

## **LAB Assignment 10**

### **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.