

Chapter 9: Memory Management

Descriptive

- 1) Explain three stages of Binding of Instruction and data to Memory
- 2) Discuss the concept of logical and Physical address space
- 3) Explain Dynamic Loading
- 4) Explain the Swapping of process with Memory using diagram.
- 5) Explain the concept of contiguous memory allocation with diagram.
- 6) Define 1) Internal fragmentation 2) External Fragmentation
- 7) Define 2) page 2) frame
- 8) Explain address translation architecture with diagram.
- 9) Explain paging with TLB in detail.
- 10) List three techniques of page table structure ,Explain any one with diagram.
- 11) Explain shared page example with diagram.
- 12) Draw example of segmentation with suitable values of base and limit .

Objective

- 1) Logical address is generated by CPU(T/F)
- 2) Full forms : MMU,
- 3) Limit register contains range of physical address.(T/F)
- 4) What do you mean by hole in memory ?
- 5) How first fit and best are better than worst fit?

6)

0	a	0	5
1	b	1	6
2	c	2	1
3	d	3	2

page table

Logical address

Page size=4kb

Find the physical address for the logical address 3 as per the given page table.

Logical address is on page 0 –offset is 3

Page 0 is on frame 5

Physical address $= (5 * 4) + 3 = 23$

- 7) Find the range of physical memory address for the following given segment.

Base address for the segment :1400

Limit :1000.

Range =base address+limit=1400+100=1500 i.e 1400 to 1500

Chapter 12: File system implementation

Objective

- 1) _____ provide an object-oriented way of implementing file systems.
a) virtual file system b) file system c) directory structure d) none
- 2) Linear list with hash data structure is called _____ table
a) file allocation b) hash c) directory d) access control
- 3) Situations where two file names hash to the same location is called _____
a) interrupt b) collision c) timeout d) none
- 4) A file consists of one or more extents. (True/False)
- 5) When address pointer contains not data but the addresses of blocks which contain data ,it is called _____
a) single direct b) double indirect c) triple indirect d) none

Descriptive

- 1) Write about File System Structure?
- 2) Draw the file access control list or file control block?
- 3) What do you mean by virtual file system. Draw and explain schematic view of VFS?
- 4) Define Vnode.
- 5) Differentiate b/w hash table and linear implementation for directory.
- 6) List out the allocation methods of disk blocks .Explain any one of them.
- 7) Explain about free space management.