

40 Lecture - CS501

Important Mcqs

1. What is virtual memory?

- a) Memory that is stored on virtual machines
- b) A technique used to increase the apparent size of a computer's main memory
- c) A type of memory that can only be accessed by virtual machines
- d) A type of memory that is used for temporary storage

Answer: b

What is the purpose of virtual memory?

- a) To increase the amount of physical memory available to the operating system
- b) To speed up the execution of programs
- c) To create a virtual machine environment
- d) To store data temporarily

Answer: a

Which of the following is not a benefit of virtual memory?

- a) Programs can execute even when there is insufficient physical memory available
- b) It improves overall system performance
- c) It allows for faster access to data
- d) It provides a larger memory space for programs

Answer: c

What is a page fault?

- a) A type of error that occurs when a program tries to access memory that is not available
- b) A technique used by virtual memory to transfer pages of data between physical memory and disk storage
- c) A type of virtual memory that is stored on a hard disk
- d) A type of memory that is only used for temporary storage

Answer: a

What is the role of the page table in virtual memory?

- a) To map virtual addresses to physical addresses
- b) To store data temporarily
- c) To manage the transfer of pages of data between physical memory and disk storage
- d) To create a virtual machine environment

Answer: a

What is thrashing?

- a) A situation in which the operating system spends too much time managing virtual memory
- b) A type of error that occurs when a program tries to access memory that is not available
- c) A situation in which the system spends too much time transferring pages between physical memory and disk storage
- d) A type of virtual memory that is stored on a hard disk

Answer: c

What is the size of a page in virtual memory typically?

- a) 2 KB

- b) 4 KB
- c) 8 KB
- d) 16 KB

Answer: b

What is the purpose of a TLB in virtual memory?

- a) To speed up the mapping of virtual addresses to physical addresses
- b) To store data temporarily
- c) To manage the transfer of pages of data between physical memory and disk storage
- d) To create a virtual machine environment

Answer: a

What is the difference between demand paging and pre-paging?

- a) Demand paging loads pages into physical memory only when they are needed, while pre-paging loads pages into physical memory before they are needed
- b) Pre-paging loads pages into physical memory only when they are needed, while demand paging loads pages into physical memory before they are needed
- c) Demand paging and pre-paging are the same thing
- d) Neither demand paging nor pre-paging are used in virtual memory

Answer: a

Which of the following is an example of a virtual memory implementation?

- a) RAID
- b) SSD
- c) Pagefile
- d) BIOS

Answer: c