#include <iostream>

#include <string.h>

#include <conio.h>

using namespace std;

#define MAX\_SIZE 101

int Arr[MAX\_SIZE];

int rear = -1; // -1 show when queue is empty

int front = -1;

void Enqueue(int value)

{

if(rear == MAX\_SIZE -1) // when queue is full

{

cout << "Queue is full";

}

else if(rear == -1 && front == -1) // when queue is empty in the begining

{

rear = front = 0;

}

else

{

rear++;

}

Arr[rear] = value;

}

void Dequeue()

{

if(front == -1) // when queue is empty

{

cout << "queue is empty ";

}

else if(front == rear) /\*front and rear are same when queue have only one value and after this value is delete queue is empty\*/

{

rear = front = -1;

}

else

{

front ++;

}

}

void Print()

{

cout << "Queue : ";

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

{

cout << Arr[a] << " ";

}

cout << endl;

}

void main()

{

Enqueue(1); Print();

Enqueue(2); Print();

Enqueue(3); Print();

Dequeue(); Print();

Enqueue(4); Print();

Enqueue(5); Print();

Dequeue(); Print();

Enqueue(6); Print();

getch();

}