

# Queue Program

```
#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

#define SIZE 5

int front=-1;

int rear=-1;

int q[SIZE];

void insert();

void del();

void display();

int main()

{

    int choice;

    do

    {

        printf("\nMENU");

        printf("\n1.Insert\n2.Delete\n3.Display\n4.Exit\nEnter your choice:");

        scanf("%d",&choice);

        switch(choice)

        {

            case 1:insert();

                    display();
```

```

        break;

    case 2:del();

        display();

        break;

    case 3:display();

        break;

    case 4:printf("End of the program!!!");

        exit(0);

    }

}while(choice!=4);

return 0;

}

void insert()

{

    int no;

    printf("\nEnter no:");

    scanf("%d",&no);

    if(rear<SIZE-1)

    {

        q[++rear]=no;

        if(front==-1)

            front=0;

    }

    else

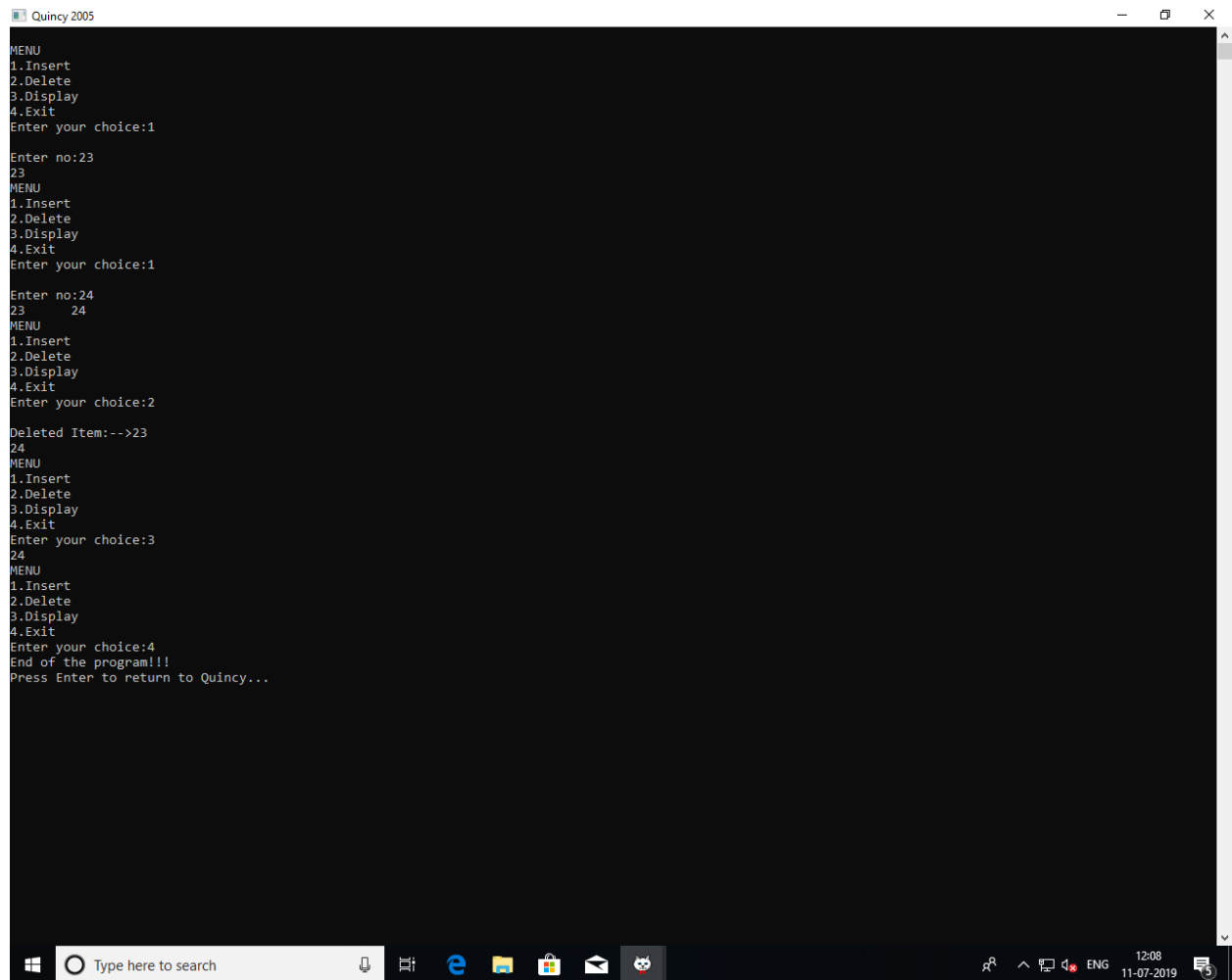
        printf("\nQueue Overflow");

```

```
}  
  
void del()  
{  
    if(front==-1)  
    {  
        printf("\nQueue Underflow");  
        return;  
    }  
    else  
        printf("\nDeleted Item:-->%d\n",q[front]);  
    if(front==rear)  
    {  
        front=-1;  
        rear=-1;  
    }  
    else  
        front+=1;  
}  
  
void display()  
{  
    int i;  
    if(front==-1)  
    {  
        printf("\nQueue is empty....");  
        return;  
    }  
}
```

```
    }  
  
    for(i=front;i<=rear;i++)  
        printf("%d\t",q[i]);  
}
```

## Output:



```
Quincy 2005  
MENU  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Enter your choice:1  
  
Enter no:23  
23  
MENU  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Enter your choice:1  
  
Enter no:24  
23      24  
MENU  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Enter your choice:2  
  
Deleted Item:-->23  
24  
MENU  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Enter your choice:3  
24  
MENU  
1.Insert  
2.Delete  
3.Display  
4.Exit  
Enter your choice:4  
End of the program!!!  
Press Enter to return to Quincy...
```