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

Answer 1:

Values: 'hello', -87.8, 6

Expressions: \*, - , / , +

2. What is the difference between string and variable?

Answer 2: ‘String’ is a data type in python. It can contain both numbers as well as characters.

‘Variable’ is a reference to an object in python that can contain data of any data type.

3. Describe three different data types.

Answer 3:

Int – Contains integer data (whole numbers only)

Float – Contains decimal point numbers

Str – Contains characters (numbers + alphabets)

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

Answer 4: An expression is a combination of operators and operands that is interpreted to produce some other value. All expressions perform a mathematical operation.

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

Answer 5: An “Expression” is a combination of operators and operands that are combined and interpreted by the compiler to create a new value,

A “Statement” is just a standalone unit of execution and doesn't return anything.

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

bacon = 22

bacon + 1

Answer 6: bacon will still contain 22.

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

'spam' + 'spamspam'

'spam' \* 3

Answer 7: 'spamspamspam'

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

Answer 8: Variable name should not start with a number.

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

Answer 9: int(), float(), str()

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

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

Answer 10: String type data cannot be concatenated with integer type data.

Can be fixed by type casting: 'I have eaten ' + str(99) + ' burritos.'