

Rizal Technological University
College of Engineering and Architecture

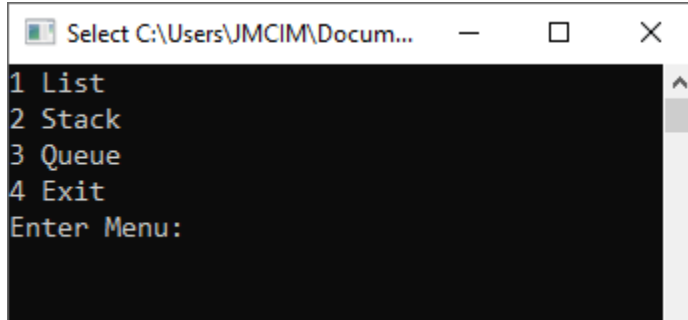
Midterm Exam

Name:
Instructor:
Section:
Date:

Direction: Read carefully the following sets of instruction

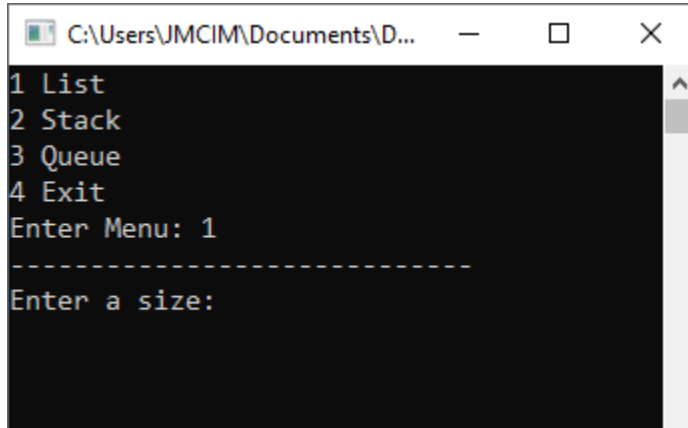
Create a program that can process data using Abstract Data Types (List, Stack and Queue) with and linked list implementation.

- a. The program consist of menu for the List, Stack, Queue and Exit.



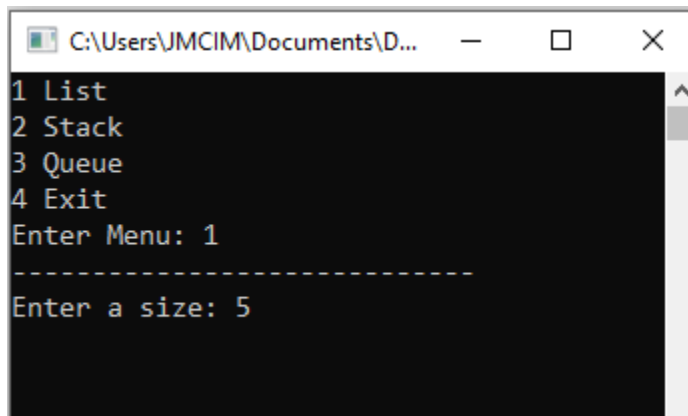
```
Select C:\Users\JMCIM\Docum...
1 List
2 Stack
3 Queue
4 Exit
Enter Menu:
```

- b. Type 1 to “Enter Menu:” to process the data using List



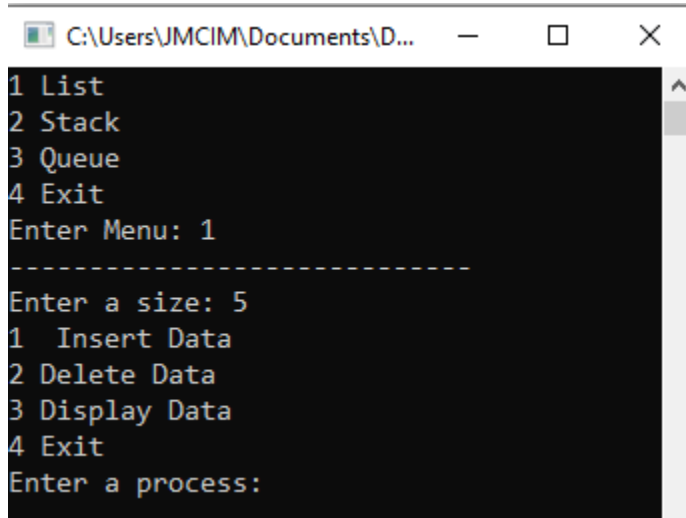
```
C:\Users\JMCIM\Documents\D...
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 1
-----
Enter a size:
```

