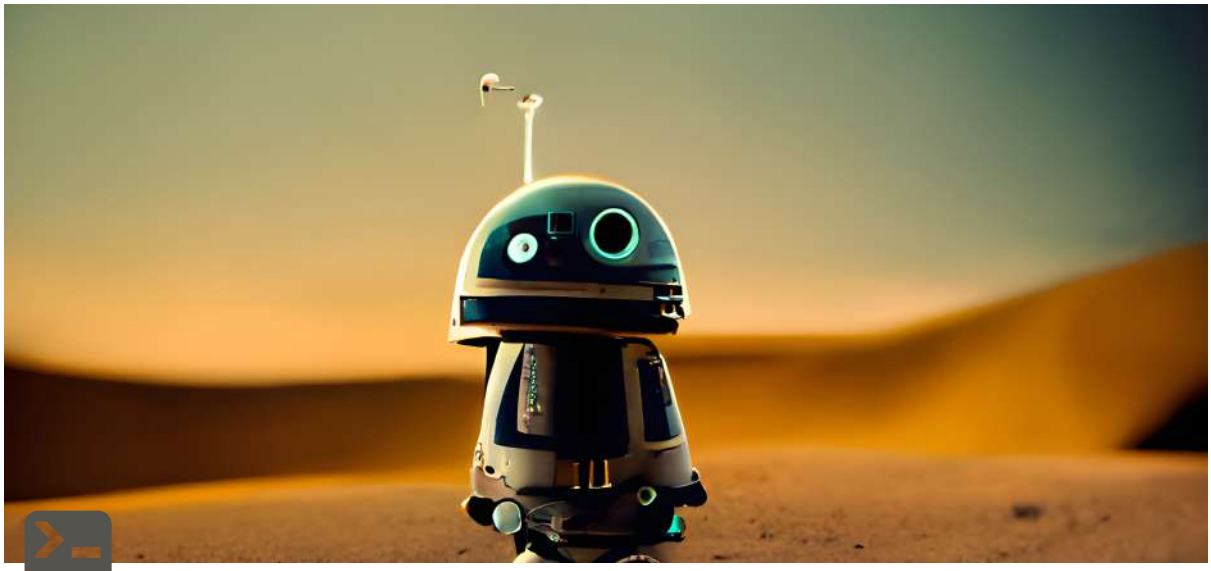

# Week 1 materials

## topics covered

- intro to programming: problem solving, different programming languages, statements, machine code
- python 3
- print(output) statement

## some recap

- string is a series of characters
- to print a string use: `print("Your sentence")` or `print('Your sentence')`
- remember that everything is printed the way we read: top to bottom, left to right
- you can use as many print commands as you want
- Concatenation is the process of combining or joining two or more strings together to create a new string. The plus operator (+) is used for string concatenation in Python. `print("Hello, " + "everyone")` will give an output:

```
Hello, everyone
```

- When you put ‘\n’ in a string, the print() function starts a newline, e.g. `print('Hello \n Bye')` will give an output:

```
Hello
Bye
```

- all files have some extension: .txt .jpeg .pdf  python files have extension .py

## exercises

1. What is the difference between these two statements?
    a. print(”My name is Bob”)
    b. print(’My name is Bob’)

2. What is the difference between these two statements?
    a. print(”I LOVE DOGS”)
    b. print(”i love dogs”)

3. What is the output of the following print statement?

```
print("Have a great day!")
```

    a. “Have a great day!”
    b. “Have a great day”
    c. Have a great day!
    d. ‘Have a great day!’

4. What is the output of the following statements?

```
print("Hi there!")
print("How are you doing?")
```

a. Hi there! How are you doing?

b. How are you doing? Hi there!

c. “Hi there!”

   “How are you doing?”

d. Hi there!

   How are you doing?

e. “Hi there. How are you doing?”

5. Write a program that prints a message saying

   I love Python!

6. Write a program that prints a message saying

   Hello, World!!!

7. Write a program that prints a message saying your name and your age, e.g.

   My name is Colin;) I am 20 years old!

8. What would be the output of this statement?

```
print("Hello" + "World")
```

   a. HelloWorld

   b. Hello World

   c. Hello

      World

   d. Hello + World

9. What would be the output of this statement?

```
print("I " + "love " + "listening " + "to " + "music" + "!")
```

a. Ilovelisteningtomusic

b. I love listening to music!

c. I

   love

   listening

   to

   music

   !

d. I + love + listening + to + music + !

10. Write this sentence using string concatenation:

    I like chocolate and vanilla ice cream.

11. Write this sentence using string concatenation:

    Today is a great day!

12. Write a program to display the message "Welcome to Python" three times, on separate lines using three `print()` statements.

13. Write a program to display the message "I am learning programming" five times, on separate lines using five `print()` statements.

14. Write a program to display the message "Python is awesome!" two times, on separate lines, using only one `print()` statement and the `\n` escape sequence, look for more info in the recap section.

15. Write a program that prints out your favorite food, followed by a blank line, followed by your favorite color, followed by a blank line, followed by your favorite animal. Use either `\n` escape sequence or separate `print()` statements. Save this program as p1_15.py.

16. Write a program that prints out your favorite hobby, followed by a blank line, followed by your favorite sport, followed by a blank line, followed by your favorite game. Use either `\n` escape sequence or separate `print()` statements. Save this program as p1_16.py.

17. Print a pattern of your choice using asterisks (*). For example, you can print a triangle, a square, or any other shape you like.

18. Print some of the lyrics of your favorite song.

19. Write a program that prints the to-do list for each day of the week. You should include a separate `print()` statement for each day of the week and use `\n` within that day to print the list, each day's to-do list should be displayed on a new line. Make sure to include a descriptive label for each day.

    Here is an example of how you might display your to-do list:

    Wednesday:

    - Study for the exam

    - Clean the house

    - Take a walk in the park

EXTRA TASK:

In Python, you can use `upper()` function. It is a built-in string method that converts all the characters in a string to uppercase. It returns a new string with the uppercase representation of the original string. To use a function simply use a '.' after the string you want to convert to uppercase. For example, `print("hello".upper())` will output: HELLO. The `upper()` function is just one example of the many string methods available in Python.

So your task is to write a program that prints out a motivational quote in the following format:

```
DREAM BIG
and
ACHIEVE GREATNESS!
```

You can use your favorite quote or find one on the internet, or simply use the one above. You need to use `.upper()` function, concatenation and `\n` escape sequence in this exercise.