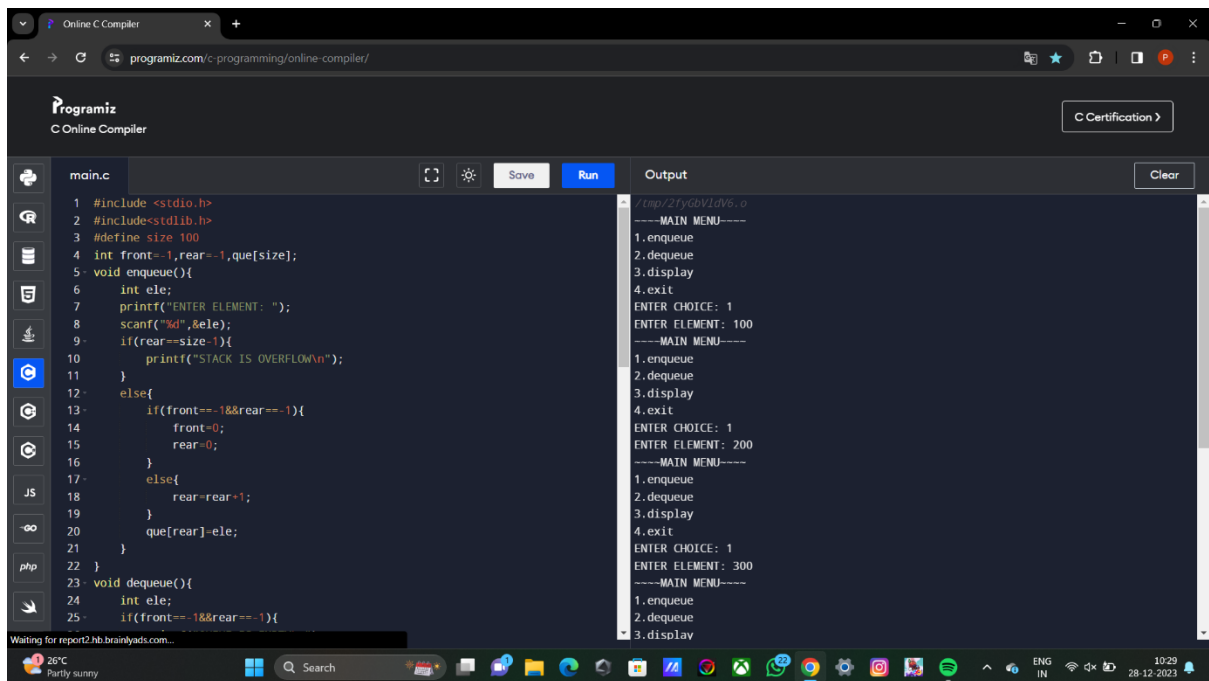


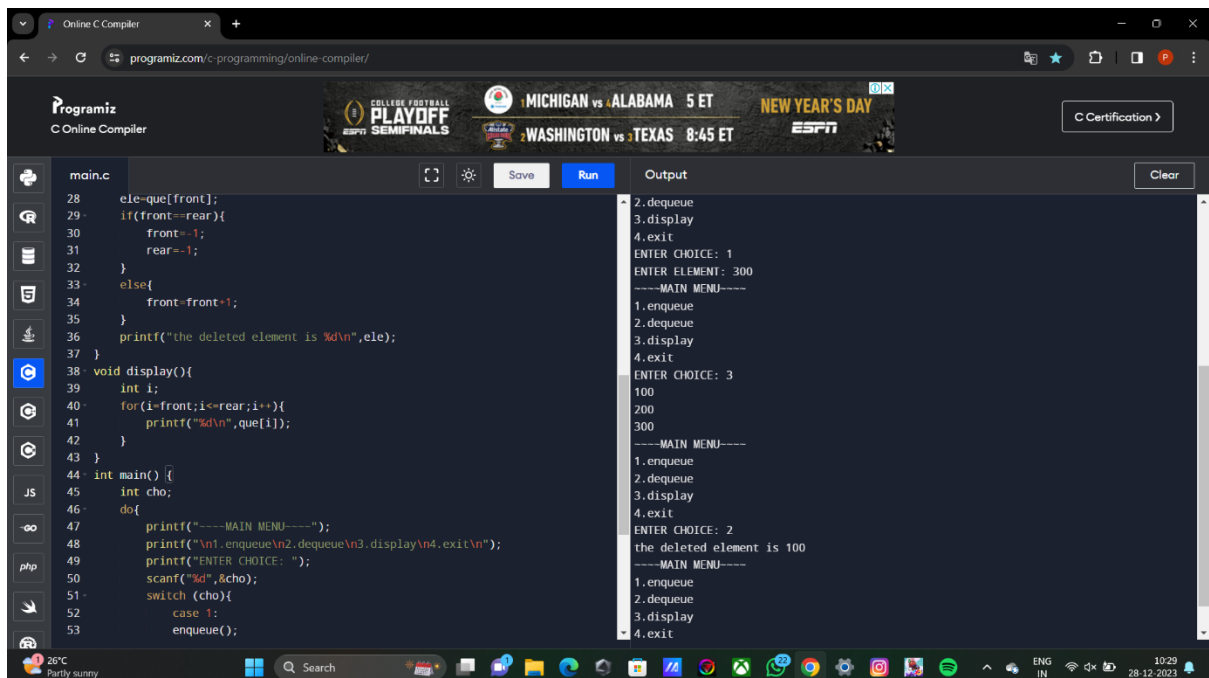
1. OPERATIONS ON A NORMAL QUEUE.



```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #define size 100
4 int front=-1, rear=-1, que[size];
5 void enqueue(){
6     int ele;
7     printf("ENTER ELEMENT: ");
8     scanf("%d", &ele);
9     if(rear==size-1){
10         printf("STACK IS OVERFLOW\n");
11     }
12     else{
13         if((front==1&&rear==1){
14             front=0;
15             rear=0;
16         }
17         else{
18             rear=rear+1;
19         }
20         que[rear]=ele;
21     }
22 }
23 void dequeue(){
24     int ele;
25     if(front==1&&rear==1){
```

