

```
#include<stdio.h>
# define MAX 5
int cqueue_arr[MAX];
int front = -1;
int rear = -1;

void insert(int item)
{
if((front == 0 && rear == MAX-1) || (front == rear+1))
{
printf("Queue Overflow \n");
return;
}
if (front == -1)
{
front = 0; rear = 0;
}
else
{
if(rear == MAX-1)
rear = 0;
else rear = rear+1;
}
cqueue_arr[rear] = item ;
}

void del()
{
if (front == -1)
{
```

```

printf("Queue Underflow\n");
return ;
}
printf("Element deleted from queue is : %d\n",cqueue_arr[front]);
if(front == rear)
{
front = -1; rear=-1;
}
else
{
if(front == MAX-1) front = 0; else front = front+1;
}
}

void display()
{
int front_pos = front,rear_pos = rear; if(front == -1)
{
printf("Queue is empty\n");
return;
}
printf("Queue elements :\n");
if( front_pos <= rear_pos )
while(front_pos <= rear_pos)
{
printf("%d ",cqueue_arr[front_pos]); front_pos++;
}
else
{

```

```
while(front_pos <= MAX-1)
{
printf("%d ",cqueue_arr[front_pos]); front_pos++;
}
front_pos = 0;
while(front_pos <= rear_pos)
{
printf("%d ",cqueue_arr[front_pos]); front_pos++;
}
printf("\n");
}
int search(int s)
{
int i;
for(i=front;i<=rear;i++)
{
if(s==cqueue_arr[i])
{
printf("element found at %d position \n",i+1);
}
}
}
int main()
{
int choice,item,s;
do
{
printf("1.Insert\n");
printf("2.Delete\n");
printf("3.Display\n");
```

```
printf("4.Search\n");
printf("4.Quit\n");
printf("Enter your choice : "); scanf("%d",&choice);
switch(choice)
{
case 1 : printf("Input the element for insertion in
queue : ");
scanf("%d", &item);
insert(item);
break;
case 2 : del();
break;
case 3: display();
break;
case 4: printf("enter the item to be searched for\n");
scanf("%d",&s);
search(s);
break;
case 5: exit ( 0 );
default: printf("\nWrong selection!!!Please try again!!!
\n");
}
}
while(choice!=4);
return 0;
}
```



Run

Debug

Stop

Share



```
c
4 {
5 case 1 :
6 printf("Input the element for
7 scanf("%d", &item);
8 insert(item);
9 break;
0 case 2 :
1 del();
2 break;
3 case 3:
4 display();
5 break;
6 case 4:
7 printf("enter the item to be
8 scanf("%d",&s);
9 search(s);
0 break;
1 case 5:
2 exit( 0 );
3 break;
4 default:
5 printf("Wrong choice\n");
6 }
7 }
8 while(choice!=4);
9 return 0;
0 }
1
2
```



input



onlinegdb.com

1



Run

Debug

Stop

Share


```
c
9 }
10 int search(int s)
11 {
12     int i;
13     for(i=front;i<=rear;i++)
14     {
15         if(s==cqueue_arr[i])
16         {
17             printf("element found at %d position\n",i);
18         }
19     }
20 }
21 int main()
22 {
23     int choice,item,s;
24     do
25     {
26         printf("1.Insert\n");
27         printf("2.Delete\n");
28         printf("3.Display\n");
29         printf("4.Search\n");
30         printf("5.Quit\n");
31         printf("Enter your choice : ");
32         scanf("%d",&choice);
33         switch(choice)
34         {
35             case 1 :
36                 printf("Input the element for\n");
```



onlinegdb.com

1





OnlineGDB
beta
online
compiler and
debugger for
c/c++



code.
compile.
run. debug.
share.


IDE


My
Projects


Classroom
new

About • FAQ
• Blog •
Terms of
Use •
Contact Us
• GDB
Tutorial •
Credits •
Privacy



 Run

 Debug

 Stop

main.c

```
7
8 *****
9 #include<stdio.h>
10 # define MAX 5
11
12 int cqueue_arr[MAX];
13 int front = -1;
14 int rear = -1;
15
16
17 void insert(int item)
18 {
19     if((front == 0 && rear =
20     {
21         printf("Queue Overflow \
22         return;
23     }
24     if (front == -1) /*If q
25     {
26         front = 0;
27         rear = 0;
28     }
29     else
30     {
31         if(rear == MAX-1) /*re
32         rear = 0;
33     else
```



onlinegdb.com

1



beta
online
compiler and
debugger for
c/c++

code.
compile.
run. debug.
share.

IDE

My
Projects

Classroom

new

About • FAQ

• Blog •

Terms of

Use •

Contact Us

• GDB

Tutorial •

Credits •

Privacy

© 2016 -

2021 GDB

Online

```
86 }  
87 }  
88 printf("\n");
```



input

Input the element for insertion

in queue : 3

1.Insert

2.Delete

3.Display

4.Search

5.Quit

Enter your choice : 1

Input the element for insertion

in queue : 4

1.Insert

2.Delete

3.Display

4.Search

5.Quit

Enter your choice : 1

Input the element for insertion

in queue : 5

1.Insert

2.Delete

3.Display

4.Search

5.Quit

Enter your choice :





onlinegdb.com

3



beta

online
compiler and
debugger for
c/c++code.
compile.run. debug.
share.

IDE

My
Projects

Classroom

new

About • FAQ

• Blog •

Terms of
Use •

Contact Us

• GDB

Tutorial •

Credits •

Privacy

© 2016 -

2021 GDB

Online

input

Enter your choice : 1

Inset the element in queue : 3

1.Insert element to queue

2.Delete element from queue

3.Display all elements of queue

4.Quit

Enter your choice : 1

Inset the element in queue : 4

1.Insert element to queue

2.Delete element from queue

3.Display all elements of queue

4.Quit

Enter your choice : 2

Element deleted from queue is :

2

1.Insert element to queue

2.Delete element from queue

3.Display all elements of queue

4.Quit

Enter your choice : 3

Queue is :

3 4

1.Insert element to queue

2.Delete element from queue

3.Display all elements of queue

4.Quit

Enter your choice : 



🔒 onlinegdb.com

1



beta
online
compiler and
debugger for
c/c++

code.
compile.
run. debug.
share.

IDE

My
Projects

Classroom
new

About • FAQ

• Blog •

Terms of

Use •

Contact Us

• GDB

Tutorial •

Credits •

Privacy

© 2016 -

2021 GDB

Online

```
5.Quit
Enter your choice : 2
Element deleted from queue is :
2
1.Insert
2.Delete
3.Display
4.Search
5.Quit
Enter your choice : 3
Queue elements :
3 4 5
1.Insert
2.Delete
3.Display
4.Search
5.Quit
Enter your choice : 4
enter the item to be searched for
r
4
element found at 3 position

...Program finished with exit code 0
Press ENTER to exit console.
```

Last modified: 9:50 p.m.