

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, buck-size, n, store=0;
    printf("Enter bucket size:");
    scanf("%d", &buck-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);
```

```

Scan ("%.d", &incoming);
if (incoming <= (bucket-size - store))
    < store += incoming;
    pointt ("Bucket buffer size %.d out of %.d\n",
            store, buck-size);
    >
else {
    pointt ("Dropped %.d no. of packets\n",
            incoming - (bucket-size - store));
    pointt ("Bucket buffer size %.d out of %.d\n")
            store, buck-size);
    store = buck-size;
    >
store = store - outgoing;
pointt ("After outgoing %.d packets left out of
        %.d in buffer\n", store, buck-size);
n--;
}

```

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.

```

✓
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```
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
```