

## KEY CONCEPTS:

In the last three classes, we reviewed all the material we had covered up to this point including if-then, For, While and Lists.. The review code can be found at:

<https://colab.research.google.com/drive/1MiXv0NwGZz8SKI6WXylbReCNHJnWD9PC>

## Homework:

The Problems with a \* are of increased difficulty.

1. A password checker.
  - a. Assign a password of your choice to a variable called mypass
  - b. Assign the number of times they can try to guess the password to a variable called numtries
  - c. Keep prompting the user to enter a password till they enter the correct password, or exceed the number of tries
  
2. Write code to be print the multiplication tables for the numbers 2 - 10 (up to x 10)

E.g.

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

.

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$$2 \times 10 = 20$$

$$3 \times 1 = 3$$

etc

3. Searching
  - a. Ask the user to enter 10 integers (Hint: use a loop and add them to a list)
  - b. \*Search the list and find the smallest number in the list
  - c. \*Search the list to find the largest number in the list
  - d. Find the sum and average of all the numbers in the list
  
4. Print the first 30 Fibonacci numbers. Reference to Fibonacci numbers are available at:  
[https://en.wikipedia.org/wiki/Fibonacci\\_sequence](https://en.wikipedia.org/wiki/Fibonacci_sequence)

5. Print the numbers 1 through 8 and their factorials.