

DS Lab Test-1

Question-3

```
int q[100]; int front = -1; int rear = -1;  
void enq(int ele)  
{  
    if
```

```
#define size 100  
int q[100]  
int front = -1;  
int rear = -1;
```

```
void enq(int ele)  
{
```

```
    if (rear == size - 1)  
    {
```

```
        printf("Queue is full");  
    }
```

```
    else if (front == -1 && rear == -1)  
    {
```

```
        front = 0;  
        rear = 0;
```

```
    }  
    else  
    {
```

```
        rear = rear + 1;
```

```
    }
```

```
    q[rear] = ele;
```

```
}
```

post

```
int dq()
{
    int ele;
    if (front == -1 && rear == -1)
    {
        return -999;
    }
    else if (front == rear)
    {
        ele = q[front];
        front = -1;
        rear = -1;
    }
    return ele ele;
}
else
{
    ele = q[front];
    front = front + 1;
    return ele;
}
}
```

```
void disp(char name[], int ph, int date, char id[],
           int index)
{
    printf("Name of customer = %.s", name);
    printf("Phone numbe = %.d", ph);
    printf("Date of call = %.d", date);
    printf("ID of customer = %.s", id);
}
```



```
int main()
```

```
{
```

```
    char char name[100][1];
```

```
    int ph[1];
```

```
    int date[1];
```

```
    char id[100][1];
```

```
    int cust[100][1];
```

```
    int n;
```

```
do  
{  
    int c;
```

```
    printf("Enter the details of the em customer  
to put your the call in queue.");
```

```
    \n1. Enter customer's name \n2. Enter  
customer's phone number \n3.
```

```
for(int i = 0;
```

```
    printf("Enter the number of calls = %d", &n);  
    scanf("%d", &n);
```

```
for(int i = 0; i < n; i++)
```

```
{  
    eng(i);
```

```
    printf("Enter the details of customer name,  
customer id, phone number, date of call  
respectively for for customer %d", (i+1));
```

```
    getch();
```

```
    scanf("%s", name);
```

```
    getch();
```

```
    scanf("%s", id[i]);
```

```
    scanf("%d", &ph[i]);
```

```
    scanf("%d", &date[i]);
```

just

```

for(int i=0; i<n; i++)
{
    else
    ele = dq();
    if if(ele != -999)
    {
        printf("No more customers is waiting  
line, queue is empty\n");
    }
    else
    {
        printf("Removed call %d from  
queue", ele);
    }
    display(name, ph[i], date[i], id);
}

```