#include <stdio.h>

#include <stdlib.h>

#define MAX 5

void insert\_by\_pr(int);

void delete\_by\_pr(int);

void create();

void check(int);

void display();

int prique[MAX];

int front, rear;

void main()

{

int n,ch;

printf("\n1.Insert an element into queue");

printf("\n2.Delete an element from queue");

printf("\n3.Display queue elements");

printf("\n4.Exit");

create();

while (1)

{

printf("\nEnter your choice:");

scanf("%d", &ch);

switch (ch)

{

case 1:

printf("\nEnter value to be inserted:");

scanf("%d",&n);

insert\_by\_pr(n);

break;

case 2:

printf("\nEnter value to delete:");

scanf("%d",&n);

delete\_by\_pr(n);

break;

case 3:

display();

break;

case 4:

exit(0);

default:

printf("\nInvalid choice");

}

}

}

void create()

{

front=rear=-1;

}

void insert\_by\_pr(int data)

{

if (rear>=MAX-1)

{

printf("\nQueue full");

return;

}

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

{

front++;

rear++;

prique[rear] = data;

return;

}

else

{

check(data);

}

rear++;

}

void check(int data)

{

int i,j;

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

{

if (data>=prique[i])

{

for (j=rear+1;j>i;j--)

{

prique[j] = prique[j-1];

}

prique[i]=data;

return;

}

}

prique[i]=data;

}

void delete\_by\_pr(int data)

{

int i;

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

{

printf("\nQueue is empty");

return;

}

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

{

if (data==prique[i])

{

for (;i<rear;i++)

{

prique[i]=prique[i+1];

}

prique[i] = -99;

rear--;

if (rear==-1)

{

front=-1;

}

return;

}

}

printf("\n%d not found in queue to delete", data);

}

/\* Function to display queue elements \*/

void display()

{

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

{

printf("\nQueue is empty");

return;

}

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

{

printf(" %d ", prique[front]);

}

front = 0;

}



