

Leaky bucket

Code:

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

```
#include <conio.h>
```

```
void main() {
```

```
    int bucket_size;
```

```
    int dr;
```

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

```
        printf("remaining empty size %d \n", emp);
```

```
    } if (ps <= bucket_size)
```

```
    {
```

```
        if (ps <= emp)
```

```
        {
```

```
            printf(" packet of size %d transmitted  
: \n", ps);
```

```
        }
```

else

{

printf ("packet dropped: \n");

}

}

else

{

printf ("packet dropped \n");

}

printf ("Do you want to continue transmitting
data? In 1 or 0? :");

scanf ("%d", &ch);

if (ch == 0)

{

break;

}

emp = emp - ps + dr;

}

}



main.c

Output

/tmp/6Ae1Rx2ZNz.o

Enter bucket size and data rate

5000 200

Enter the packet size :

2000

remaning empty size 5000

packet of size 2000 transmitted :

Do you want to continue transmitting data?

1 or 0? :1

Enter the packet size :

3000

remaning empty size 3200

packet of size 3000 transmitted :

Do you want to continue transmitting data?

1 or 0? :1

Enter the packet size :

3000

remaning empty size 400

packet dropped

Do you want to continue transmitting data?

1 or 0? :|