8. 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,outgoing rate and no: of inputs:");

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

store=buck\_size;

}

store=store-outgoing;

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

n--;

}

}

Output:

Text

Description automatically generated