**Lab. Assignment #2**

Class:CSC 305

Instructor: Jonathan Parziale

**Objective:** Write a C++ -program that will implement 4 Memory Management algorithms

**Algorithms:**

A) Best-Fit

B) First-Fit

C) Next-Fit

D) Worst-Fit

Your program must do the following:

1. Program Input:

User will input to the program

* 1. Main Memory information, including
     1. The Number of Memory partitions.
     2. The Size of each memory partition.
  2. Process information (assign a unique identifier to each job)
     1. User will input the number of processes
     2. Memory requirements for each process/job
     3. amount of memory each process requires

1. For each algorithm, your program should have a data structure(class or struct) that will include the following,

* Name of the process/ job(number or word)
* Process/job status (Run/Wait),
* partition number the process/job was assigned to

You can create an array or list of the object to represent the job queue.

**3**. Program output:

a**)** Initial memory allocation: Calculate and display a list of **initial** memory allocation, i.e which partitions contain which process after the first round of allocation

b) Memory waste: Program will calculate and display the memory waste for each partition

c. total waste for each algorithm.

e. A list of Processes in the waiting State(was not assigned to a partition).

**Deliver to black board:**

Note: use the values from the example I provide to test your code

1)Source code from the program/programs

2)Screen shots of the output/results from each algorithm.

Tentative Deadline: 4/1/2019

Possible Points:25