

# Mini Test 2

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Task 1:

★ Code

Task 2:

★ Code

Task 3:

Contiguous allocation — This allocation method stores files in contiguous blocks. In order to access memory in this way, you only need the disk address of the first block and the total number of blocks that trail the first. This isn't always the best because data can get fragmented

Linked-List allocation — Each node

in the list is a block of data and that block of data points to where the next block of data can be found. So this will defeat the fragmentation problem because we can place the blocks anywhere we want but random access of the disk is extremely slow

### Linked-List with FAT - This

method implements all data in the same way as the regular linked list but the links between nodes are stored in the file allocation table which is located in main memory. Sadly, the table must stay in main memory at all times so it wastes some space.

I-Node - Each index node lists attributes and disk addresses of a file's block in memory. This is similar to the FAT table except we only need to load

in a file's corresponding i-node  
instead of keeping a large  
persistent table in memory.

Task 4:

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★ Code