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' = VALUE

-87.8 = VALUE

- = EXPRESSION

/ = EXPRESSION

* = EXPRESSION

6 = VALUE

2. What is the difference between string and variable?

**A Variable is a store of information, and a String is a type of information you would store in a Variable**

3. Describe three different data types.

|  |  |
| --- | --- |
| Text Type: | str |
| Numeric Types: | int, float, complex |
| Sequence Types: | list, tuple, range |
| Mapping Type: | dict |
| Set Types: | set, frozenset |
| Boolean Type: | bool |

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

**An expression is a combination of operators and operands that is interpreted to produce some other value.**

**The values that an operator acts on are called operands. A sequence of operands and operators, like a + b - 5 , is called an expression.**

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

In programming language terminology, an “expression” is a combination of values and functions that are combined and interpreted by the compiler to create a new value, as opposed to a “statement” which 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

if i run the code as it is it will give 22 only but if i run

bacon = 22

bacon = bacon + 1

then it will give 23

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?

Because variable names cannot begin with a number

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

The int() , float() , and str( ) functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

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

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

Because concatenation is done with in strings only.... code can be fixed by using

print('I have eaten ' + str(99) + ' burritos.')