CYCLE 2

AIM:

Write a program for congestion control using Leaky bucket algorithm.

PROGRAM:

Carl Co.	
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12-8-23	Data: Paga:
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	Write a program for congesion control using Leaky bucket algorithm.
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	n== 1
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Ourput is the stand placed police. Enter the bucket size: 1000 Enter the outgoing date :200 miles Enter the oragoing rate in Enter the no of in puto 6

Enter the incoming packet size 200

Incoming packet size 200 out of 1000

Bucket buffer size 200 out of 1000 in buffer out of 1000 in buffer out of 1000 in buffer of 1000 in buffer out of Enter the incoming packet size: 400 Buchet buffer size 400 out of 1000 After onlying 200 packets left out of 1000 in Suffer. Enter the incoming packet size -450 Bucket buffer size 650 packet tett out of 1000

After 9019 h 50 packets left out of 100 in buf Enter the incoming packet size : 500 Incoming packet size 500 out of 1000 After only only 750 parchets left out of 1000 in Suffer Enter the incoming packet rec!: 100 Buttert buffer size 250 out of 1000 Aprile outgoing 650 packets left out of 1000 inby/s Enter incoming packets rec:0 Bucket beflevisize 650 oute of 1000. After outgoing 450 packets left out of 1000in e outpointd pecket

PROGRAM:

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

Output:

```
Enter the bucket size: 1000
Enter the outgoing rate: 200
Enter the no of inputs: 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: 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: 400
Incoming packet size 400
Bucket buffer size 400 out of 1000
After outgoing 200 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 of 1000 in buffer
Enter the incoming packet size: 500
Incoming packet size 500
Bucket buffer size 950 out of 1000
After outgoing 750 packets left out of 1000 in buffer
Enter the incoming packet size: 100
Incoming packet size 100
Bucket buffer size 850 out of 1000
```