#include <stdio.h>

#include <stdlib.h>

void push1(int);

void push2(int);

int pop1();

int pop2();

void enqueue();

void dequeue();

void display();

void create();

int st1[100], st2[100];

int top1 = -1, top2 = -1;

int count = 0;

void main()

{

int ch;

printf("\n1 - Enqueue element into queue");

printf("\n2 - Dequeu element from queue");

printf("\n3 - Display from queue");

printf("\n4 - Exit");

create();

while (1)

{

printf("\nEnter choice");

scanf("%d", &ch);

switch (ch)

{

case 1:

enqueue();

break;

case 2:

dequeue();

break;

case 3:

display();

break;

case 4:

exit(0);

default:

printf("Wrong choice");

}

}

}

/\*Function to create a queue\*/

void create()

{

top1 = top2 = -1;

}

/\*Function to push the element on to the stack\*/

void push1(int data)

{

st1[++top1] = data;

}

/\*Function to pop the element from the stack\*/

int pop1()

{

return(st1[top1--]);

}

/\*Function to push an element on to stack\*/

void push2(int data)

{

st2[++top2] = data;

}

/\*Function to pop an element from th stack\*/

int pop2()

{

return(st2[top2--]);

}

/\*Function to add an element into the queue using stack\*/

void enqueue()

{

int data, i;

printf("Enter data into queue");

scanf("%d", &data);

push1(data);

count++;

}

/\*Function to delete an element from the queue using stack\*/

void dequeue()

{

int i;

for (i = 0;i <= count;i++)

{

push2(pop1());

}

pop2();

count--;

for (i = 0;i <= count;i++)

{

push1(pop2());

}

}

/\*Function to display the elements in the stack\*/

void display()

{

int i;

for (i = 0;i <= top1;i++)

{

printf(" %d ", st1[i]);

}

}