Lab3

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1 Internal and External Fragmentation

There are two different types of fragmentation that you can implement on an operating system. Internal fragmentation is the process of splitting memory into fixed-sized blocks. This occurs when the process is larger than the allotted memory. The internal fragmentation is the difference between the allocated memory and the required space. Internal fragmentation uses best-fit memory allocation. On the other hand, external fragmentation occurs when there is enough memory allocated for the given process, but the memory is currently allocated in a non-contiguous manner. This happens when a process is removed. External Fragmentation uses compaction, segmentation, and paging.

2 Memory Partitions

First Fit:

1. 212KB – 300KB partition
2. 417KB – 600KB partition
3. 112KB – 288KB partition
4. 426KB – not enough memory allocated

Best Fit:

1. 212KB – 300KB partition
2. 417KB – 500KB partition
3. 112KB – 200KB partition
4. 426KB – 600KB partition

Worst Fit:

1. 212KB – 600KB partition

2. 417KB – 500KB partition
3. 112KB – 388KB partition
4. 426KB – not enough memory allocated