

## WEEK 14

Write a program for congestion control using Leaky bucket algorithm

Write a program for congestion control using  
Leaky Bucket algorithm.

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

```
int main()
```

```
{
```

```
    int incoming, outgoing, bucket_size, n, store = 0;
```

```
    printf("Enter bucket size:");
```

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

```
    printf("Enter outgoing size:");
```

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

```
    printf("Enter no. of inputs:");
```

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

```
    while (n != 0)
```

```
    {
```

```
        printf("Enter the incoming bucket size:");
```

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

```
        if (incoming <= (bucket_size - store))
```

```
        { store += incoming;
```

```
            printf("Bucket buffer size %d out of %d",  
                  store, bucket_size);
```

```
        }
```

```
        else {
```

```
            printf("Dropped %d no. of packets\n",  
                  incoming - (bucket_size - store));
```

Output :

Enter bucket size : 5000

Enter outgoing rate : 2000

Enter number of inputs : 2

Enter the incoming packet size : 3000

Bucket buffer size ✓ 3000 out of 5000

After outgoing 1000 packets left out of 5000  
in buffer

Enter the incoming packet size : 1000

Bucket buffer size ✓ 2000 out of 5000

After outgoing 0 packets left out of 5000  
in buffer.

ND  
21/9/2023



```
PS D:\VS Code> cd "d:\VS Code\OS\" ; if ($?) { gcc bucket.c -o bucket } ; if ($?) { .\bucket }
Enter Bucket size and outstream size
2000
100
Packet of 41 bytes accepted
Remaining bytes: 2000
If you want to stop input, press 0, otherwise, press 1
1
Packet of 467 bytes accepted
Remaining bytes: 1633
If you want to stop input, press 0, otherwise, press 1
1
Packet of 334 bytes accepted
Remaining bytes: 1399
If you want to stop input, press 0, otherwise, press 1
1
Packet of 500 bytes accepted
Remaining bytes: 999
If you want to stop input, press 0, otherwise, press 1
1
Packet of 169 bytes accepted
Remaining bytes: 930
If you want to stop input, press 0, otherwise, press 1
1
Packet of 724 bytes accepted
Remaining bytes: 306
If you want to stop input, press 0, otherwise, press 1
1
Packet of 478 bytes is discarded
Remaining bytes: 406
If you want to stop input, press 0, otherwise, press 1
1
Packet of 358 bytes accepted
Remaining bytes: 148
If you want to stop input, press 0, otherwise, press 1
1
Packet of 962 bytes is discarded
Remaining bytes: 248
If you want to stop input, press 0, otherwise, press 1
0
Remaining bytes: 348
Remaining bytes: 448
Remaining bytes: 548
Remaining bytes: 648
Remaining bytes: 748
```