

## Leaky Bucket

code:

```
#include <bits/stdc++.h>
#include <unistd.h>
using namespace std;
#define bucketSize 500
void bucketInput (int a, int b)
{
    if (a > bucketSize)
        cout << "In Bucket overflow" << endl;
    else
    {
        sleep(5);
        while (a > b)
        {
            cout << "In It | " << b << endl;
            bytes outputted;
        }
        a = a - b;
        sleep(5);
    }
    if (a > 0)
        cout << "remaining" << a << endl;
        bytes sent successfully;
}
```

```
int main()
{
```

```
    int op, pktsize;
    cout << "Enter output rate: ";
```

```
    cin >> op;
```

```
    for (int i = 1; i <= 5; i++)
```

```
    {
```

```
        sleep( rand() % 10 );
```

```
        pktsize = rand() % 100;
```

```
        cout << "Packet no" << i <<
```

```
            "Packet size" << pktsize;
```

```
        bucketinput( op, pktsize
                     (pktsize, op);
```

```
        cout << endl;
```

```
    } return 0;
```

```
}
```