**NAME:SAYALI JIVAN CHAUDHARI**

**ROLL NO.:14**

**PRN NO.2023015400005055**

**1)implementation of operation based on queue**

#include <iostream>

using namespace std;

int queue[100], n = 100, front = - 1, rear = - 1;

void Insert() {

int val;

if (rear == n - 1)

cout<<"Queue Overflow"<<endl;

else {

if (front == - 1)

front = 0;

cout<<"Insert the element in queue : "<<endl;

cin>>val;

rear++;

queue[rear] = val;

}

}

void Delete() {

if (front == - 1 || front > rear) {

cout<<"Queue Underflow ";

return ;

} else {

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

front++;;

}

}

void Display() {

if (front == - 1)

cout<<"Queue is empty"<<endl;

else {

cout<<"Queue elements are : ";

for (int i = front; i <= rear; i++)

cout<<queue[i]<<" ";

cout<<endl;

}

}

int main() {

int ch;

cout<<"1) Insert element to queue"<<endl;

cout<<"2) Delete element from queue"<<endl;

cout<<"3) Display all the elements of queue"<<endl;

cout<<"4) Exit"<<endl;

do {

cout<<"Enter your choice : "<<endl;

cin>>ch;

switch (ch) {

case 1: Insert();

break;

case 2: Delete();

break;

case 3: Display();

break;

case 4: cout<<"Exit"<<endl;

break;

default: cout<<"Invalid choice"<<endl;

}

} while(ch!=4);

return 0;

}