**Chapter 3.2 Programming Project – While Loop**

Use Python IDLE (we installed this on your computer earlier in the semester) to build and test your program

We will be using a While loop to create the following:

Create a program to have the user guess a number between 1 and 10. Perform the following steps to create your program.

1. Generate a random number between 1 and 10 (use Google to find the code to generate the random number).
   1. Print this out at the beginning of the program. Obviously not something we would do in a real scenario where we are asking the user to guess, but since it is randomly generated, it is helpful for us to see it as we input numbers.
      1. When you are finished with all testing, simply remark out the print for this, but leave it in your program
2. Create a WHILE loop to do the following (all of this should be within the WHILE loop):
   1. Ask the user to pick a number between 1 and 10
   2. Verify their choice was withing the range of 1 and 10
   3. If they choose correctly, print a celebration to the screen letting them know they chose correctly
   4. If their number was too low, tell them, and then ask them to choose again
   5. If their number was too high, tell them, and ask them to choose again
3. When their guess is correct, celebrate their success!
4. When your program is finished:
   1. Show me the output of two wrong guesses and the final correct guess
   2. Print out and label the random number at the end.

**Notes**:

The WHILE loop is only part of the program. It does not need to be what drives the entire flow.

Make output to the screen be informative and “clean”

#Pause at the end to keep the window open

Use the correct type of variable (int, string, etc)

Build on success and accomplish one thing at a time

Need to include documentation and title the program

Test, test, test….

**Paste your code below (not a screen print)**

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