LAB Assignment 9

Operating Systems (UCS303)

Instructions: The instructor is required to discuss the concept of memory management with the students. Students have to implement following program.

Write a program using C/C++/Java to simulate the first fit, best fit and worst fit memory allocation strategy. Assume memory chunk and initial requirement for memory block from your side.

Example Program Flow

- 1. Initialize the program with an initial memory chunk of a specified size.
- 2. Display the menu for the user to choose an allocation strategy (First Fit, Best Fit, Worst Fit) or to exit.
- 3. Prompt the user to request a memory block allocation, specifying the size.
- 4. Allocate memory based on the chosen strategy.
- 5. Display the updated state of the memory chunk.
- 6. Repeat steps 3 to 5 until the user chooses to exit.