Level 1: Basic Math & Strings

Accessing the Tutorial

* Go to: <http://www.letslearnpython.com/learn/>
* Skip directly to “Lesson 5: Variables”

Questions

1. Complete “Lesson 5: Variables – Save a Value” by typing the sample commands in the black area of the IDE.
   1. What do you get if you type puppies / 3?
2. **6\*6**
3. => 36 **puppies=6\*6**
4. **puppies**
5. => 36 **puppies/3**
6. => 12.0
   1. Why doesn’t typing kittens / 3 work?

Because kittens does not have an assigned value.

1. Complete “Lesson 5: Variables – Assign a New Value” by typing the sample commands in the black area of the IDE.
   1. Explain how the following sequence of commands works:
      * puppies = 36
      * puppies = puppies / 6
      * puppies

Puppies equals 36 means that when you type puppies, puppies will equal to 36.

When you type puppies= puppies/6, this means that the amount of puppies will be divided by six

When you type puppies, puppies will = to 36.

1. Read through “Lesson 5: Variables – Rules”.
2. Complete “Lesson 5: Variables – Math Operators” by typing the sample commands in the black area of the IDE.
   1. Explain what happens for following sequence of commands:
      * colour = “red”
      * puppies = 36
      * colour + puppies

Color is defined as red

Puppies is defined as 36

Color + puppies means “red + 36”.

1. Complete “Lesson 5: Variables – String Operators” by typing the sample commands in the black area of the IDE.
   1. Explain why the following commands give different results:
      * Color + day \* fishes
      * ( Color + day ) \* fishes

**In the first operation**, when you are using BEDMAS according to it you have to multiply day\*fishes and then add that answer by color.

**In the second operation**, you have to follow BEDMAS, so do the brackets first, Color+day and then multiply that answer by fishes.

1. Complete “Lesson 5: Variables – Indexes” by typing the sample commands in the black area of the IDE.
   1. What is the index of ‘r’ in “watermelon”?
   2. Write an expression using mynumber to return ‘r’

The index of r in watermelon is 4

Mynumber=5

Friot[mynumber-2]

=>’e’

1. Complete “Lesson 5: Variables – Assignments or Comparisons” by typing the sample commands in the black area of the IDE.
   1. What is the difference between “=” and “==”?
   2. Create your own mnemonic to remember this difference.

==means equal to

= means sum of an equation

1. Complete “Lesson 6: Errors – Examples” by typing the sample commands in the black area of the IDE.
   1. What doesn’t “friend” + 5 work?
   2. Wht is the difference between int and str?

It doesn’t work because it has to be a string not integer.

Int is an integer

Str is a string

1. Read through “Lesson 6: Errors – Parts of an Error Message”.
   1. Is “friend” + 5 an example of:
      1. A Syntax Error?
      2. A Runtime Error?
      3. A Logic Error?

“Friend” +5 is a type error which means it is also known as a syntax error.

1. Read through “Lesson 6: Errors – Fixing Errors”.
   1. Use the ‘print’ command to print your first name and last name.

**print("Manveer")**

Manveer

1. Complete “Lesson 7: Booleans – Types of Data” by typing the sample commands in the black area of the IDE.
   1. What is the value of: type(“True”)
   2. What is the value of: type( True )
   3. Why is the result different?

Value of type(“true”) is <class ‘str’>

Type(true) results in error because is it not defined.

Because when you do type(“true)” it is defined but when you do it without quotes it is undefined.

1. Complete “Lesson 7: Booleans – What Is A Boolean” by typing the sample commands in the black area of the IDE.
   1. Why do you think that having a Boolean data type is important in computer programming?

we use them in programming a lot when we need to make decisions about what to do in our code. For example, "If this expression is True, do something; if the expression is False, do something else instead.

1. Complete “Lesson 7: Booleans – Trying Out Booleans” by typing the sample commands in the black area of the IDE.
   1. Why do you think that there is no Maybe” Boolean data value in computer programming?

There is no maybe because Booleans data is used to tell if something is right or wrong or True or false. There is no answer of maybe.