

# LAB 03

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## **Explain the difference between internal and external fragmentation.**

Internal fragmentation is the wasted space within the memory partition due to excessive space requested for memory allocation. External fragmentation is the different free space holes in the memory.

**Given five (5) memory partitions of 100KB, 500KB, 200KB, 300KB, and 600KB (in that order), how would optimal, first-fit, best-fit, and worst-fit algorithms place processes of 212KB, 417KB, 112KB, and 426KB (in that order)?**

### 1. Optimal Fit

- 100KB: null
- 500KB: 417KB
- 200KB: null
- 300KB: 212KB
- 600KB: 426KB, 112KB

### 2. First Fit

- 100KB: null
- 500KB: 212KB
- 200KB: 417KB
- 300KB: 112KB
- 600KB: 426KB

### 3. Best Fit

- 100KB: null
- 500KB: 417KB
- 200KB: null
- 300KB: 212KB
- 600KB: 426KB, 112KB

### 4. Worst Fit

- 100KB: null
- 500KB: 426KB
- 200KB: null
- 300KB: 112KB
- 600KB: 212KB, 417KB