OPERATING SYSTEMS

Unit III - MCQ Bank

1. What is Address Binding?

    a. going to an address in memory

    b. locating an address with the help of another address

    c. binding two addresses together to form a new address in a different memory space

    d. a mapping from one address space to another

Answer: d

2. Binding of instructions and data to memory addresses can be done at

    a. Compile time

    b. Load time

    c. Execution time

    d. All of the mentioned

Answer: d

3. If the process can be moved during its execution from one memory segment to another, then

binding must be

    a. delayed until run time

    b. preponed to compile time

    c. preponed to load time

    d. none of the mentioned

Answer: a

4. What is Dynamic loading?

    a. loading multiple routines dynamically

    b. loading a routine only when it is called

    c. loading multiple routines randomly

    d. none of the mentioned

Answer: b

5. What is the advantage of dynamic loading?

    a. A used routine is used multiple times

    b. An unused routine is never loaded

    c. CPU utilization increases

    d. All of the mentioned

Answer: b

6. The idea of overlays is to

    a. data that are needed at any given time

    b. enable a process to be larger than the amount of memory allocated to it

    c. keep in memory only those instructions

    d. all of the mentioned

Answer: d

7. The_____must design and program the overlay structure.

    a. programmer

    b. system architect

    c. system designer

    d. none of the mentioned

Answer: a

8. The____swaps processes in and out of the memory.

    a. Memory manager

    b. CPU

    c. CPU manager

    d. User

Answer: a

9. If a higher priority process arrives and wants service, the memory manager can swap out the lower priority process to execute the higher priority process. When the higher priority process finishes, the lower priority process is swapped back in and continues execution. This variant of swapping is sometimes called?

    a. priority swapping

    b. pull out, push in

    c. roll out, roll in

    d. none of the mentioned

Answer: c

10. If binding is done at assembly or load time, then the process_____be moved to different locations after being swapped out and in again.

    a. can

    b. must

    c. can never

    d. may

Answer: c

11. In a system that does not support swapping

    a. the compiler normally binds symbolic addresses (variables) to relocatable addresses

    b. the compiler normally binds symbolic addresses to physical addresses

    c. the loader binds relocatable addresses to physical addresses

    d. binding of symbolic addresses to physical addresses normally takes place during execution

Answer: a

12. The address generated by the CPU is referred to as

    a. Physical address

    b. Logical address

    c. Neither physical nor logical

    d. None of the mentioned

Answer: b

13. The address loaded into the memory address register of the memory is referred to as

    a. Physical address

    b. Logical address

    c. Neither physical nor logical

    d. None of the mentioned

Answer: a

14. The run time mapping from virtual to physical addresses is done by a hardware device called the

    a. Virtual to physical mapper

    b. Memory management unit

    c. Memory mapping unit

    d. None of the mentioned

Answer: b

15. Which of the following is TRUE?Overlays are used to increase the size of physical memory

    a. Overlays are used to increase the logical address space

    b. When overlays are used, the size of a process is not limited to the size of the physical memory

    c. Overlays are used whenever the physical address space is smaller than the logical address spacebasic register

Answer: c

16. The size of a process is limited to the size of

a. physical memory

b. external storage

c. secondary storage

d. none of the mentioned

Answer: a

17. If execution time binding is being used, then a process_____be swapped to a different memory space.

a. has to be

b. can never

c. must

d. may

Answer: d

18. Swapping requires a

a. motherboard

b. keyboard

c. monitor

d. backing store

Answer: d

19. The backing store is generally a

a. fast disk

b. disk large enough to accommodate copies of all memory images for all users

c. disk to provide direct access to the memory images

d. all of the mentioned

Answer: d

20. The   consists of all processes whose memory images are in the backing store or in memory and are ready to run.

    a. wait queue

    b. ready queue

    c. cpu

    d. secondary storage

Answer: b

21. The   time in a swap out of a running process and swap in of a new process into the memory is very high.

    a. context – switch

    b. waiting

    c. execution

    d. all of the mentioned

Answer: a

22. The major part of swap time is _____time.

    a. waiting

    b. transfer

    c. execution

    d. none of the mentioned

Answer: b

23. Swapping____be done when a process has pending I/O, or has to execute I/O operations only into operating system buffers.

    a. must

    b. can

    c. must never

    d. maybe

Answer: c

24. Swap space is allocated

   a. as a chunk of disk

   b. separate from a file system

   c. into a file system

   d. all of the mentioned

Answer: a

25. CPU fetches the instruction from memory according to the value of

   a. program counter

   b. status register

   c. instruction register

   d. program status word

Answer: a

26. A memory buffer used to accommodate a speed differential is called

   a. stack pointer

   b. cache

   c. accumulator

   d. disk buffer

Answer: b

27. Which one of the following is the address generated by CPU?

   a. physical address

   b. absolute address

   c. logical address

   d. none of the mentioned

Answer: c

28. Run time mapping from virtual to physical address is done by

   a. Memory management unit

   b. CPU

    c. PCI

    d. None of the mentioned

Answer: a

29. Memory management technique in which system stores and retrieves data from secondary storage for use in main memory is called?

    a. fragmentation

    b. paging

    c. mapping

    d. none of the mentioned

Answer: b

30. The address of a page table in memory is pointed by

    a. stack pointer

    b. page table base register

    c. page register

    d. program counter

Answer: b