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Programiz C Online Compiler

C Certification ›

main.c

Run

```c
#192210211
#include<stdio.h>
#include<stdlib.h>
void insert();
void dequeue();
void display();
int front = -1, rear = -1 ,maxsize;
int queue[100];
int main ()  {
    int choice;
    printf("\n Enter the size of QUEUE : ");
    scanf("%d",&maxsize);
    printf("\n QUEUE OPERATIONS USING ARRAY");
    printf("\n1.insert an element\n2.Delete an element\n3.Display the queue\n4
        .Exit");
    while(choice != 4)   {
        printf("\nEnter your choice : ");
        scanf("%d",&choice);
        switch(choice)  {
            case 1:
            insert();
            break;
            case 2:
            dequeue();
            break;
            case 3:
            display();
            break;
            case 4:
            exit(0);
```

Output

Clear

```
/tmp/tYTSR8BOGQ.o
Enter the size of QUEUE : 5
QUEUE OPERATIONS USING ARRAY
1.insert an element
2.Delete an element
3.Display the queue
4.Exit
Enter your choice :
```

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```
29          exit(0);
30          break;
31          default:
32          printf("\nEnter valid choice??\n"); }   }
33      return 0; }
34  void insert()  {
35      int item;
36      printf("\nEnter the element\n");
37      scanf("\n%d",&item);
38      if(rear == maxsize-1)  {
39          printf("\nOVERFLOW\n");
40          return;   }
41      if(front == -1 && rear == -1)  {
42          front = 0;
43          rear = 0;   }
44      else   {
45          rear = rear+1;  }
46      queue[rear] = item;
47      printf("\nValue inserted ");  }
48  void dequeue() {
49      int item;
50      if (front == -1 || front > rear)  {
51          printf("\nUNDERFLOW\n");
52          return;  }
53      else  {
54          item = queue[front];
55          if(front == rear)  {
56              front = -1;
57              rear = -1 ; }
58          else   {
```

Output

Clear

```
/tmp/tYTSR8BOGQ.o
Enter the size of QUEUE : 5
QUEUE OPERATIONS USING ARRAY
1.insert an element
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Run

```c
        printf("\nOVERFLOW\n");
        return;   }
    if(front == -1 && rear == -1)  {
        front = 0;
        rear = 0;   }
    else   {
        rear = rear+1;  }
    queue[rear] = item;
    printf("\nValue inserted ");  }
void dequeue() {
    int item;
    if (front == -1 || front > rear)  {
        printf("\nUNDERFLOW\n");
        return;  }
    else  {
        item = queue[front];
        if(front == rear)  {
            front = -1;
            rear = -1 ; }
        else   {
            front = front + 1;  }
        printf("\nvalue deleted ");}}
void display() {
    int i;
    if(rear == -1)  {
        printf("\nEmpty queue\n");  }
    else  {
        printf("\n Elements in the queue are\n");
        for(i=front;i<=rear;i++)  {
            printf("\n%d",queue[i]);}}}
```

Output

Clear

```
/tmp/tYTSR8BOGQ.o
Enter the size of QUEUE : 5
QUEUE OPERATIONS USING ARRAY
1.insert an element
2.Delete an element
3.Display the queue
4.Exit
Enter your choice :
```