

```
#include <stdio.h>
#include <stdlib.h>

#define max 50

void insert();
void delete ();
void display();
int queue_array[max];
int rear = -1;
int front = -1;
void main()
{
    int choice;
    while (1)
    {
        printf("\n1.Insert elemnet to Queue\n");
        printf("2.Delete element from Queue\n");
        printf("3.Display all elements of queue\n");
        printf("4.quit");
        printf("Enter your choice:");
        scanf("%d", &choice);
        switch (choice)
        {
            case 1:
                insert();
                break;
            case 2:
                delete ();
                break;
            case 3:
                display();
                break;
            case 4:
                exit(1);
            default:
                printf("Wrong choice\n");
        }
    }
}
```

```

    }
}
void insert()
{
    int add_item;
    if (rear == max - 1)
        printf("Queue Overflow\n");
    else
    {
        if (front == -1)
            front = 0;
        printf("Insert element in queue: \n");
        scanf("%d", &add_item);
        rear += 1;
        queue_array[rear] = add_item;
    }
}
void delete ()
{
    if (front == -1 || front > rear)
    {
        printf("Queue Underflow\n");
    }
    else
    {
        printf("Element Deleted from queue is:%d\n",
queue_array[front]);
        front += 1;
    }
}
void display()
{
    int i;
    if (front == -1)
    {
        printf("Queue is empty\n");
    }
    else

```

```
{  
    printf("Queue is :\n");  
    for (i = 0; i <= rear; i++)  
  
        printf( " %d ", queue_array[i]);  
    printf("\n");  
}  
}
```

View Go Run Terminal Help



Get Started



studentdatausingstruct.c



queueusingarray.c >



display()

55

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

```
1.Insert elemnet to Queue
2.Delete element from Queue
3.Display all elements of queue
4.quitEnter your choice:1
Insert element in queue:
342
```

```
1.Insert elemnet to Queue
2.Delete element from Queue
3.Display all elements of queue
4.quitEnter your choice:1
Insert element in queue:
345
```

```
1.Insert elemnet to Queue
2.Delete element from Queue
3.Display all elements of queue
4.quitEnter your choice:1
Insert element in queue:
35
```

```
1.Insert elemnet to Queue
2.Delete element from Queue
3.Display all elements of queue
4.quitEnter your choice:3
Queue is :
34 64 342 345 35
```

```
1.Insert elemnet to Queue
2.Delete element from Queue
3.Display all elements of queue
4.quitEnter your choice:2
Element Deleted from queue is:34
```

```
1.Insert elemnet to Queue
2.Delete element from Queue
3.Display all elements of queue
4.quitEnter your choice:2
Element Deleted from queue is:64
```

```
1.Insert elemnet to Queue
2.Delete element from Queue
3.Display all elements of queue
4.quitEnter your choice:2
Element Deleted from queue is:342
```

