

## Lab Program-3

```
#include <stdio.h>
#include <conio.h>
#include <process.h>
```

```
int item, r = -1, f = 0; n; q[10];
```

```
void insertrear()
```

```
{
```

```
    if (r == (n-1))
```

```
    {
```

```
        printf("Queue overflow\n");
```

```
        return;
```

```
    }
```

```
    printf("Enter item to be inserted\n");
```

```
    scanf("%d", &item);
```

```
    r = r + 1;
```

```
    q[r] = item;
```

```
}
```

```
void deletefront()
```

```
{
```

```
    if (f > r)
```

```
    {
```

```
        printf("Queue is empty\n");
```

```
        f = 0;
```

```
        r = -1;
```

```
}
```



```
else  
    printf("Item deleted is %d\n", q[b]);
```

```
}
```

```
void display()
```

```
{ int i;
```

```
  if (f > r)
```

```
  { printf("Queue is empty\n");  
    return;
```

```
  }
```

```
  else
```

```
  { printf("The contents of queue is ");
```

```
    for (i = b; i <= r; i++)
```

```
    {
```

```
      printf("%d\t", q[i]);
```

```
    }
```

```
    printf("\n");
```

```
  }
```

```
}
```

```
int main()
```

```
{
```

```
  int c;
```



```
printf("Enter size of array\n");
```

```
scanf("%d",&n);
```

```
while(i!=4)
```

```
{
```

```
printf("1-insert 2-delete 3-display
```

```
4-Exit\n");  
printf("Enter choice");
```

```
scanf("%d",&c);
```

```
switch(c)
```

```
{
```

```
case 1:
```

```
insertrear();  
break;
```

```
case 2:
```

```
deleterfront();  
break;
```

```
case 3:
```

```
display();  
break;
```

```
case 4:
```

```
exit(0);
```

```
default:
```

```
printf("Invalid choice")  
}
```

```
}
```

```
}
```