- c. Give a random size of data for List



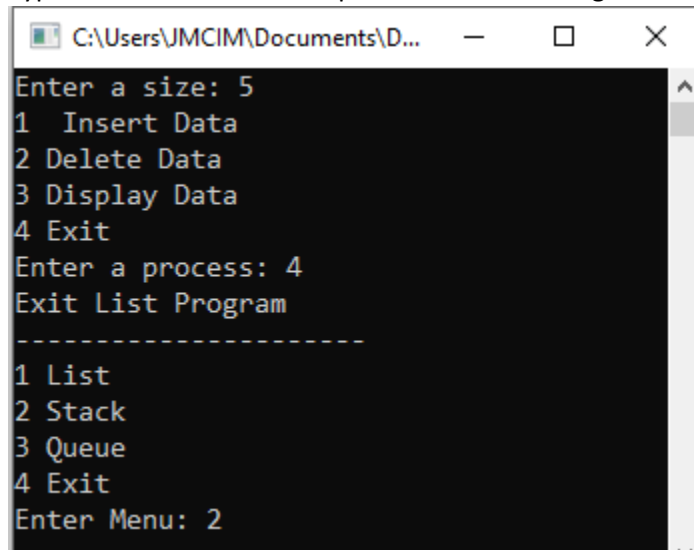
```
C:\Users\JMCIM\Documents\D...
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 1
-----
Enter a size: 5
```

- d. After entering a size of data, it will display another menu for List
Insert Data to insert data
Delete data to delete data
Display data to display data
Exit to go back to ADT menu



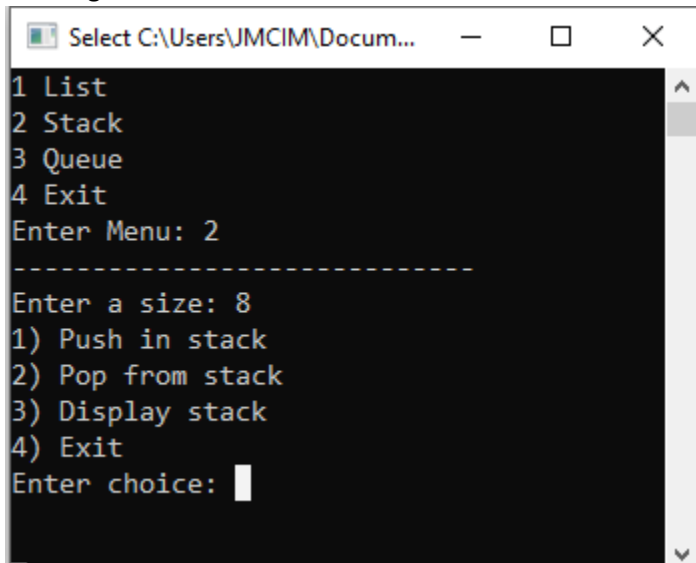
```
C:\Users\JMCIM\Documents\D...  -  □  X
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 1
-----
Enter a size: 5
1 Insert Data
2 Delete Data
3 Display Data
4 Exit
Enter a process:
```

- e. Type 2 to “Enter Menu:” to process the data using Stack



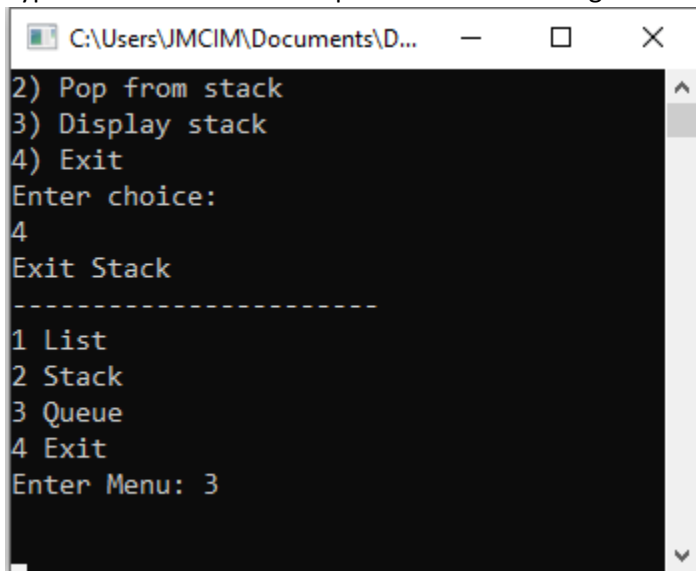
```
C:\Users\JMCIM\Documents\D...  -  □  X
Enter a size: 5
1 Insert Data
2 Delete Data
3 Display Data
4 Exit
Enter a process: 4
Exit List Program
-----
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 2
```

- f. Give a random size of data for Stack
- g. After entering a size of data, it will display another menu for Stack
 - Push in stack to insert data using stack
 - Pop from stack to delete data using stack
 - Display stack to display data
 - Exit to go back to ADT menu



