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Lab Assignment #8

Due: 03/08/19

CODE:

#import random buil-in library

import random

#Ask for user input of number of rolls to stimulate

number\_of\_rolls = int(input("Enter the number of times to roll the dice: "))

while True:

#Declare and initiate possible sums of dice rolls

num\_twos = 0

num\_threes = 0

num\_fours = 0

num\_fives = 0

num\_sixes = 0

num\_sevens = 0

num\_eights = 0

num\_nines = 0

num\_tens = 0

num\_elevens = 0

num\_twelves = 0

#Loop counter

i=0

#Display title for histogram

print("Dice roll histograms:")

#Continue program if number of rolls is greater than 1

if number\_of\_rolls >= 1:

#Roll the dice number\_of\_rolls times

while i in range (number\_of\_rolls):

#Use randint fucnction to randomly roll dice

die1 = random.randint(1,6)

die2 = random.randint(1,6)

#Calculate sum of two dice rolled

dice\_total = die1 + die2

#Count the sums rolled

if dice\_total == 2:

num\_twos += 1

elif dice\_total == 3:

num\_threes += 1

elif dice\_total == 4:

num\_fours += 1

elif dice\_total == 5:

num\_fives += 1

elif dice\_total == 6:

num\_sixes += 1

elif dice\_total == 7:

num\_sevens += 1

elif dice\_total == 8:

num\_eights += 1

elif dice\_total == 9:

num\_nines += 1

elif dice\_total == 10:

num\_tens += 1

elif dice\_total == 11:

num\_elevens += 1

elif dice\_total == 12:

num\_twelves += 1

i += 1

#Display histogram of possible values of sums rolled using asterisks

print("2s: "+"\*"\*num\_twos)

print("3s: "+"\*"\*num\_threes)

print("4s: "+"\*"\*num\_fours)

print("5s: "+"\*"\*num\_fives)

print("6s: "+"\*"\*num\_sixes)

print("7s: "+"\*"\*num\_sevens)

print("8s: "+"\*"\*num\_eights)

print("9s: "+"\*"\*num\_nines)

print("10s: "+"\*"\*num\_tens)

print("11s: "+"\*"\*num\_elevens)

print("12s: "+"\*"\*num\_twelves)

#If number\_of\_rolls entered was less than 1, ask users to try again.

else:

print("Invalid rolls. Try again.")

#Repeatedly ask users for number of rolls and quit if number of rolls

#entered is less than 1

number\_of\_rolls = int(input("Enter the number of times to roll the dice: "))

if (number\_of\_rolls > 1):

continue

else:

break

#End of Program

OUTPUT:

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32

Type "copyright", "credits" or "license()" for more information.

>>>

========= RESTART: C:/Users/Nabiha/Documents/CECS 174/Labs/Lab 8.py =========

Enter the number of times to roll the dice: 50

Dice roll histograms:

2s: \*\*

3s: \*\*

4s: \*\*\*\*\*\*

5s: \*\*\*\*\*\*\*

6s: \*\*\*\*\*

7s: \*\*\*\*\*\*\*\*\*

8s: \*\*\*\*\*\*\*\*

9s: \*\*\*\*\*

10s: \*\*

11s: \*\*

12s: \*\*

Enter the number of times to roll the dice: 100

Dice roll histograms:

2s: \*\*

3s: \*\*\*

4s: \*\*\*\*\*\*\*\*\*

5s: \*\*\*\*\*\*\*\*\*\*\*\*

6s: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

7s: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

8s: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

9s: \*\*\*\*\*

10s: \*

11s: \*\*\*\*\*\*\*\*\*

12s: \*\*\*\*

Enter the number of times to roll the dice: 0

>>>