

## Cycle II

### LAB 14:

Aim : Write a program for congestion control using Leaky bucket algorithm.

2. Write a program for congestion using Leaky bucket algorithm.

```
#include <stdio.h>
```

```
void main ()  
{
```

```
    int psize, bsize, outgoing, emptyspace, choice;  
    printf("Enter the Bucket size = ");  
    scanf("%d", &bsize);  
    emptyspace = bsize;  
    printf("Enter the outgoing rate = ");  
    scanf("%d", &outgoing);
```

```
    while(1)  
    {
```

```
        printf("\n Enter the packet size = ");  
        scanf("%d", &psize);
```

```
        if (psize < bsize & psize <= emptyspace)  
        {
```

```
            emptyspace = emptyspace - psize;  
            printf("The Packet of size %d is added  
            and in the bucket \n", psize);  
            emptyspace += outgoing;
```

```
        }
```

```
    else
```

```
        printf("The Packet of size %d is dropped  
        due to lack of space in the bucket \n");
```

```
    printf("\n Enter 1 to Continue or 0 to stop: ");
```

```
scanf ("%d", &choice);
```

```
if (choice == 0)  
    break;
```

```
}
```

```
}
```

Output:-

Enter the bucket size : 5000

Enter the outgoing rate : 200

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 15000 is dropped due to lack of space in the bucket.

Enter 1 to continue or 0 to stop : 1

Enter the packet size : 100

The packet of size 100 is added and in the bucket.

## Output :

```
"C:\Users\HP\Downloads\Bur  X  +  v
Enter the Bucket size = 5000
Enter the outgoing rate = 200

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 6422296 is dropped due to lack of space in the bucket

Enter 1 to Continue or 0 to Stop: 1

Enter the packet size = 100
The Packet of size 100 is added and in the bucket

Enter 1 to Continue or 0 to Stop: 0

Process returned 0 (0x0)   execution time : 33.269 s
Press any key to continue.
```