INDIAN SCHOOL MUSCAT

SENIOR SECTION

DEPARTMENT OF COMPUTER SCIENCE

CLASS XII

TOPIC: IMPLEMENTATION OF QUEUE

LAB WORKSHEET - 9

1. Considering the following code is given in the program write a menu driven program to do the following menu operations for a queue as an array.

```
struct QUEUE
{ char Data[10] ;
  int rear, front ;
 } S1 ;
  void Queue()
  { S1.rear = S1.front = - 1 ;}

  void  Insert() ;
  void  Delete();
  void  Isempty();
  void  Isfull();
  void  Count();
  void  Display();
```

MENU

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a. Insert an element to a queue.
b. Delete an element from a queue.
c. Check whether the queue is empty.
d. Check whether the queue is full.
e. Count the number of elements in the queue.
f. Display the elements in the queue.
Enter your choice(a to f):

2. Considering the following code is given in the program write a menu driven program to do the following menu operations for a queue as a linked list (dynamic queue).

```
struct node
{ char name[25] ;
  long int Telno ;
  node *link ;
};
class QUEUE
{ node *FRONT, *REAR;

   public:

   QUEUE()
   { FRONT = REAR = NULL;}
 ~QUEUE()
  { cout<< "\Destroying queue"; }
```

```
 void   Insert() ;
 void   Delete();
 void   Isempty();
 void   Count();
 void   Display();
};

            MENU
            -------
    a. Insert an element to a queue.
    b. Delete an element from a queue.
    c. Check whether the queue is empty.
    d. Count the number of elements in the queue.
    e. Display the elements in the queue.
    Enter your choice(a to e ):
```