## **OS REFRESHER MODULE 2**

## **README**

- 1. a. A dynamic array is constructed with fixed value of 6 rows and varying columns (7,4,6,3,7,2) using malloc.
- b. Using realloc the size of columns is allocated again.
- 2. studentInsert is used to insert a student with the given four details given as user input.

Search is used to find whether the student entered by the user exists in the list or not.

Display is used to print all the list of students in the record list.

The menu based option is given to the user to select one of the options.

next is used to traverse and move to the next node.

- b. In a doubly linked list the reference of the previous node is also taken into consideration. This results in a node having two links one at the front and the other at the back.
- c. Push is used to insert a node into the stack. Along with this it is important to check whether the stack is already filled or not.

Pop is used to remove the top most element in the stack. It is also important to check whether the stack is already empty or not as if it is empty then it will be an error.

Peek is used to find the value of the node present at the top position of the stack.

Enqueue is used to put node in the queue and dequeue is used to remove a node from the queue.

- 2. Functions of different operations are made like addition, multiplication, subtraction, division and exponential. The functions are pointed to their respective positions as mentioned.
- 3. Value of two numbers is taken as user input.

4.	Bubble sort swaps to adjacent numbers after comparing the value of the two and depending on the order taken(smallest on the left most index or largest element on the left most index).