

Program for congestion control using Leaky Bucket algorithm

```
#include <bits/stdc++.h>
using namespace std;
#define bucketSize 512

void bucketInput (int a, int b)
{
    if (a > bucketSize)
        cout << "\n\t\t Bucket overflow ";

    else {
        delay (500);
        while (a > b) {
            cout << "\n\t\t" << b << " bytes outputted.";
            a -= b;
            delay (500);
        }
        if (a > 0)
            cout << "\n\t\t Last " << a << " bytes sent";
        cout << "\n\t\t Bucket output successful ";
    }
}

int main () {
    int op, pktSize;
    randomize();
    cout << "Enter output rate : ";
    cin >> op;
```

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

```
    delay (random (1000));
```

```
    pktSize = random (1000);
```

```
    cout << "\n Packet no " << i << " \t Packet size  
        = " << pktSize ;
```

```
    bucketInput (pktSize, op);
```

```
}
```

```
}
```