// circular Queue

#include<iostream>

#define N 5

using namespace std ;

string queue[N] ;

int front = -1;

int rear = -1;

void enque(string x)

{

if(((rear + 1)% N)== front)

{

cout<<"Overflow" << endl ;

}

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

{

front = rear = 0 ;

queue[rear]=x ;

}

else

{

rear = (rear + 1 )%N ;

queue[rear] = x ;

}

}

void dequeue()

{

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

{

cout<<"Underflow" << endl ;

}

else if(front == rear)

{

front = -1 ;

rear = -1;

}

else

{

cout<<"The Dequed element is "<<queue[front] << endl ;

front = (front + 1)%N ;

}

}

void Display()

{ int i = front;

cout<<"the queue elements are : " ;

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

{

cout<<"Que is empty" << endl ;

}

else

{

while(i!=rear)

{

cout<< queue[i]<< endl ;

i = (i + 1)%N ;

}

cout<<queue[rear] <<endl ;

}

}

int main()

{ enque("pizza");

enque("46");

enque("69");

enque("92");

enque("115");

Display();

dequeue();

dequeue();

Display();

return 0;

}