

Write a program for Congestion Control  
using leaky bucket Algorithm

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{  
    cout << "Enter bucket size" << endl;
```

```
    int bucket_size;
```

```
    int filled = 0;
```

```
    int output_rate;
```

```
    int input_rate;
```

```
    int choice
```

```
    cin >> bucket_size;
```

```
    cout << "Enter output rate" << endl;
```

```
    cin >> output_rate;
```

```
    do {
```

```
        cout << "Enter packet size" << endl;
```

```
        cin >> input_packet;
```

```
        if (input_packet <= bucket_size) {
```

```
            if (filled + input_packet > bucket_size)
```

```
            {
```

```
                cout << "Packet too big for bucket" << endl;
```

```
            }
```

```
        } else {
```

```
            filled = filled + input_packet;
```

```
        }
```

```
    } else
```

```
    {
```

```
        cout << "packet is too big for bucket" << endl;
```

```
    }
```

~~else~~

if (filled <= output\_rate)

3 filled = 0;

else

filled = filled - output\_rate;

cout << "Amount of bucket filled" << filled;

cout << "Do you want to enter another

Packet (9 for yes, 8 for no)" << endl;

cin >> choice

3

while (choice == 9)

3

Output :

Enter Bucket size :- 500

Enter output rate :- 50

Enter packet size :- 700

Packet too big for bucket

Do you want to enter packet (9 yes 8 no):

~~Packet filled :- 1~~

Enter Packet size = 200

Packet filled :- 150

Do you want to Enter Packet (9 yes, 8 no):

Enter packet size : 250

bucket size :- 350

Do you want to Enter packet (9 yes 8 no):

Enter packet size : 250

Packet too big for bucket

Amount of bucket filled: 300.

✓  
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