Assignment #12 – Odds and Evens   /15

Create a code where the user inputs a starting and ending number. At a push of a button the code outputs:

- A count of how many negative odd numbers there are.
- The sum of all the numbers divisible by 6.

Assignment #13 – Leap Year Counter   /15

Write a program that asks the user to enter a start-year and end year. The code outputs a count of the number of leap years. A leap year occurs if the following conditions are met:

- A year divided by 4 is a leap year, however;
- If the year is divisible by 100 it is NOT a leap year, unless;
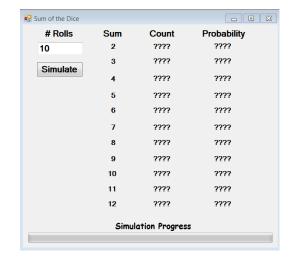- The year is also divisible by 400 then it is a leap year.

Assignment #14 – Sum of the Dice   /25

Create a program where the user inputs the number of dice rolls. For each roll the program with generate two random numbers between 1 & 6 and add those numbers to get the sum.

- The program counts how many times each sum was rolled.
- The number of times each sum was rolled is outputted on screen, and;
- Below or beside each total display a percentage (probability), to two decimal places by using the syntax math.round(variable,2), of how often that sum was rolled. Have your probability variables defined as *single*.
- Insert a progress bar to communicate the state of the simulation to the user.

Run through various simulations by changing the number of rolls the program simulates. If two dice are rolled the probability of rolling a specific sum is listed below. Does your program correctly simulate rolling dice?

SUM	PROBABILITY
2	2.78 %
3	5.56 %
4	8.33 %
5	11.11 %
6	13.89 %
7	16.67 %
8	13.89 %
9	11.11 %
10	8.33 %
11	5.56 %
12	2.78 %

Sum of the Dice

# Rolls	Sum	Count	Probability
10	2	????	????
	3	????	????
Simulate	4	????	????
	5	????	????
	6	????	????
	7	????	????
	8	????	????
	9	????	????
	10	????	????
	11	????	????
	12	????	????

Simulation Progress

Bonus Assignment: Dice Probabilities   /10

Augment your code from assignment 14 so the user can choose to roll 1, 2 or 3 dice only and use it to calculate the probability of rolling a specified sum (for 1 die it would be calculating the probability of rolling the numbers 1 – 6; like in the third looping practice question). Open a new VB project but you can copy your form and code to it (from assignment 14) to speed the process up. Save it as Bonus Assignment Dice.