

LEAKY BUCKET ALGORITHM

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#include <bits/stdc++.h>
#include <unistd.h>
using namespace std;
#define bucketSize 500
void bucketInput(int a, int b)
{
    if (a > bucketSize)
        cout << "\n\t\t Bucket Overflow";
    else {
        sleep(5);
        while (a > b) {
            cout << "\n\t\t "<b<b<" bytes outputted.";
            a = -b;
            sleep(5);
        }
        if (a > 0)
            cout << "\n\t\t Last "<a<a<" bytes sent \t";
        cout << "\n\t\t Bucket output successful";
    }
}

int main()
{
    int op, pktSize;
    cout << "Enter output rate: ";
    cin >> op;
    for (int i = 1; i <= 5; i++)
    {
        sleep(rand() % 10);
        pktSize = rand() % 700;
        cout << "\n Packet no "<i<i<" \t Packet Size = "<pktSize;
        bucketInput(pktSize, op);
    }
    cout << endl;
    return 0;
}

```