

```

import java.util.Scanner;
public class bucket {
public static void main(String[] args)
{ Scanner sc=new Scanner(System.in);
int bucket=0;
int op_rate,i,n,bsize;
System.out.println("Enter the number of packets");
n=sc.nextInt();
System.out.println("Enter the output rate of the bucket");
op_rate=sc.nextInt();
System.out.println("Enter the bucket size");
bsize=sc.nextInt();
System.out.println("Enter the arriving packets(size)");
int pkt[]=new int[n]; for(i=0;i<n;i++)
{ pkt[i]=sc.nextInt(); }
System.out.println("\nSec\tpsizetBuckettAccept/Reject\tpk
t_send");
System.out.println("-----");
for(i=0;i<n;i++)
{ System.out.print(i+1+"\t"+pkt[i)+"\t");
if(bucket+pkt[i]<=bsize)
{ bucket+=pkt[i];
System.out.print(bucket+"\tAccept\t\t"+min(bucket,op_rate
)+"\n" +"""); bucket=sub(bucket,op_rate); }
else

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{ int reject=(bucket+pkt[i]-bsize);
bucket=bsize;
System.out.print(bucket+"\tReject
"+reject+"\t"+min(bucket,op_rate)+"\n");
bucket=sub(bucket,op_rate); } }
while(bucket!=0)
{
System.out.print(++i+"\t0\t"+bucket+"\tAccept\t\t"+min(
bucket,op_rate)+"\t"); bucket=sub(bucket,op_rate); } }
static int min(int a,int b)
{ return ((a<b)?a:b); }
static int sub(int a,int b)
{ return (a-b)>0?(a-b):0; } }

```

#### Output 1–

Enter the number of packets 4

Enter the output rate of the bucket 7

Enter the bucket size 8

Enter the arriving packets(size) 6 8 9 5

Sec	psize	Bucket	Accept/Reject	pkt_send
1	6	6	Accept	6
2	8	8	Accept	7
3	9	8	Reject 2	7
4	5	6	Accept	6