# 6. Duck Arcade

Program Name: Duck.java Input File: duck.dat

At the State Fair of Texas, there is a Duck Arcade game on the midway that guarantees that you will win a prize every time you play. In this arcade, there are hundreds of small, plastic ducks floating down a stream of water. On the bottom of each duck and unseen by the player is a positive integer in the range from 1 through 10. There is always an equal number of ducks with each of the 10 integers.

To play the game, the player selects 5 ducks out of the stream. The prize the player wins is based on the sum of the numbers on the bottom of the five ducks selected using the following guidelines:

- Level 1 if the sum is 25 or less, the prize is a chalk dog
- Level 2 if the sum is 26 through 30, the prize is a 4" stuffed animal
- Level 3 if the sum is 31 through 35, the prize is a 12" stuffed animal
- Level 4 if the sum is greater than 35, the player can choose any prize in the Duck Arcade.

Your boss wants you to write a program that simulates random games for a large number of players so he can determine if the sum of the numbers on the 5 ducks selected in each game are in a range that will allow him to make a healthy profit.

To simulate the random numbers on the ducks selected, you will construct an object of the type <code>java.util.Random</code>. This class allows you to specify the seed for the random number generator. For a given seed, the order of the random numbers is always the same.

#### Input

The first line of input will contain a single integer n that indicates the number of games in your simulation. The second line will contain a long integer that you will use to seed the random number generator for the simulation.

## Output

You will print the number of games in the simulation that fall into each of the Levels, 1 through 4, following the format shown in the example output below.

### **Example Input File**

25 43234564324455

## **Example Output to Screen**

Level 1: 10 Level 2: 6 Level 3: 4 Level 4: 5

#### Note: these are the random numbers generated for the 25 games in the input file:

2 3 7 7 4 8 8 4 8 6 2 1 2 8 3 3 7 7 1 8 1 10 8 5 8 1 4 7 6 7 5 10 9 10 5 7 8 10 8 9 10 6 10 3 7 4 4 7 5 5 4 9 1 2 4 10 2 9 5 9 1 6 7 9 6 6 1 4 4 5 4 7 2 8 9 2 6 6 4 6 5 2 8 10 4 8 10 1 8 9 8 1 2 9 4 10 10 7 9 3 6 6 3 3 10 9 3 3 8 8 2 7 4 4 6 7 9 1 3 1 1 9 7 4 7