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Abhishikat (write-up)

Q) Program for Congestion control using Leaky Bucket Algorithm

```
#include <iostream.h>
#include <bits/stdc++.h>
using namespace std;

void Bucket(int a, int b)
{
    if (a > bucket_size)
        cout << "Bucket Overflow";
    else {
        delay(1000);
        while (a > b)
        {
            cout << "\n" << b << " bytes outputted.";
            a -= b;
            delay(1000);
        }
        if (a > 0)
        {
            cout << "Last" << a << " bytes sent";
            cout << "Bucket Output Successful";
        }
    }
}

int main()
{
    int packet_size, op;
    srand(time(0));
    cout << "Enter output rate "; cin >> op;
    for (int i = 1; i <= 5; i++)
    {
        delay(random(2000));
        packet_size = random(2000);
        cout << "Packet number" << i << "Packet Size = " << packet_size;
        bucket(packet_size, op);
    }
}
```