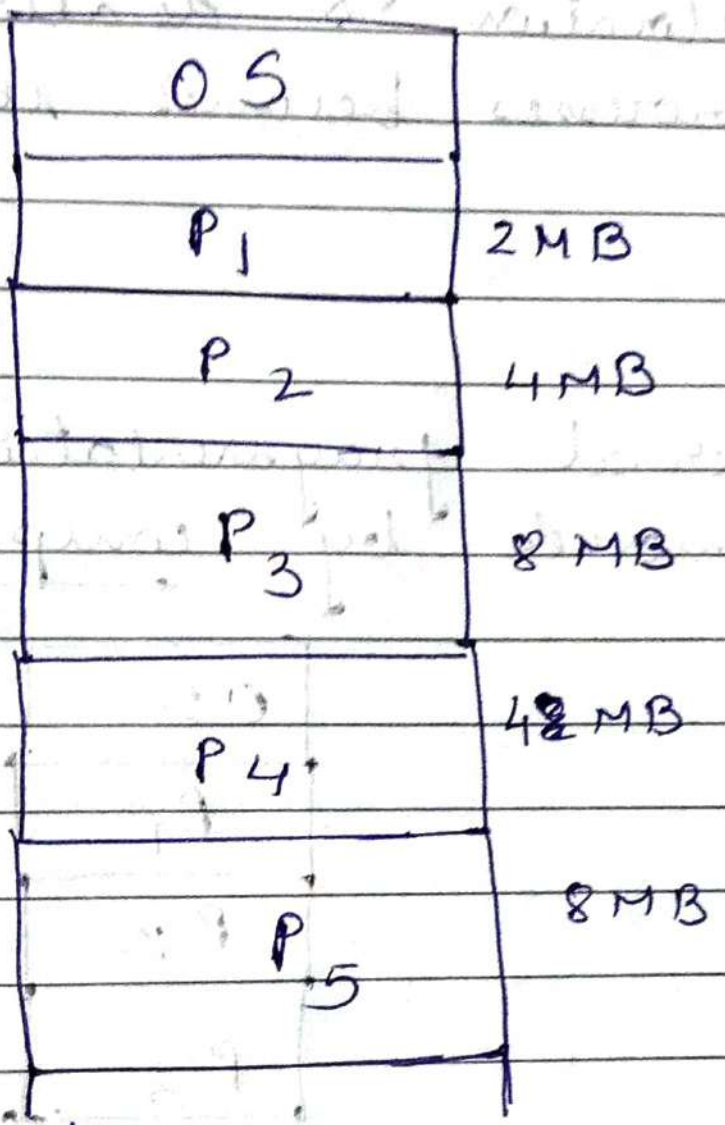
- ~~In this~~, partitioning

2) Dynamic Partitioning / Variable size

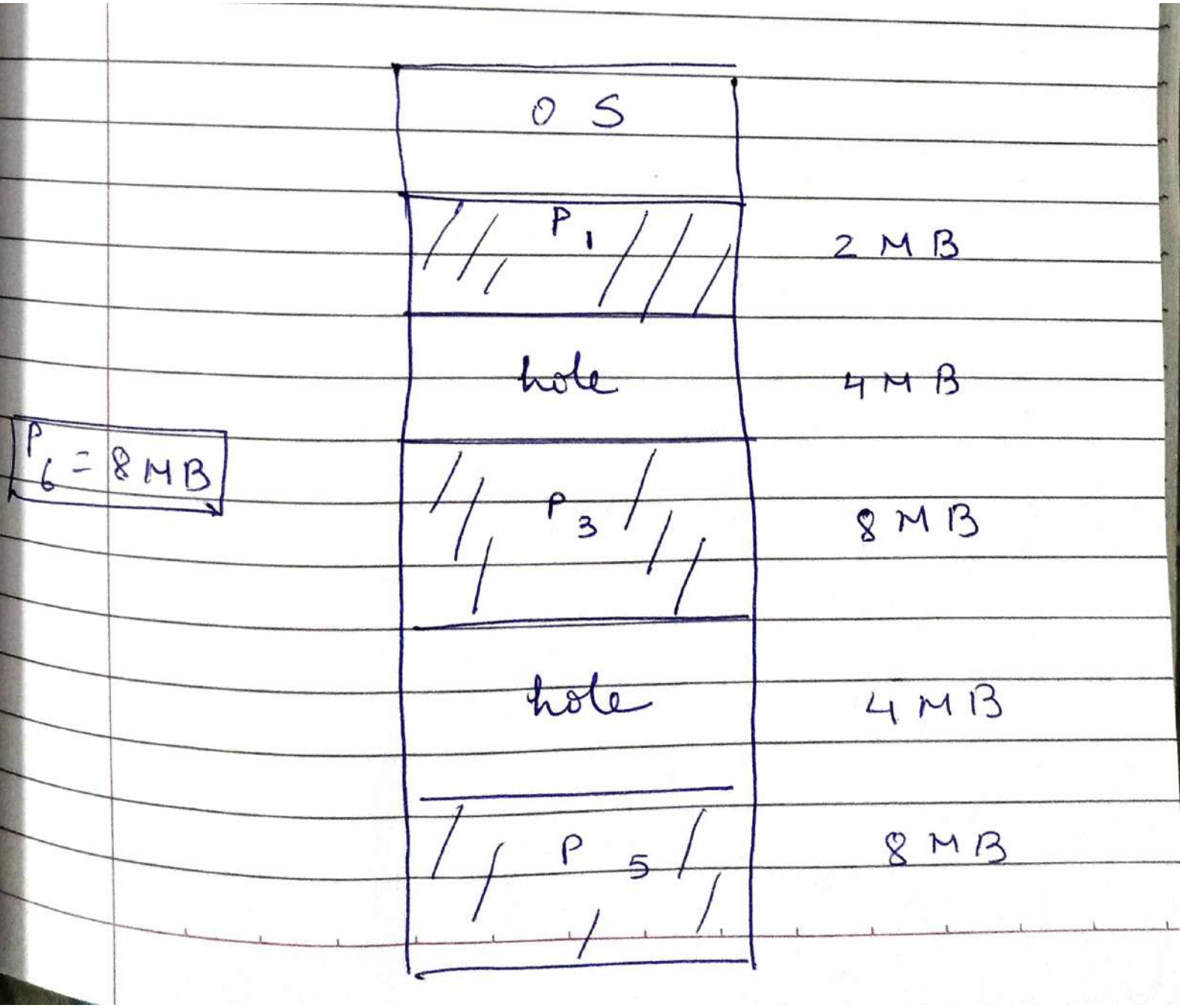
- Dynamic partitioning tries to overcome problems caused by fixed partitioning.
- In this, the partition size is not declared initially. It is declared at the time of process loading.
- First partition is reserved for OS.
- This eliminates internal fragmentation completely.

2) Dynamic Partitioning / Variable size partitioning



Advantages:

1) No internal fragmentation
2) No limit in process size
3) No limitation on degree of multiprogramming

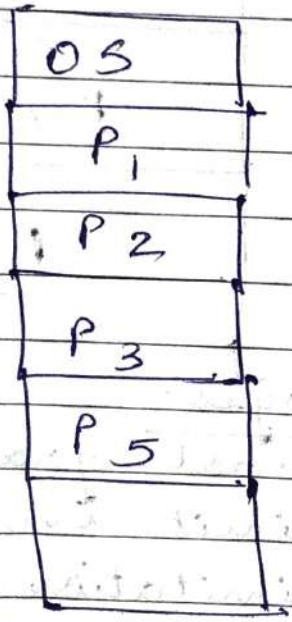

OS
P1
2 MB
hole
4 MB
P6 = 8 MB
P3
8 MB
hole
4 MB
P5
8 MB

Page No.
Date

Disadvantages

1) External fragmentation
2) Allocation & deallocation of processes becomes complex.

External fragmentation can be removed by : compaction



This compaction technique is undesirable because

- changing address of processes.
- if any process is in running state, it has to be stopped.


O.S
P1
P2
P3
hole external fragmentation
(a)
(b)
(c)
(d)
P4
(e)
(f)
(g)
(h)
2 holes
3 holes