#include<stdio.h>

#define max 5

void insert(int s[],int \*front,int \*rear,int \*item)

{

if(\*rear==max-1)

{

printf("\n The queue is full.");

}

else {

if (\*front == -1 && \*rear == -1) {

\*front = 0;

}

(\*rear)++;

s[\*rear] = \*item;

printf("insertd at %d",\*rear);

}

}

int delete(int s[], int \*front, int \*rear) {

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

printf("\nQueue is empty.");

return -1;

} else {

int element = s[\*front];

(\*front)++;

if (\*front > \*rear) {

\*front = -1;

\*rear = -1;

}

return element;

}

}

void display(int s[],int \*rear,int \*front)

{

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

printf("\nQueue is empty.");

return;

}

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

{

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

}

printf("\n");

}

void main()

{

int front=-1;

int rear=-1;

int s[max];

int item;

int choice;

for(;;)

{

printf("\n choice 1 to push \n choice 2 to delete \n choice 3 to display");

printf("\n Enter a choice:");

scanf("%d",&choice);

switch(choice)

{

case 1:

printf("\n The item to be inserted:");

scanf("%d",&item);

insert(s,&front,&rear,&item);

break;

case 2:

{

int deleted\_item=delete(s,&front,& rear);

if(deleted\_item!=-1){

printf("%d",deleted\_item);

}

}

break;

case 3:

display(s,& rear,& front);

break;

default:

printf("Entered data is wrong.");

exit(0);

}

}

}