Output

```
1. enqueue
2. dequeue
3. display
4. exit
ENTER CHOICE: 1
ENTER ELEMENT: 100
----MAIN MENU----
1. enqueue
2. dequeue
3. display
4. exit
ENTER CHOICE: 1
ENTER ELEMENT: 200
----MAIN MENU----
1. enqueue
2. dequeue
3. display
4. exit
ENTER CHOICE: 1
ENTER ELEMENT: 300
----MAIN MENU----
1. enqueue
2. dequeue
3. display
```



```
28 ele=que[front];
29 if(front==rear){
30     front=-1;
31     rear=-1;
32 }
33 else{
34     front=front+1;
35 }
36 printf("the deleted element is %d\n", ele);
37 }
38 void display(){
39     int i;
40     for(i=front; i<=rear; i++){
41         printf("%d\n", que[i]);
42     }
43 }
44 int main() {
45     int cho;
46     do{
47         printf("----MAIN MENU----");
48         printf("\n1. enqueue\n2. dequeue\n3. display\n4. exit\n");
49         printf("ENTER CHOICE: ");
50         scanf("%d", &cho);
51         switch (cho){
52             case 1:
53                 enqueue();
```

Output

```
2. dequeue
3. display
4. exit
ENTER CHOICE: 1
ENTER ELEMENT: 300
----MAIN MENU----
1. enqueue
2. dequeue
3. display
4. exit
ENTER CHOICE: 3
100
200
300
----MAIN MENU----
1. enqueue
2. dequeue
3. display
4. exit
ENTER CHOICE: 2
the deleted element is 100
----MAIN MENU----
1. enqueue
2. dequeue
3. display
4. exit
```

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PLAYOFF
SEMIFINALS

MICHIGAN vs ALABAMA 5 ET
WASHINGTON vs TEXAS 8:45 ET

NEW YEAR'S DAY

C Certification >

main.c

SaveRunClear

```
43 }
44 int main() {
45     int cho;
46     do{
47         printf("----MAIN MENU----");
48         printf("\n1.enqueue\n2.dequeue\n3.display\n4.exit\n");
49         printf("ENTER CHOICE: ");
50         scanf("%d",&cho);
51         switch (cho){
52             case 1:
53                 enqueue();
54                 break;
55             case 2:
56                 dequeue();
57                 break;
58             case 3:
59                 display();
60                 break;
61             case 4:
62                 exit(0);
63             default:
64                 printf("ENTER NUMBER BETWEEN 1 TO 4");
65         }
66     }while(cho>=1&&cho<=4);
67     return 0;
68 }
```

Output

Clear

```
4.exit
ENTER CHOICE: 1
ENTER ELEMENT: 300
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER CHOICE: 3
100
200
300
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER CHOICE: 2
the deleted element is 100
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER CHOICE: 4
```

