DAT-119 – Python 1

1) Write a rock, paper, scissors program! (Use at least two functions, including main())

1. When the program begins, a random number between 0 and 2 is generated. If the number is 0, the computer has chosen rock; if the number is 1, the computer has chosen paper; if the number is 2, the computer has chosen scissors. Do not display the computer’s choice yet.
2. The user enters their choice of “rock,” “paper,” or “scissors” at the keyboard. Only “rock,” “paper,” or “scissors” (without commas or quotation marks) should be accepted.
3. The computer’s choice is displayed.
4. A winner is selected according to the rules:
   1. If one player chooses rock, and the other chooses scissors, rock wins (rock smashes scissors)
   2. If one player chooses scissors, and the other chooses paper, scissors win (scissors cut paper)
   3. If one player chooses paper, and the other chooses rock, paper wins (paper wraps around rock)
   4. If both players make the same choice, the game must be played again to determine the winner.

Remember to plan ahead (actually write out some of the logic in your plans … programs are going to start to get complicated enough now that trying to code without breaking things out into functions and thinking through any looping or conditional logic is a recipe for trouble). Remember to write out small pieces (make sure the water runs before you wash the dishes) -- test and save often!

**Example output:**

Welcome to the Rock, Paper, Scissors!

Please enter "rock", "paper", or "scissors", all-lowercase, no quotation marks: rock

The computer chose rock

You tied and must play again!

Please enter "rock", "paper", or "scissors", all-lowercase, no quotation marks: potato

That was not one of the options; please try again.

Please enter "rock", "paper", or "scissors", all-lowercase, no quotation marks: rock

The computer chose scissors

You win!