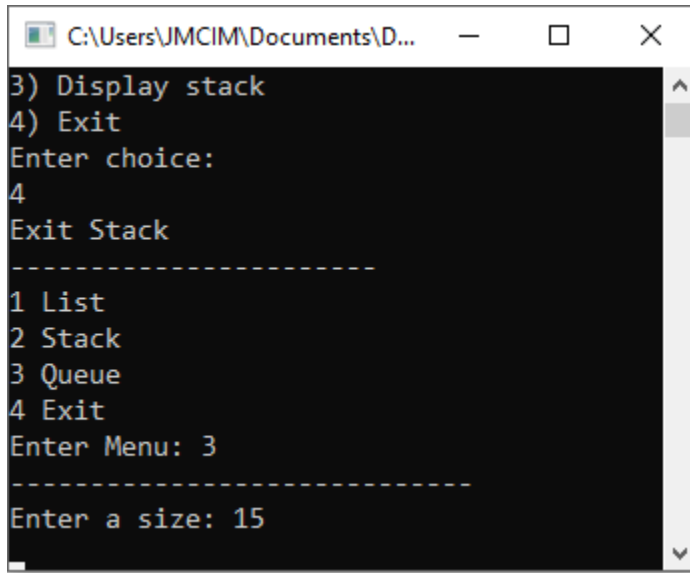
```
Select C:\Users\JMCIM\Docum...
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 2
-----
Enter a size: 8
1) Push in stack
2) Pop from stack
3) Display stack
4) Exit
Enter choice: 
```

- h. Type 3 to “Enter Menu:” to process the data using Queue



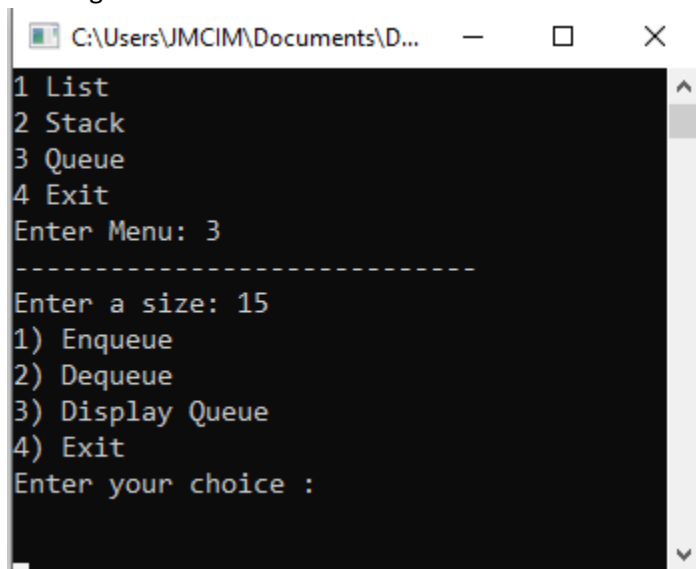
```
C:\Users\JMCIM\Documents\D...
2) Pop from stack
3) Display stack
4) Exit
Enter choice: 4
Exit Stack
-----
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 3
```

- i. Give a random size of data for Queue



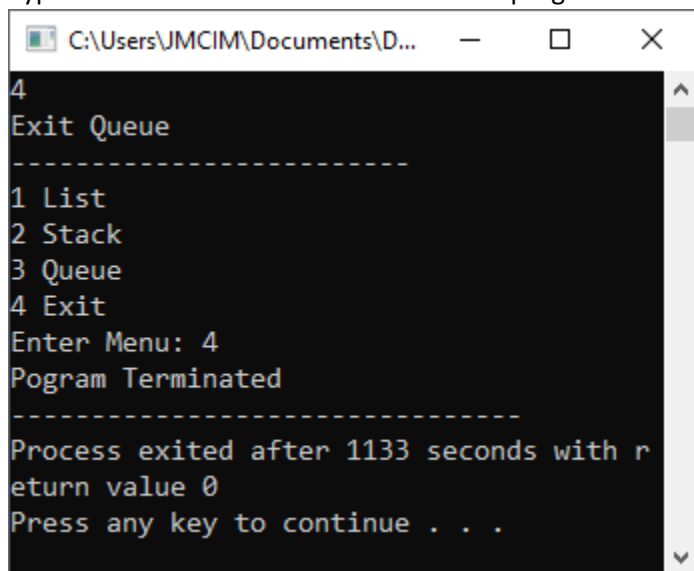
```
C:\Users\JMCIM\Documents\D...
3) Display stack
4) Exit
Enter choice:
4
Exit Stack
-----
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 3
-----
Enter a size: 15
```

- j. After entering a size of data, it will display another menu for Queue
Enqueue to insert data using Queue
Dequeue to delete data using Queue
Display Queue to display data
Exit to go back to ADT menu



```
C:\Users\JMCIM\Documents\D...
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 3
-----
Enter a size: 15
1) Enqueue
2) Dequeue
3) Display Queue
4) Exit
Enter your choice :
```

- k. Type 4 to "Enter Menu:" to terminate the program



```
C:\Users\JMCIM\Documents\D...
4
Exit Queue
-----
1 List
2 Stack
3 Queue
4 Exit
Enter Menu: 4
Pogram Terminated
-----
Process exited after 1133 seconds with r
eturn value 0
Press any key to continue . . .
```