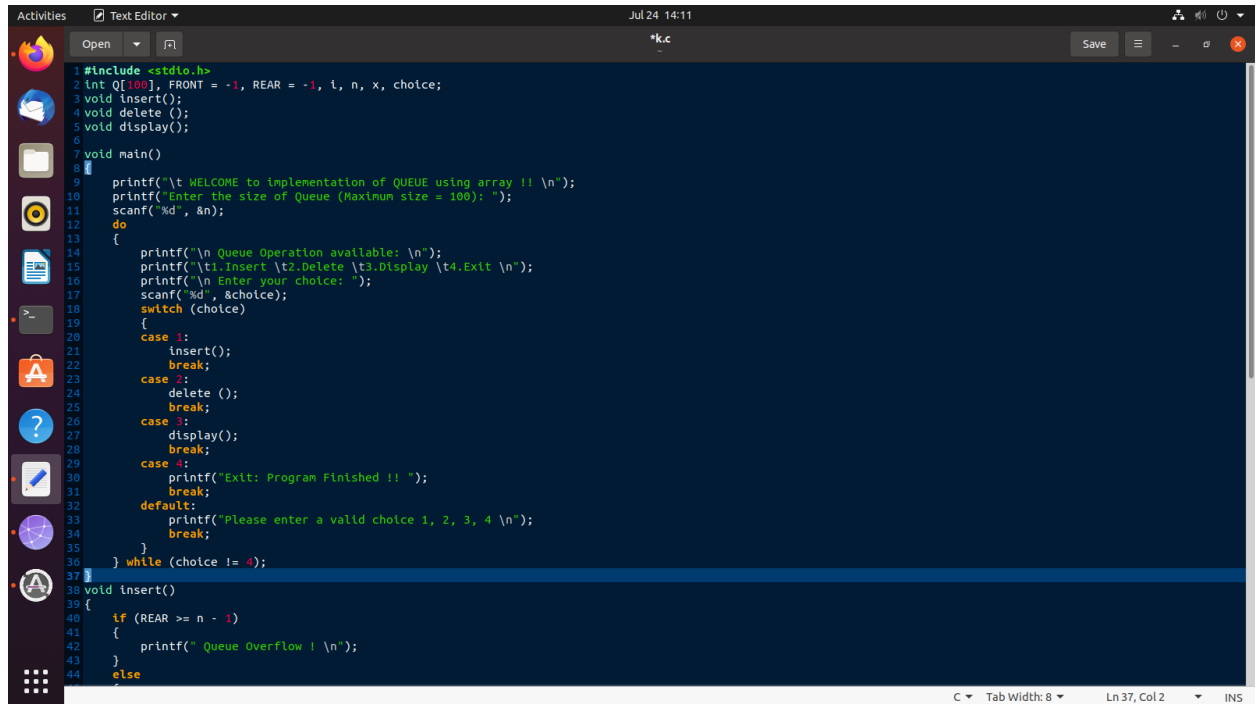
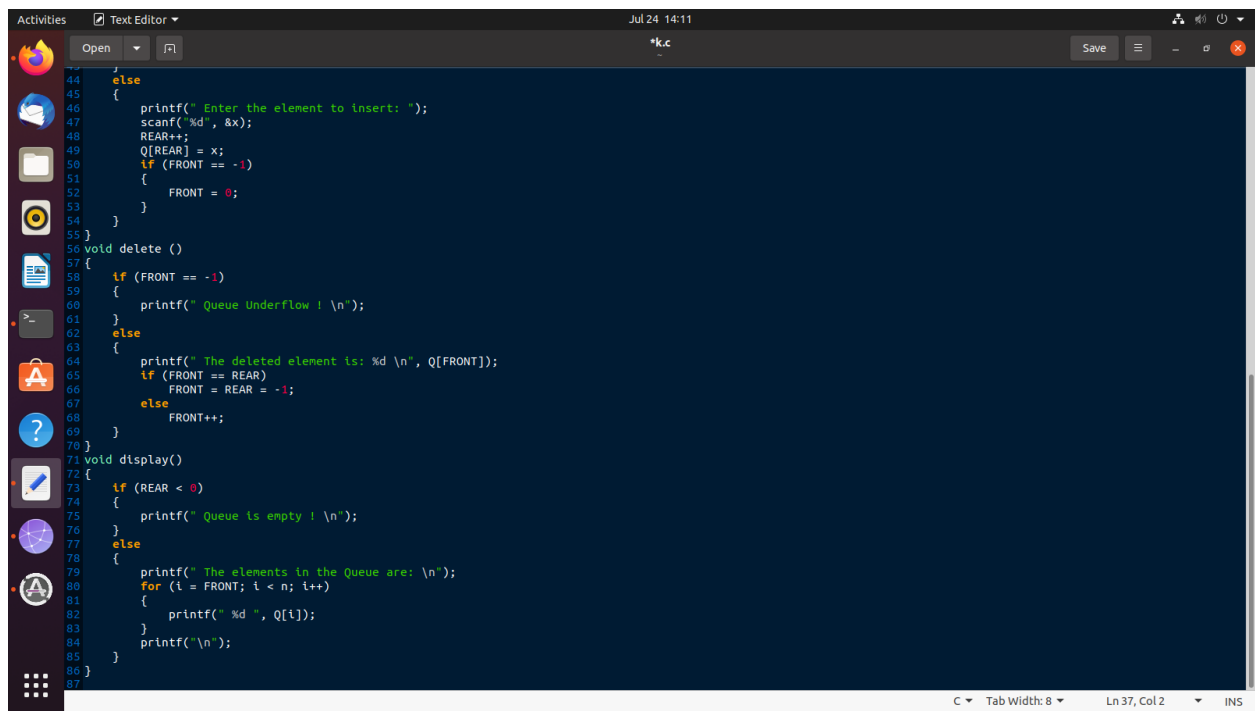


Karan shah  
Roll number- 52  
Sy it



```
1#include <stdio.h>
2int Q[100], FRONT = -1, REAR = -1, i, n, x, choice;
3void insert();
4void delete ();
5void display();
6
7void main()
8{
9    printf("\t WELCOME to implementation of QUEUE using array !! \n");
10   printf("Enter the size of Queue (Maximum size = 100): ");
11   scanf("%d", &n);
12   do
13   {
14       printf("\n Queue Operation available: \n");
15       printf("\t1.Insert \t2.Delete \t3.Display \t4.Exit \n");
16       printf("\n Enter your choice: ");
17       scanf("%d", &choice);
18       switch (choice)
19       {
20           case 1:
21               insert();
22               break;
23           case 2:
24               delete ();
25               break;
26           case 3:
27               display();
28               break;
29           case 4:
30               printf("Exit: Program Finished !! ");
31               break;
32           default:
33               printf("Please enter a valid choice 1, 2, 3, 4 \n");
34               break;
35       }
36   } while (choice != 4);
37
38 void insert()
39 {
40     if (REAR >= n - 1)
41     {
42         printf(" Queue Overflow ! \n");
43     }
44     else
```



```
45     else
46     {
47         printf(" Enter the element to insert: ");
48         scanf("%d", &x);
49         REAR++;
50         Q[REAR] = x;
51         if (FRONT == -1)
52         {
53             FRONT = 0;
54         }
55     }
56 void delete ()
57 {
