

8/23 Experiment-23-

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

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

```
int main ()?
```

```
int in, out, bsize, n, available = 0;
```

```
printf ("Enter bucket size: ");
```

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

```
printf ("Enter the outgoing rate: ");
```

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

```
printf ("Enter the no. of inputs: ");
```

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

```
while (n != 0) ?
```

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

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

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

```
if (in <= (bsize - available)) ?
```

```
available += in;
```

```
printf ("Bucket buffer size %d, out of %d\n", available, bsize);
```

```
else ?
```

```
printf ("Dropped %d no. of packets\n",
```

```
in - (bsize - available));
```

```
printf ("Bucket buffer size %d out of %d\n", available, bsize);
```

```
available = bsize;
```

```
}
```

```
available = available - out;
```

```
printf ("After outgoing %d packets left out of %d in buffer\n", available, bsize);
```

```
n--;
```

```
}
```

```
}
```



Output :-

Enter the bucket size : 1000

Enter the outgoing rate : 200

Enter the no. of inputs : 6

Enter the incoming packet size : 200

Incoming packet size : 200

Bucket buffer size 200 out of 1000

After outgoing 0 packets left out of 1000 in buffer

Enter the incoming packet size : 100

Incoming packet size : 100

Bucket buffer size 400 out of 1000

After outgoing 200 packets left out of 1000

Enter the incoming packet size : 450

Bucket buffer size 650 out of 1000

After outgoing 450 packets left out of 1000

Enter the incoming packet size : 500

Bucket buffer size 100 out of 1000

After outgoing 650 packets out of 1000

Enter the incoming packet size : 0

Bucket buffer size 650 out of 1000

After outgoing 450 packets left out of 1000

10/10

25/8/23