```
#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 )</pre>
while(front_pos <= rear_pos)</pre>
printf("%d ",cqueue_arr[front_pos]); front_pos++;
else
```

```
while(front_pos <= MAX-1)</pre>
printf("%d ",cqueue_arr[front_pos]); front_pos++;
front_pos = 0;
while(front_pos <= rear_pos)</pre>
printf("%d ",cqueue_arr[front_pos]); front_pos++;
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
                             C Share
    5
       case 1:
    6
       printf("Input the element for
    7
       scanf("%d", &item);
       insert(item);
    8
    9
       break;
      case 2:
    0
      del();
       break:
    3
       case 3:
    4
       display();
    5
      break;
    6
       case 4:
    7
       printf("enter the item to be
       scanf("%d",&s);
    8
    9
      search(s);
       break;
    0
       case 5:
    2
      exit( 0 );
    3
       break;
       default:
       printf("Wrong choice\n");
    5
    6
    7
       while(choice!=4);
    8
    9
       return 0;
    0
       }
                  input
```





```
O Debug
     Run
                            C Share
                     Stop
   int search(int s)
1 - {
  int i;
2
  for(i=front;i<=rear;i++)</pre>
3
4 - {
  if(s==cqueue_arr[i])
5
6 - {
  printf("element found at %d po
8
  }
9
0
  int main()
2 - {
   int choice,item,s;
3
4
  do
5 - {
  printf("1.Insert\n");
6
   printf("2.Delete\n");
7
   printf("3.Display\n");
8
   printf("4.Search\n");
9
   printf("5.Quit\n");
0
  printf("Enter your choice : "
2
  scanf("%d",&choice);
3
   switch(choice)
4 - {
5
   case 1:
```



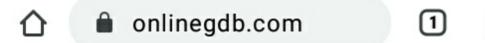


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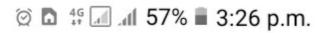


```
O Debug
                    Run
                                    Stop
              ~
         main.c
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  beta
                ***********
            8
  online
compiler and
            9
                #include<stdio.h>
debugger for
           10
               # define MAX 5
  c/c++
           11
               int cqueue_arr[MAX];
           12
  code.
               int front = -1:
           13
 compile.
               int rear = -1:
           14
run. debug.
           15
  share.
           16
               void insert(int item)
           17
   IDE
           18 - {
   Mv
           19
               if((front == 0 && rear
 Projects
           20 - {
               printf("Queue Overflow
           21
Classroc
           22
               return;
  new
           23
               if (front == -1) /*If o
About • FAQ
           24
           25 - {
 • Blog •
           26
               front = 0;
 Terms of
           27
               rear = 0;
  Use •
           28
Contact Us
           29
               else
  • GDB
           30 - {
 Tutorial •
           31
               if(rear == MAX-1)
                                        /*re
 Credits •
           32
                rear = 0;
 Privacy
           33
               else
```





```
beta
            87
  online
                 printf("\n");
            88
compiler and
debugger for
               · ,
                           input
  c/c++
          Input the element for insertion
  code.
          in queue : 3
 compile.
         1. Insert
run. debug. 2.Delete
  share.
         3.Display
          4.Search
   IDE
          5.Ouit
         Enter your choice : 1
   My
 Projects
         Input the element for insertion
          in queue : 4
Classroc
         1.Insert
   new
          2.Delete
About • FAQ 3. Display
  · Blog ·
         4.Search
         5.Quit
 Terms of
  Use •
         Enter your choice : 1
Contact Us Input the element for insertion
  • GDB
         in queue : 5
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         1.Insert
 Credits •
         2.Delete
  Privacy
         3.Display
                                              8
 © 2016 - 4. Search
2021 GDB 5.Quit
  Online
         Enter your choice :
```





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online	Enter your choice : 1
compiler and	Inset the element in queue : 3
debugger for c/c++	1.Insert element to queue
	2.Delete element from queue
code.	3.Display all elements of queue
compile.	4.Quit
run. debug.	Enter your choice : 1
share.	Inset the element in queue : 4
IDE	1.Insert element to queue
IDE	2.Delete element from queue
My	3.Display all elements of queue
Projects	4.Quit
Classroc	Enter your choice : 2
new	Element deleted from queue is :
	2
About • FAQ	1.Insert element to queue
• Blog •	2.Delete element from queue
Terms of	3.Display all elements of queue
Use •	4.Quit
Contact Us	Enter your choice : 3
• GDB	Queue is :
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Credits •	1.Insert element to queue
100000000000000000000000000000000000000	2.Delete element from queue 👸
and the second second second	3.Display all elements of queue
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Online	Enter your choice :





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          5.Quit
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  c/c++
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          1.Insert
  code.
          2.Delete
 compile.
run. debug. 3.Display
          4.Search
  share.
          5.Ouit
   IDE
          Enter your choice : 3
          Queue elements :
   My
          3 4 5
 Projects
          1.Insert
Classroc
          2.Delete
   new
          3.Display
About • FAQ 4. Search
          5.Quit
  · Blog ·
          Enter your choice : 4
 Terms of
          enter the item to be searched fo
  Use •
Contact Us

    GDB

          element found at 3 position
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 Credits •
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          ... Program finished with exit co
 © 2016 -
          de 0
2021 GDB
          Press ENTER to exit console.
  Online
```

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