aryPdf

Run ▶

main.c

```c
#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 deletion()
{
```

main.c

```
29  if(front == -1)
30  {
31  printf("Queue Underflow\n");
32  return ;
33  }
34  printf("Element deleted from queue is : %d\n",cqueue_arr
    [front]);
35  if(front == rear)
36  {
37  front = -1;
38  rear=-1;
39  }
40  else
41  {
42  if(front == MAX-1)
43  front = 0;
44  else
45  front = front+1;
46  }
47  }
48  void display()
49  {
50  int front_pos = front,rear_pos = rear;
51  if(front == -1)
52  {
53  printf("Queue is empty\n");
54  return;
55  }
```

naryPdf C

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main.c

```
56   printf("Queue elements :\n");
57   if( front_pos <= rear_pos )
58   while(front_pos <= rear_pos)
59   {
60   printf("%d\n ",cqueue_arr[front_pos]);
61   front_pos++;
62   }
63   else
64   {
65   while(front_pos <= MAX-1)
66   {
67   printf("%d ",cqueue_arr[front_pos]);
68   front_pos++;
69   }
70   front_pos = 0;
71   while(front_pos <= rear_pos)
72   {
73   printf("%d\n ",cqueue_arr[front_pos]);
74   front_pos++;
75   }
76   }
77   printf("\n");
78   }
79   int main()
80   {
81   int choice,item;
82   do
83   {
```

main.c

```c
printf("1.Insert\n");
printf("2.Delete\n");
printf("3.Display\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 :
deletion();
break;
case 3:
display();
break;
case 4:
break;
default:
printf("Wrong choice\n");
}
}while(choice!=4);
return 0;
}
```

Talk

```
clang-7 -pthread -lm -o main main.c
./main
1.Insert
2.Delete
3.Display
4.Quit
Enter your choice : 1
Input the element for insertion in queue : 34
1.Insert
2.Delete
3.Display
4.Quit
Enter your choice : 1
Input the element for insertion in queue : 34
1.Insert
2.Delete
3.Display
4.Quit
Enter your choice : 145
Wrong choice
1.Insert
2.Delete
3.Display
4.Quit
Enter your choice : 2
Element deleted from queue is : 34
1.Insert
2.Delete
3.Display
4.Quit
```