

## CHAPTER 1 – PYTHON BASICS

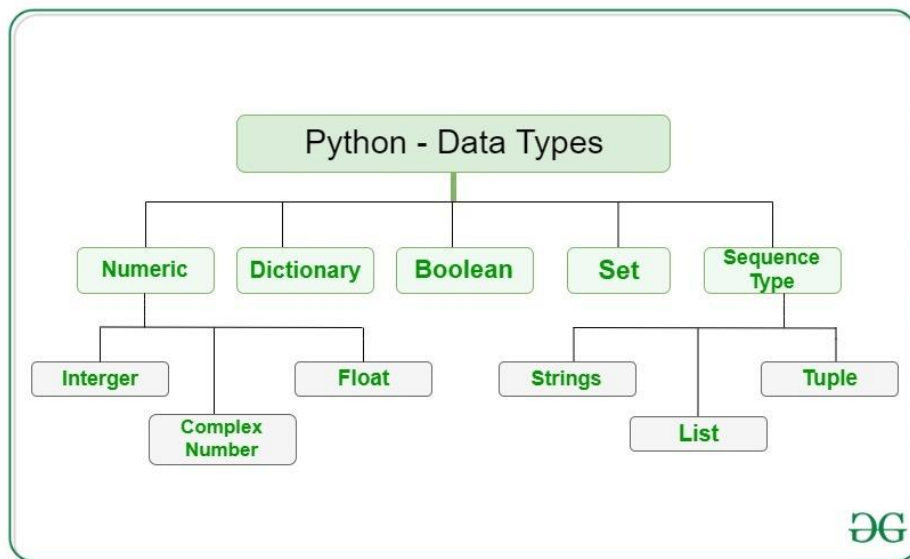
### 1. Which of the following are operators, and which are values?

\* - Operator  
'hello' - Value  
-88.8 - Value  
- - Operator  
/ - Operator  
+ - Operator  
5 - Value

### 2. Which of the following is a variable, and which is a string?

Spam - Variable  
'spam' - String

### 3. Name three data types



### 4. What is an expression made up of? What do all expressions do?

- Expression is the most basic kind of programming instruction in the language.
- Expressions consist of values (such as 2) and operators (such as +), and they always evaluate (that is, reduce) down to a single value.

**5. This chapter introduced assignment statements, like `spam = 10`. What is the difference between an expression and a statement?**

An expression evaluates to a single value. A statement does not.

**6. What does the variable `bacon` contain after the following code runs?**

```
bacon = 20
bacon + 1
```

ANS: 20

**7. What should the following two expressions evaluate to?**

```
'spam' + 'spamspam' - spamspamspam
'spam' * 3           - spamspamspam
```

**8. Why is `eggs` a valid variable name while `100` is invalid?**

Variable names cannot begin with a number.

**9. What three functions can be used to get the integer, floating-point number, or string version of a value?**

`int()`, `float()` and `str()` Functions can be used to get the integer, floating-point number, or string version of a value respectively.

**10. Why does this expression cause an error? How can you fix it?**

```
'I have eaten ' + 99 + ' burritos.'
```

**Cause of error:** concatenating an integer with a string

**Correction** : `'I have eaten ' + '99' + ' burritos.'`

(or)

`'I have eaten ' + str(99) + ' burritos.'`