SE 1115 Homework #2 December 7, 2018

DUE DATE: December 14, 2018

In this homework, you are supposed transform existing dice example to be a simulation. In this simulation, there is no user. A loop will iterate 1000 times and you will use random module to produce two integer values between 1 and 6 for each dice at each iteration. You are supposedly store these pairs in a two dimensional data structure. This data structure will be choice of yours as list or dictionary.

If you choose your lists inside the list will look like this with the counts of the random dice occurrences at the end of the simulation.

```
[[31, 27, 23, 22, 28, 28], [33, 30, 30, 25, 45, 24], [22, 27, 35, 37, 28, 27], [31, 22, 29, 34, 34, 21], [24, 25, 19, 39, 19, 28], [27, 16, 27, 25, 34, 24]]
```

If you prefer dictionary it is going to look something like this;

```
{1:{1: 35, 2: 31, 3: 37, 4: 23, 5: 21, 6: 29}
2:{1: 22, 2: 24, 3: 34, 4: 27, 5: 20, 6: 34},
3:{1: 33, 2: 21, 3: 28, 4: 30, 5: 28, 6: 29},
4:{1: 28, 2: 31, 3: 24, 4: 31, 5: 31, 6: 26},
5:{1: 24, 2: 20, 3: 30, 4: 28, 5: 33, 6: 25},
6:{1: 25, 2: 27, 3: 22, 4: 29, 5: 28, 6: 32}}
```

At the end of the simulation, you should print histogram of the values with the probabilities printed out at the end of where stars end.

```
Dice Pairs
        Count
        1-1
        31 ********************************0.03
  1-2
        1-3
        23 **********************0.02
  1-4
        21 ******************0.02
  1-5
  1-6
        22 *******************0.02
  2-1
        24 ***********************0.02
  2-2
        34 **********************************0.03
  2-3
        27 ****************************0.03
  2-4
        20 ******************0.02
  2-5
        34 **********************************0.03
  2-6
        33 **********************************0.03
  3-1
```

```
21 *******************0.02
3-2
      28 *****************************0.03
3-3
       30 ***********************************0.03
3-4
       28 *****************************0.03
3-5
      29 *****************************0.03
3-6
       28 ******************************0.03
4-1
4-2
      31 *******************************0.03
4-3
      24 **********************0.02
4-4
      31 ******************************0.03
4-5
       31 **********************************0.03
      26 *************************0.03
4-6
       24 ************************0.02
5-1
      20 *****************0.02
5-2
       30 **********************************0.03
5-3
      28 *****************************0.03
5-4
5-5
       25 *************************0.03
5-6
      25 ************************0.03
6-1
      27 ****************************0.03
6-2
6-3
      22 ******************0.02
6-4
      29 ******************************0.03
      28 ******************************0.03
6-5
       32 *********************************0.03
6-6
```