

leaky bucket

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

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

else

printf("packet dropped");

printf("Want to continue transmitting data?");

scanf("%d", &ch);

if (ch == 0)

break;

}

}

output:

Enter bucket size and data rate

5000

200

Enter the packet size:

6000

packet dropped

Want to continue transmitting data?

1 or 0?: 1

Enter the packet size:

3000

packet of size 2000 transmitted.

Do you want to continue transmitting data?

1 or 0?: 1

Enter size of packet:

2000

packet of size 2000 transmitted.

Want to continue transmitting data?

1 or 0?: 0

9/10

N

24/8/23

Enter bucket size and data rate

1000

200

Enter the packet size :

600

remaning empty size 1000

packet of size 600 transmitted :

Do you want to continue transmitting data?

1 or 0? :1

Enter the packet size :

100

remaning empty size 600

packet of size 100 transmitted :

Do you want to continue transmitting data?

1 or 0? :1

Enter the packet size :

700

remaning empty size 700

packet of size 700 transmitted :

Do you want to continue transmitting data?

1 or 0? :1

Enter the packet size :

100

remaning empty size 200

packet of size 100 transmitted :

Do you want to continue transmitting data?

1 or 0? :|