12-8-23

Write a program for congestion control using leaky bucket algorithm.

```
#include <stdio.h>
int main()
{
    int in, out, bsize, n, available = 0;
    printf("enter the bucket size:");
    scanf("%d", &out);
    printf("Enter the outgoing rate:");
    scanf("%d", &out);
    printf("Enter the no of input:");
    scanf("%d", &n);
    while (n != 0)
    {
        printf("Enter the incoming packet
        scanf("%d", &in); size:");
        printf("Incoming packet size
        if (in (%d\n", in);
        if (in = (bsize - available))
        {
            available += in;
            printf("Bucket buffer size%d
            \n". out of %d\n",
            available, bsize);
        }
        else
        {
            printf("Dropped %d no of
            packets\n", in - (bsize
            available));
            printf("Bucket buffer size%d
            out of %d\n available
            bsize);
```

```
        available = size;
    }
    available = available - end;
    printf("After outgoing %d packets left out
        of %d in buffer", n--, available, bsize);
}
```

output

Enter the bucket size : 1000
Enter the outgoing rate : 200
Enter the no of input : 6
Enter the incoming packet size : 200
Incoming packet size 200
Bucket buffer size 200 out of 1000
After outgoing 0 packets left out of 1000 in buffer
Enter the incoming packet size : 450
Incoming packet size : 450
Bucket buffer size 650 out of 1000
After outgoing 450 packets left out and of 100 buffer
Enter the incoming packet size : 500
Bucket buffer size 950 out of 1000
After outgoing 750 packets left out 1000 in buffer
Enter the incoming packet size : 100
Bucket buffer size 850 out of 1000
After outgoing 650 packets left out of 1000.
Enter the incoming packet size : 0
Bucket buffer size 650 out of 1000.
After outgoing 450 packets left out of 1000. in buffer.

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