#include<stdio.h>

#include<stdlib.h>

struct node

{

int data;

struct node\* next;

};

struct node \*f = NULL;

struct node \*r = NULL;

void enqueue(int d) //Insert elements in Queue

{

struct node\* n;

n = (struct node\*)malloc(sizeof(struct node));

n->data = d;

n->next = NULL;

if((r==NULL)&&(f==NULL))

{

f = r = n;

r->next = f;

}

else

{

r->next = n;

r = n;

n->next = f;

}

}

void dequeue() // Delete an element from Queue

{

struct node\* t;

t = f;

if((f==NULL)&&(r==NULL))

printf("\nQueue is Empty");

else if(f == r)

{

f = r = NULL;

free(t);

}

else

{

f = f->next;

r->next = f;

free(t);

}

}

void print()

{ // Print the elements of Queue

struct node\* t;

t = f;

if((f==NULL)&&(r==NULL))

printf("\nQueue is Empty");

else

{

do{

printf("\n%d",t->data);

t = t->next;

}

while(t != f);

}

}

int main()

{

int opt,n,i,data;

printf("Enter Your Choice:");

do{

printf("\n1.Insert the Data in Queue\n2.Show the data in Queue\n3.Delete the Data in Queue\n4.Exit\n");

scanf("%d",&opt);

switch(opt){

case 1:printf("\nEnter the number of data:");

scanf("%d",&n);

printf("\nEnter your data:\n");

i=0;

while(i<n){

scanf("%d",&data);

enqueue(data);

i++;

}

break;

case 2:print();

break;

case 3: dequeue();

break;

case 4:

break;

default:printf("\nIncorrect Choice");

}

}

while(opt!=0);

return 0;

}