

1. What are the differences between operators and values in the following?

*

'hello'

-87.8

-

/

+

6

Sol: * - / + are operators and "hello" -87.8 6 are values.

2. What is the difference between string and variable?

spam

'spam'

sol: string starts and ends with single or double quotes

3. Describe three different data forms.

sol: strings, integer and floating point

4. What makes up an expression? What are the functions of all expressions?

sol: expression is combination of operators and value. Expression is solved down to a single value

5. In this chapter, assignment statements such as spam = 10 were added. What's the difference between a declaration and an expression?

SOL: Expression is solved down to find a value and declaration is assigning a value directly.

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

bacon = 22

bacon + 1

sol: bacon value will not change as bacon +1 is not reassigned or equated to bacon variable.

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

`'spam' + 'spamspam'`

`'spam' * 3`

sol: "both will be 'spamspamspam'"

8. Why is it that eggs is a true variable name but 100 is not?

sol. variable name cannot start with a number but it can end with number ex: `a100=5`. this is valid. but `100a=5` is not valid.

9. Which of the following three functions may be used to convert a value to an integer, a floating-point number, or a string?

sol: `int()` `float()` `str()` can be used to convert to required data type

10. What is the error caused by this expression? What would you do about it?

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

sol: concatenation error as you cannot add integer to string values.