

EXPERIMENT 14

Aim: Write a program for congestion control using leaky bucket algorithm

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int bucket_size, dr;
    printf("Enter bucket size and data rate\n");
    scanf("%d", &bucket_size);
    scanf("%d", &dr);
    int emp = bucket_size;
    while(1) {
        int ch, ps;
        printf("Enter the packet size ");
        scanf("%d", &ps);
        if (ps <= bucket_size)
        {
            if (ps <= emp)
            {
                printf("Packet of size %d transmitted\n", ps);
            }
            else
            {
                printf("Packet dropped\n");
            }
        }
    }
```

```

do
{
    printf("Packet Dropped");
}
printf("Continue ? 1 or 0 ? : ");
scanf("%d", &ch);
if(ch == 0)
    break;
}
}

```

OUTPUT:

Enter bucket size and data rate

5000

200

Enter the packet size

6000

packet dropped

Do you Continue ? 1 or 0 ? : 1

Enter the packet size:

3000

packet of size 3000 transmitted

Continue ? 1 or 0 ? : 1

Enter the packet size:

2000

Packet of size 3000 transmitted.

```
Enter the packet size = 3000  
The Packet of size 3000 is added and in the bucket
```

```
Enter 1 to Continue or 0 to Stop: 1
```

```
Enter the packet size = 2000  
The Packet of size 2000 is added and in the bucket
```

```
Enter 1 to Continue or 0 to Stop: 1
```

```
Enter the packet size = 1500  
The Packet of size 1500 is dropped due to lack of space in the bucket
```

```
Enter 1 to Continue or 0 to Stop: 0
```

```
PS D:\BMSCE\Academics\Semester IV\Computer networks\Lab\Leaky bucket> █
```