credit is available.

- If a packet arrives and its size is less than the available credit, the packet can be forwarded. Otherwise, it is discarded or queued depending on theapplication.
- The bucket leaks through the hole in its bottom at a constant rate of *r* bytes per second, this indicates creditaccumulation.

/* Leaky Bucket */

```
public class LeakyBucket
{
  static int min(int x,int y)
  {
        if(x<y)
              return x;
        else
              return y;
  }
public static void main(String[] args)
{
    int drop=0,mini,nsec,cap,count=0,i,process;
    int inp[]=new int[25];
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter The Bucket Size\n");
    cap= sc.nextInt();
    System.out.println("Enter The Operation Rate\n");
    process= sc.nextInt();
    System.out.println("Enter The No. Of Seconds You Want To Stimulate\n");
    nsec=sc.nextInt();
    for(i=0;i<nsec;i++)
        {
        System.out.print("Enter The Size Of The Packet Entering At "+ i+1+"sec");
        inp[i] = sc.nextInt();
        }
    System.out.println("\nSecond | Packet Recieved | Packet Sent | Packet Left | Packet
    Dropped|\n");
    //System.out.println("-----------------------------------------------------------------
      \n");
    for(i=0;i<nsec;i++)
    {
       count+=inp[i];
       if(count>cap)
       {
              drop=count-cap;
              count=cap;
```

```
        }
          System.out.print(i+1);
          System.out.print("\t\t"+inp[i]);
          mini=min(count,process);
          System.out.print("\t\t"+mini);
          count=count-mini;
          System.out.print("\t\t"+count);

          System.out.print("\t\t"+drop);
          drop=0;
          System.out.println();
    }
      for(;count!=0;i++)
      {
            if(count>cap)
            {
               drop=count-cap;
               count=cap;
            }
              System.out.print(i+1);
              System.out.print("\t\t0");
              mini=min(count,process);
              System.out.print("\t\t"+mini);
              count=count-mini;
              System.out.print("\t\t"+count);
              System.out.print("\t\t"+drop);
              System.out.println();
       }
  }
}
```

Output1

Enter The Bucket Size
6
Enter The output Rate
2
Enter The No. of Seconds You Want To Stimulate
2
Enter The Size of Packet entering at 01sec
8
Enter The Size of Packet entering at 11sec
6
Second | Packet Recieved | Packet Sent | Packet Left | Packet Dropped|
1 8 2 4 2
2 6 2 4 4