TASMIYA FATHIMA

M T W T F S S

Date :

⟹ WAP to stimulate the working of a queue of integers using an array. Provide the following operation

a) Insert
b) Delete c) Display.

The program should print appropriate messages.

Algorithm :-

A[size]
Front ← -1
Rear ← -1

IsFull()
{
if (Rear == Size-1)
return True

else
return False
}

IsEmpty()
{
if (Front == -1 && Rear == 1)
return True
else
return False
}

Enqueue ()
{
if (IsFull())
printf("Q is Full")

```
else if (Is Empty())
    Front ← Rear ← 0

else
    Rear ← Rear + 1
    A[Rear] = x
}

Dequeue ()
{
    if (Is Empty())
    print ("Q is Empty")
    else if (Front == Rear)
    {
        x = A[Front]
        front ← rear ← -1
    }

    else
    {
        x ← A[front]
        front ← front + 1
    }
    return x
}

void display ()
{
    if (Is Empty())
    printf (" Queue is Empty)

    else
    printf (" Queue Elements are : \n")
    for(i = Front; i <= Rear ; i++)
```

```
        printf ("%d", A[i]);
    }
    printf ("\n");
}
```