

## **PROG 10**

```
import java.util.Scanner;

import java.lang.*;

public class leaky {

    public static void main(String[] args)

    {

        int i;

        int a[]=new int[20];

        int buck_rem=0,buck_cap=4,rate=3,sent,recv;

        Scanner in = new Scanner(System.in);

        System.out.println("Enter the number of packets");

        int n = in.nextInt();

        System.out.println("Enter the packets");

        for(i=1;i<=n;i++)

            a[i]= in.nextInt();

        System.out.println("Clock \t packet size \t accept \t sent \t remaining");

        for(i=1;i<=n;i++)

        {

            if(a[i]!=0)

            {

                if(buck_rem+a[i]>buck_cap)

                    recv=-1;

                else

                {

                    recv=a[i];

                    buck_rem+=a[i];

                }

            }

        }

    }

}
```

```
recv=0;

if(buck_rem!=0)
{
    if(buck_rem<rate)
        {sent=buck_rem;

        buck_rem=0;
    }
    else
    {
        sent=rate;

        buck_rem=buck_rem-rate;
    }
    else
        sent=0;
    if(recv==-1)
        System.out.println(+i+ "\t\t" +a[i]+ "\t dropped \t" + sent +"\t" +buck_rem);
    else
        System.out.println(+i+ "\t\t" +a[i] +" \t\t" +recv +" \t" +sent + "\t" +buck_rem);
}
}
```