CODE:

#include <iostream>

#define MAX 5

using namespace std;

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int queue\_arr[MAX];

int front=-1;

int rear=-1;

void insert(int item)

{

if(front==0 && rear==MAX-1)

{

cout<<"Queue Overflow!!\n";

return;

}

if(front==-1)

{

front = 0;

rear = 0;

}

else

{

if(rear==MAX-1)

rear=0;

else

rear=rear+1;

}

queue\_arr[rear] = item;

}

void deletion()

{

if(front==-1)

{

cout<<"Queue Underflow!";

return;

}

cout<<"Element deleted from queue is: "<<queue\_arr[front]<<endl;

if(front==rear)

{

front=-1;

rear=-1;

}

else

{

if(front==MAX-1)

front=0;

else

front=front+1;

}

}

void checkempty()

{

if(front==-1)

{

cout<<"Oueue is Empty\n";

}

else

cout<<"Queue is not Empty\n";

}

void checkifunderflow()

{

if(front ==-1 && rear ==-1)

{

cout<<"Queue Underflow!\n";

return;

}

else

cout<<"Queue is not Underflow!\n";

}

void checkifoverflow()

{

if(rear==MAX-1)

{

cout<<"Queue Overflow!\n";

return;

}

else

cout<<"Queue is not Overflow!\n";

}

int main(int argc, char\*\* argv) {

int choice,item;

choice=0;

while(choice!=6)

{

cout<<"\n\*\*OPERATIONS\*\*\n";

cout<<"\n1.Add a record";

cout<<"\n2.Delete a record";

cout<<"\n3.Checking Empty";

cout<<"\n4.Checking Underflow";

cout<<"\n5.Checking Overflow";

cout<<"\n6.Quit";

cout<<"\nEnter your choice:";

cin>>choice;

switch(choice)

{

case 1 :

cout<<"\nAdd a record to insert in queue:";

cin>>item;

insert(item);

break;

case 2 :

deletion();

break;

case 3 :

checkempty();

break;

case 4 :

checkifunderflow();

break;

case 5 :

checkifoverflow();

break;

case 6 :

choice=6;

cout<<"Press any key..";

break;

default:

cout<<"Wrong Choice!!\n";

break;

}

}

return 0;

}

Output:





