

CS112: Computing Laboratory

Assignment :- 13

Date: 13/05/2020

For proper indentation and commenting in the code: 10 marks

For below questions: 10+10+10+10+10 =50 marks

Total marks: 50 + 10 = 60 marks

- (1) Implement Queue using array that accepts integer values. Write enqueue(), dequeue(), isempty(), isfull(), display() operations.
- (2) Implement Circular Queue using array that accepts integer values. Write enqueue(), dequeue(), isempty(), isfull(), display() operations.
- (3) Implement Stack using array that accepts integer values. Write push(), pop(), isempty(), peek(), display() operations.
- (4) Write a C program which checks to see if a single argument is supplied on the command line when the program is invoked.
- (5) Write a C program to print current date of the system using "system" command.
Write a C program to list files in a directory using "system" command.

Instructions to follow:

1. Implement all the above programs and give the file names as follows:
 - a. Name of program file: question_1.c
 - b. Name of output file: output_1.out
 - c. Run with few sample inputs and mention the details: execution_1.txt

*** Note that the format of details in execution_1.txt would be:

****Menu****

1. Enqueue
2. Dequeue
3. Isempty
4. Isfull
5. Display

Enter your choice:1

Enqueue : 10

Enter your choice: 5

Queue elements are : 20 50 10

- d. For question 4, ./question_4.out testing

The argument supplied is testing.

./question_4.out testing1 testing2

Too many arguments are supplied.

./question_4.out

One argument expected

- e. For question 5,

Current Date: 13 May 2020

List of files in the directory: a.txt, program1.c,

- 2) Create a zip file which includes all the above files naming it **<Student_EmailID>.zip** and upload the zip file through google form:

3) **Deadline of submission :- 6 PM 13/05/2020 (sharp)**

4) Feel free to contact your respective TA for any query.