

Chapter 1 – Print and Simple Variables

Objective:

Learn about print() function and about simple types of variables such as strings (str), integers (int), floats and Booleans (bool).

Relevant material:

[Learn Python – Full Course for Beginners](#) sections 4-7 (Drawing a shape to Working with Numbers).

See also: [print\(\)](#) [pow\(\)](#) [string](#) [math library sum\(\)](#)

Assignment:

1. Print a square perimeter.
2. Print a smiley face inside a square perimeter.
3. Print a right triangle of height 10 using '*' characters.
4. **Challenge:** repeat assignment 1 using only 2 print() lines (Hint: Loop and "if"s)
5. **Challenge:** repeat assignment 3 using only 1 print() line (Hint: Loop)
6. Print "Hello World!" with upper case letters only.
7. Print the length of the string "Hello World!".
8. Print the indexes of the character "W".
9. In the string "Hello World!", replace "Hello" to "Hey" and print the new string to console.
10. print the equation $4 * (3^{17} + \frac{52}{2.5})$ and its answer to console.
(for example: `print("1 + 1 = " + str(1+1))` would print `1 + 1 = 2`)
11. **Challenge:** repeat assignment 10 using [fancier output formatting](#) (Note: this is the more modern way of formatting strings, it's much more readable).
12. Calculate and print the smallest integer greater than or equal to (543/90) using math library.
13. Calculate and print the largest integer less than or equal to (543/90) using math library.
14. Calculate and print the summation of the numbers 1,2,3...,10.
15. **Challenge:** repeat assignment 14 without writing all numbers explicitly (Hint: there is a python built-in function that can generate a range on numbers).

Solutions:

Deliver a python script (.py file) with the code solving the above assignments.