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 are ‘hello’, -87.8, 6**

**Expressions are \*, -, /, +**

2. What is the difference between string and variable?

Ans: **String is a sequence of characters and it is a data type which start and ends with ‘ & ‘ or “ & “ whereas Variable is the placeholder for different data types values**

3. Describe three different data types.

Ans: **interger, float & string**

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

**Ans: Expression is made up of operators & values. All expression will evaluate based on the operator to give a result**

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

Ans: **Statement is an instruction for the system to execute like print and assignment statement(which assigns a value to a variable) but expression evaluates based on the operator and gives the result**

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

bacon = 22

bacon + 1

**Ans: 22**

**Since bacon+1 is not assigned to bacon, the value of the doesn’t change**

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

'spam' + 'spamspam' **Ans: spamspamspam**

'spam' \* 3 **Ans: spamspamspam**

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

**Ans:** A variable can start with a alphabet or \_ and followed by numbers or \_ or alphabet or can be just single alphabet. **Since 100 is a numeric value, this is invalid as a variable**

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

**Ans: int(), float() and str() respectively**

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

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

**Ans: TypeError: can only concatenate str (not "int") to str**

**Correction : 'I have eaten ' + ‘99’ + ' burritos.' – placing 99 in between single quoted or double quotes**

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