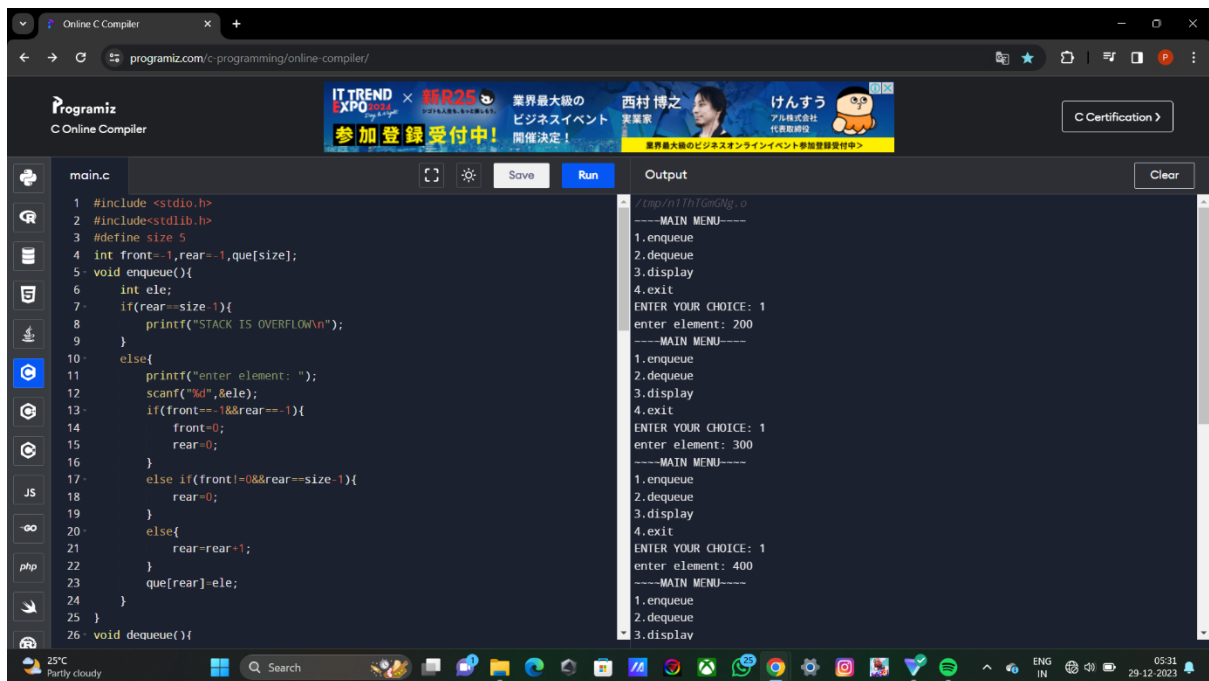
26°C
Partly sunny

Search

ENG
IN

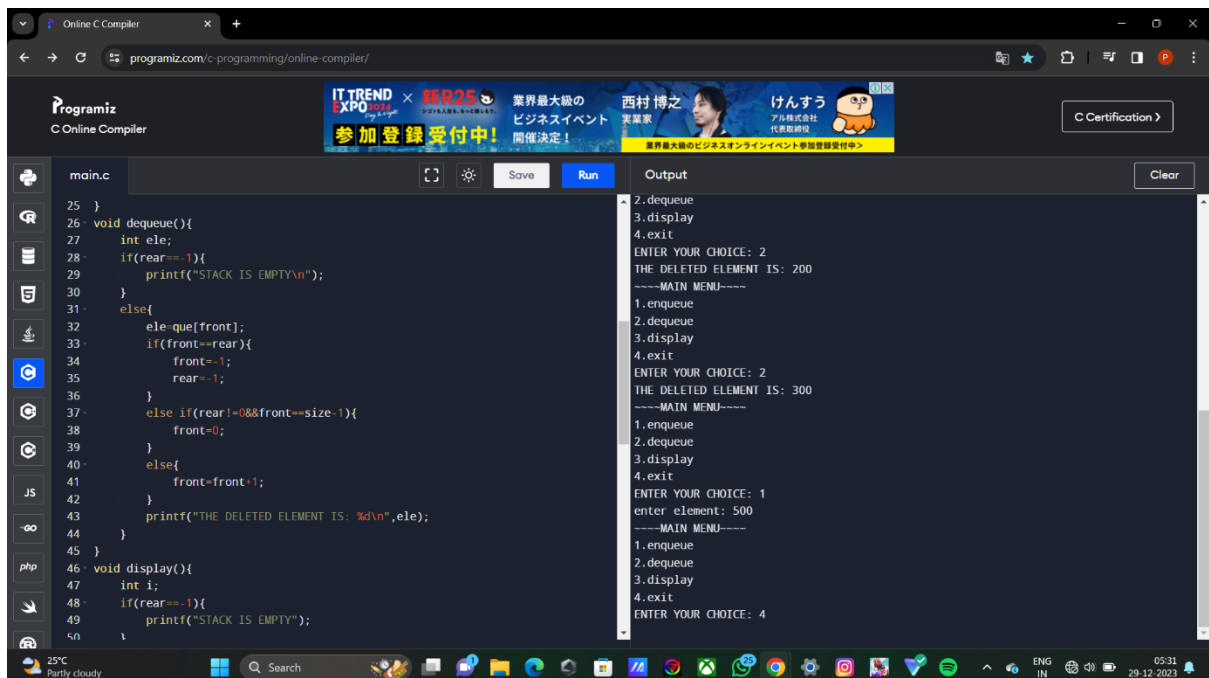
10:29
28-12-2023

2. OPERATIONS ON A CYCLED QUEUE



```
main.c
1 #include <stdio.h>
2 #include <stdlib.h>
3 #define size 5
4 int front=-1, rear=-1, que[size];
5 void enqueue(){
6     int ele;
7     if(rear==size-1){
8         printf("STACK IS OVERFLOW\n");
9     }
10    else{
11        printf("enter element: ");
12        scanf("%d", &ele);
13        if(front==0&&rear==size-1){
14            front=0;
15            rear=0;
16        }
17        else if(front!=0&&rear==size-1){
18            rear=0;
19        }
20        else{
21            rear=rear+1;
22        }
23        que[rear]=ele;
24    }
25 }
26 void dequeue(){
```

```
Output
/tmp/r1Th1GecNg.o
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 1
enter element: 200
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 1
enter element: 300
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 1
enter element: 400
----MAIN MENU----
1.enqueue
2.dequeue
3.display
```



```
main.c
25 }
26 void dequeue(){
27     int ele;
28     if(rear==0){
29         printf("STACK IS EMPTY\n");
30     }
31     else{
32         ele=que[front];
33         if(front==rear){
34             front=-1;
35             rear=-1;
36         }
37         else if(rear!=0&&front==size-1){
38             front=0;
39         }
40         else{
41             front=front+1;
42         }
43         printf("THE DELETED ELEMENT IS: %d\n", ele);
44     }
45 }
46 void display(){
47     int i;
48     if(rear==0){
49         printf("STACK IS EMPTY");
50     }
```

```
Output
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 2
THE DELETED ELEMENT IS: 200
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 2
THE DELETED ELEMENT IS: 300
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 1
enter element: 500
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 4
```

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main.c

Save

Run

Clear

Output

```
52-     for(i=front;i<size-1;i++){
53-         if(que[i]!='\0'){
54-             printf("%d\n",que[i]);
