

5/11/23

Lab 8

Leaky Bucket Algorithm

Aim: Write a program for congestion control using leaky bucket algorithm.

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
int main() {
```

```
    int input = 0, i = 0, bucket limit = 100, op = 1;
```

```
    int size = 50, current = 0, input, out = 10;
```

```
    char a = 'y';
```

```
    do {
```

```
        if (current <= size) {
```

```
            if (current <= size & a == 'y') {
```

```
                cout << "Enter packet input ";
```

```
                cin >> input;
```

```
                current += input;
```

```
            }
```

```
            if (current >= 10) {
```

```
                current = current - 10;
```

```
                cout << "Packets sent is 10\n";
```

```
            }
```

```
        } else {
```

```
            cout << "Packet sent is " << current << endl;
```

```
            current = 0;
```

```
        }
```

```
        cout << "Remaining packets in bucket: " << current << endl;
```

```
        cout << "Do you want to input packet ";
```

```
        cin >> a;
```

```
    }
```

```
    while (current > 0 || a == 'y');
```

```
cout << " End " ;
```

```
return 0 ;
```

```
}
```

Output

Enter packet input : 20

Packets sent : 10

Remaining packets : 10

Do you want to input packet : y

Enter a packet input : 10

Packets sent : 10

Remaining packets : 10

Do you want to input packet : n

Packets sent : 10

Remaining packets : 0

Do you want to input packet : n

End .