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.

Ans:

\* is an expression

'hello' is value

-87.8 is value

- is an expression

/ is an expression

* is an expression

6 is value

2. What is the difference between string and variable?

Ans:

A string is a literal text, i.e. “Hello” or “Python”.

A variable is something that stores data - it can store a string, int, float, etc.

3. Describe three different data types.

Ans:

Float: A data type representing numbers with fractional parts.

Integer: A data type representing whole numbers.

String: A data type representing 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, and calls to functions. Expressions need to be evaluated.

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

Ans:

An expression always evaluates to a value. And a statement does something, like creating a variable or displaying a value, it only does whatever the statement says.

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

bacon = 22

bacon + 1

Ans: The answer after execution is 23.

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

'spam' + 'spamspam'

'spam' \* 3

Ans: The answer of the two terms is same i.e., ‘spamspamspam’.

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

Ans: we can't give variable an integer name. if we want we should begin with, a string like alphabet name then integer like eggs3, eggs10.

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

Ans: We can use str(), int(), float().

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

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

Ans: As 99 is an integer we can’t concatenated it but we can use type-casting.