58     if (FRONT == -1)
59     {
60         printf(" Queue Underflow ! \n");
61     }
62     else
63     {
64         printf(" The deleted element is: %d \n", Q[FRONT]);
65         if (FRONT == REAR)
66             FRONT = REAR = -1;
67         else
68             FRONT++;
69     }
70 }
71 void display()
72 {
73     if (REAR < 0)
74     {
75         printf(" Queue is empty ! \n");
76     }
77     else
78     {
79         printf(" The elements in the Queue are: \n");
80         for (i = FRONT; i < n; i++)
81         {
82             printf(" %d ", Q[i]);
83         }
84         printf("\n");
85     }
86 }
87 }
```

```
Activities Terminal Jul 24 14:12
Open *k.c Save
ltadmin@ltadmin-HP-ProDesk-400-G7-Microtower-PC: ~
44 1.Insert 2.Delete 3.Display 4.Exit
45
46 Enter your choice: 1
47 Enter the element to insert: 21
48
49 Queue Operation available:
50 1.Insert 2.Delete 3.Display 4.Exit
51
52 Enter your choice: 2
53 The deleted element is: 21
54 }
55 void
56 {
57 Queue Operation available:
58 1.Insert 2.Delete 3.Display 4.Exit
59
60 Enter your choice: 1
61 Enter the element to insert: 10
62
63 Queue Operation available:
64 1.Insert 2.Delete 3.Display 4.Exit
65
66 Enter your choice: 3
67 The elements in the Queue are:
68 10 0 0 0 0 0 0 0 0
69
70 }
71 void display()
72 {
73 if (REAR < 0)
74 {
75 printf(" Queue is empty ! \n");
76 }
77 else
78 {
79 printf(" The elements in the Queue are: \n");
80 for (i = FRONT; i < n; i++)
81 {
82 printf(" %d ", Q[i]);
83 }
84 printf("\n");
85 }
86 }
87 }
```

C Tab Width: 8 Ln 37, Col 2 INS