Question :
1.Write a program to implement Water Jug Problem Statement as given below:
Problem Definition: You have to measure 2liter (L) water by using twobuckets 4Land 3L.
Problem Limitation: You can only use these (4Land 3L) bucketsand there is no measuring mark on
the buckets.

Code:

```java
import java.util.*
class Main
{
   public static void main(String args[]){
      Scanner sc = new Scanner(System.in);

      int j1 = 3,j2 = 4,g=2;
      int count = j1 + j2;
      int jug1[] = new int[count];
      int jug2[] = new int[count];
      int i=0;
      jug1[i] = j1;
      jug2[i] = 0;
      i++;
      jug1[i] = 0;
      jug2[i] = j1;
      i++;
      while(i < (count-1)){

         if(jug1[i-1] > 0){
            jug1[i] = jug1[i-1];
            jug2[i] = 0;
         }
         else{
            jug1[i] = j1;
            jug2[i] = jug2[i-1];
         }
         i++;

         if(jug2[i-1] > 0){
            if(jug1[i-1] + jug2[i-1] < j2){
               break;
            }
            else{
               int temp = jug2[i-1];
               temp = j2 - temp;
               jug2[i] = j2;
               jug1[i] = jug1[i-1] - temp;
            }
         }
         i++;
      }
```
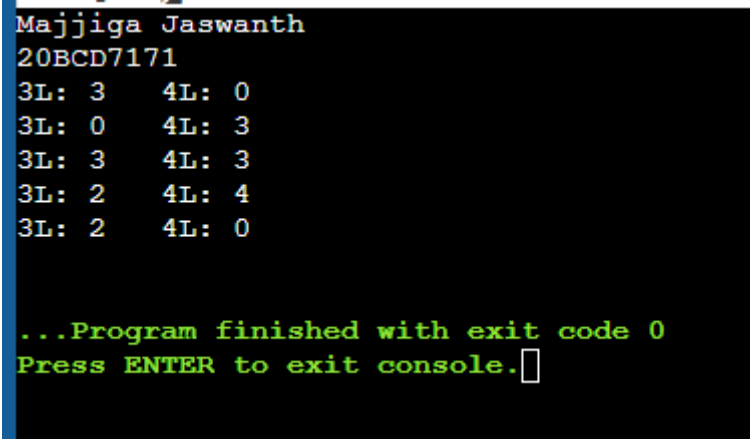
```java
        for(int j=0; j<i-1; j++){
            System.out.println("3L: "+jug1[j]+"\t4L: "+jug2[j]);
        }
    }
}
```

output: