

Python Basic

Assignment - 1

1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

*

'hello'

-87.8

-

/

+

6

Ans : Values - 'hello', -87.8 , 6

Expression - there is no expression in above given elements, since *, - , / , + are arithmetic operators.

2. What is the difference between string and variable?

Ans : String is a sequence of characters written inside single/ double quotes and are assigned to a variable.

Ex: 'python', 'helloworld'

Variable is a label that we can assign a value to it. Values can be either integers or strings.

Ex: x = 5 , n = "hello" where x & n are variables.

3. Describe three different data types.

Ans : int - these are positive or negative whole number values

string - it is a collection of one or more characters written inside a single or double or triple quotes

boolean - it is the data type with one of the two built in values True or False

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

Ans : Expression is a sequence of operands combined with a variety of operators. It is an instruction that combines values(of operands) and operators into a single value.

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

Ans : Statements represent an action or command eg; assignment statements
Expressions are combination of values and operators where an interpreter evaluates expression and displays the result,
But statements never returns a value.

6. After running the following code, what does the variable `bacon` contain?

```
bacon = 22
```

```
bacon + 1
```

Ans : It gives output 23

7. What should the values of the following two terms be?

```
'spam' + 'spamspam'
```

```
'spam' * 3
```

Ans : values will be same as 'spamspamspam'

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

Ans : A variable is a reserved computer memory location for a value to be assigned. 100 is a value which is basically a number, so we cannot specify the variable name with number itself.

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

Ans : `int()` , `float()` , `str()`

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

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

Ans : we need to change the operand 99, that is it should be written inside single quotes so that they can be concatenated and displays an output string.