

EXPERIMENT-9

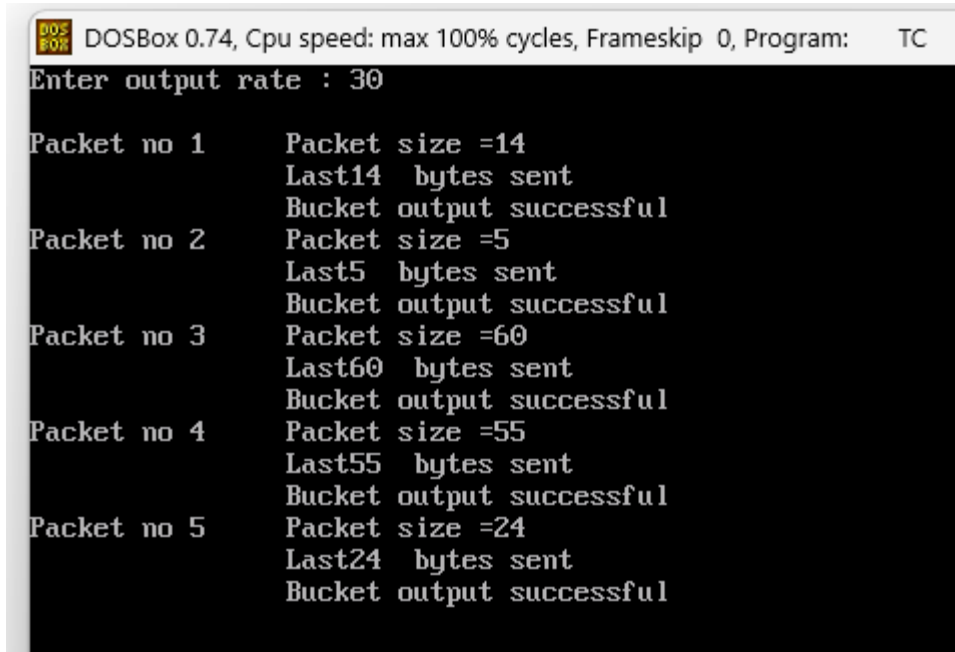
Write a program for congestion control using leaky bucket algorithm.

Program

```
#include<stdio.h>
#include<dos.h>
#include<stdlib.h>
#define bucketSize 100
void bktInput(int a,int b)
{
if(a>bucketSize)
printf("\n\t\tBucket overflow");
else
{
delay(500);
while(a>b)
{
printf("\n\t\t%d bytes outputted.",b);
a=a-b;
delay(500);
}
if (a > 0)
printf("\n\t\tLast%d bytes sent\t",a);
printf("\n\t\tBucket output successful");
}
}
void main()
{
int op, pktSize,i;
clrscr();
randomize();
printf("Enter output rate : ");
scanf("%d",&op);
for( i=1;i<=5;i++)
{
delay(random(100));
```

```
pktSize=random(100);  
printf("\nPacket no %d\tPacket size =%d ",i,pktSize);  
bktInput(pktSize,op);  
}  
getch();  
}
```

Output:



The screenshot shows a DOSBox 0.74 window with the title bar 'DOSBox 0.74, Cpu speed: max 100% cycles, Frameskip 0, Program: TC'. The terminal output is as follows:

```
Enter output rate : 30  
  
Packet no 1      Packet size =14  
                  Last14 bytes sent  
                  Bucket output successful  
Packet no 2      Packet size =5  
                  Last5 bytes sent  
                  Bucket output successful  
Packet no 3      Packet size =60  
                  Last60 bytes sent  
                  Bucket output successful  
Packet no 4      Packet size =55  
                  Last55 bytes sent  
                  Bucket output successful  
Packet no 5      Packet size =24  
                  Last24 bytes sent  
                  Bucket output successful
```