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14 Write a program for congestion control using leaky bucket algorithm

```

import java.util.*;
class leakybucket
{
    public static void main (String args)
    {
        int rem;
        Scanner sc = new Scanner (System.in);
        int s20;
        System.out.println ("enter no. of queries, buffer size, input and output bucket size");
        int q = sc.nextInt();
        int b2 = sc.nextInt();
        int ip = sc.nextInt();
        int op = sc.nextInt();
        for (int i = 0; i < q; i++)
        {
            rem = b2 - s20;
            if (ip <= (rem))
    
```

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```
System.out.println("Packet is  
accepted");
```

$s += ip;$

}

else

{

```
System.out.println("Packet not  
accepted");
```

}

```
System.out.println("remaining space  
= " + (bs - s));
```

$s -= op;$

}

}

(i+1)  $\rightarrow$  i position

((m<sub>i</sub>)  $\rightarrow$  f<sub>i</sub>) f<sub>i</sub>

Output

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size no of queues, buffer size, input and output packet size

4

7

4

1

packet is accepted

remaining space = 3

packet is accepted

remaining space = 0

Packet not accepted

Remaining space = 1

Packet not accepted

remaining space = 2

NJ  
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```
enter no of queries,buffer size,input and output packet size
4 10
6
1
packet is accepted
remaining space=4
Packet not accepted
remaining space=5
packet is accepted
remaining space=0
Packet not accepted
remaining space=1
```