55-         }
56-     }
57-     for(i=0;i<rear;i++){
58-         if(que[i]!='\0'){
59-             printf("%d\n",que[i]);
60-         }
61-     }
62- }
63- }
64- int main() {
65-     int cho;
66-     do{
67-         printf("----MAIN MENU----");
68-         printf("\n1.enqueue\n2.dequeue\n3.display\n4.exit\n");
69-         printf("ENTER YOUR CHOICE: ");
70-         scanf("%d",&cho);
71-         switch (cho){
72-             case 1:
73-                 enqueue();
74-                 break;
75-             case 2:
76-                 dequeue();
77-                 break;
```

```
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 2
THE DELETED ELEMENT IS: 200
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 2
THE DELETED ELEMENT IS: 300
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 1
enter element: 500
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 4
```

25°C
Partly cloudy

Search

ENG
IN

05:31
29-12-2023

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main.c

Save

Run

Clear

Output

```
63- }
64- int main() {
65-     int cho;
66-     do{
67-         printf("----MAIN MENU----");
68-         printf("\n1.enqueue\n2.dequeue\n3.display\n4.exit\n");
69-         printf("ENTER YOUR CHOICE: ");
70-         scanf("%d",&cho);
71-         switch (cho){
72-             case 1:
73-                 enqueue();
74-                 break;
75-             case 2:
76-                 dequeue();
77-                 break;
78-             case 3:
79-                 display();
80-                 break;
81-             case 4:
82-                 exit(0);
83-             default:
84-                 printf("ENTER CHOICE BETWEEN 1 TO 4");
85-         }
86-     }while(cho>1&&cho<=4);
87-     return 0;
88- }
```

```
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 2
THE DELETED ELEMENT IS: 200
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 2
THE DELETED ELEMENT IS: 300
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 1
enter element: 500
----MAIN MENU----
1.enqueue
2.dequeue
3.display
4.exit
ENTER YOUR CHOICE: 4
```

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