**Lab Program 9**

**Q:- Write a program for congestion control using Leaky bucket algorithm.**

**#include <bits/stdc++.h>**

**#include <Windows.h>**

**using namespace std;**

**#define bucketSize 500**

**void bucketInput(int a, int b)**

**{**

**if (a > bucketSize)**

**cout << "\n\t\tBucket overflow";**

**else**

**{**

**Sleep(5);**

**while (a > b)**

**{**

**cout << "\n\t\t" << b << " bytes outputted.";**

**a -= b;**

**Sleep(5);**

**}**

**if (a > 0)**

**cout << "\n\t\tLast " << a << " bytes sent\t";**

**cout << "\n\t\tBucket output successful";**

**}**

**}**

**int main()**

**{**

**int op, pktSize;**

**cout << "Enter output rate : ";**

**cin >> op;**

**for (int i = 1; i <= 5; i++)**

**{**

**Sleep(rand() % 10);**

**pktSize = rand() % 700;**

**cout << "\nPacket no " << i << "\tPacket size = " << pktSize;**

**bucketInput(pktSize, op);**

**}**

**cout << endl;**

**return 0;**

**}**

