

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.

* : Expression

'hello' : Value

-87.8 : Value

- : Expression

/ : Expression

+ : Expression

6 : Value

2. What is the difference between string and variable?

Ans: A string is a type of data in which information is in the form of sequence of characters; whereas a variable stores the data and it can be of any type (integer, float, string, etc.).

3. Describe three different data types.

**Ans: integer: it contains integer values,
floating point numbers: it contains decimal values,
string: it is a sequence of characters**

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

Ans: An expression is a combination of values, variables, operators. Expressions need to be evaluated. If Python is asked to print an expression, the interpreter evaluates the expression and displays the result.

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

Ans: An expression evaluates and gives a single value as output whereas a statement doesn't do that.

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

bacon = 22

bacon + 1

Ans: bacon = 22

the value 'bacon + 1' is not reassigned to bacon so it won't increment.

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

'spam' + 'spamspam'

: spamspamspam

'spam' * 3

: spamspamspam

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

Ans: 'eggs' is valid variable name while '100' is not because a variable name should always start with an alphabetic letter and 100 is an integer as a whole.

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: The error is caused because 99 is an integer and concatenation are possible only in strings. The correct statement would be: 'I have eaten' + str(99) + 'burritos'