

Leaky Bucket Algorithm:

```
#include <iostream.h>
```

```
#include <dos.h>
```

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

```
#define bucketsize 512
```

```
void bktinput (int a, int b) {
```

```
    if (a > bucketsize)
```

```
        cout << "\n\t Bucket overflow";
```

```
    else {
```

```
        delay (500);
```

```
        while (a > b) {
```

```
            cout << "\n\t\t " << b << " bytes outputted";
```

```
            a = a - b;
```

```
            delay (500);
```

```
        }
```

```
    if (a > 0)
```

```
        cout << "\n\t\t Last " << a << " bytes sent ";
```

```
    cout << "\n\t\t Bucket outputted successfully";
```

```
}
```

```
}
```

```
void main () {
```

```
    int op, packetsize;
```

```
    Randomize();
```

```
    cout << "Enter output rate for the bucket : c";
```

```
    cin >> op;
```

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

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

```
        packetsize = random (1000);
```

```
        cout << "\n packet no " << i << "\t packet size = " << packetsize;
```

```
        bktinput (packetsize, op);
```

```
    }
```