AIM:

Write a program for congestion control using leaky bucket algorithm.

PROGRAM:

#include<stdio.h>

#include<conio.h>

void main(){

int incoming, outgoing, buck\_size, n, store = 0;

clrscr();

printf("Enter bucket size");

scanf("%d",&buck\_size);

printf("enter outgoing rate");

scanf("%d", &outgoing);

printf("enter no of inputs: ");

scanf("%d", &n);

while (n != 0) {

printf("Enter the incoming packet size : ");

scanf("%d", &incoming);

printf("Incoming packet size %d\n", incoming);

if (incoming <= (buck\_size - store)){

store += incoming;

printf("Bucket buffer size %d out of %d\n", store, buck\_size);

} else {

printf("Dropped %d no of packets\n", incoming - (buck\_size - store));

printf("Bucket buffer size %d out of %d\n", store, buck\_size);

store = buck\_size;

}

store = store - outgoing;

printf("After outgoing %d packets left out of %d in buffer\n", store, buck\_size);

n--;

}

getch();

}

/\*output:

enter bucket size50

enter outgoing rate10

enter no of inputs: 5

Enter the incoming packet size : 20

Incoming packet size 20

Bucket buffer size 20 out of 50

After outgoing 10 packets left out of 50 in buffer

Enter the incoming packet size : 30

Incoming packet size 30

Bucket buffer size 40 out of 50

After outgoing 30 packets left out of 50 in buffer

Enter the incoming packet size : 40

Incoming packet size 40

Dropped 20 no of packets

Bucket buffer size 30 out of 50

After outgoing 40 packets left out of 50 in buffer

Enter the incoming packet size : 50

Incoming packet size 50

Dropped 40 no of packets

Bucket buffer size 40 out of 50

After outgoing 40 packets left out of 50 in buffer

Enter the incoming packet size : 10

Incoming packet size 10

Bucket buffer size 50 out of 50

After outgoing 40 packets left out of 50 in buffer\*/