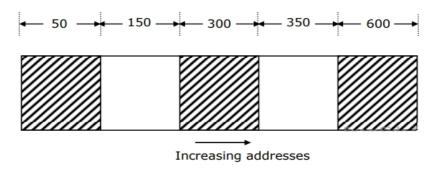
Tutorial 8

1. Consider the following heap (Figure) in which blank regions are not in use and hatched region are in use.

The sequence of request for blocks of size 300, 25, 125,50 can be satisfied if we use.



- a. Either first fit or best fit policy (anyone)
- b. First fit but not best fit policy
- c. Best fit but not first fit policy
- d. None of the above
- 2. Consider six memory partitions of sizes 200 KB, 400 KB, 600 KB, 500 KB, 300 KB and 250 KB, where KB refers to kilobyte. These partitions need to be allotted to four processes of sizes 357KB, 210 KB, 468 KB and 491 KB in that order. If the best fit algorithm is used, which partitions are NOT allotted to any process?
 - a. 200 KB and 400KB
 - b. 300 KB and 250KB
 - c. 200 KB and 300KB
 - d. 300 KB and 600KB
- 3. In a computer system where the best fit algorithm is used for allocation of jobs in the provided memory partitions, the following situations are encountered.

| Partition size in KB | 4K, 8K, 20K, 2K |
|----------------------|-----------------------------------|
| Job sizes in KB | 2K, 14K, 3K, 6K, 6K, 10K, 20K, 2K |
| Time for execution | 4, 10, 2, 1, 4, 1, 8, 6 |

At what time 20K job will be completed?

4. A system using first fit allocation memory is allocated as specified in the table. An additional request for 20K, 10K and 5K are received. At what starting address, each of the additional request will be allocated?

| U | Н | U | Н | U | Н | U | Н | U | Н | U | Н |
|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|
| 10K | 10K | 20K | 30K | 10K | 5K | 30K | 20K | 10K | 15K | 20K | 20K |