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:

Values – 'hello', -87.8, 6

Expressions - \* , - , / , +

2. What is the difference between string and variable?

Ans:

String are immutable whereas variables are mutable.

Strings contain characters whereas variables contain numerical values.

3. Describe three different data types.

Ans:

Integer: Integer contains positive or negative whole numbers.

Float: Float contains real number with decimal point.

String: String contains one or more characters with quotes.

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

Ans:

Expression is made up of operands and operators. The python interpreter evaluates expression and produces result.

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

Ans:

The expression is evaluated to produce a result of a single value whereas the statement is not evaluated to produce a result.

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

bacon = 22

bacon + 1

Ans:

23

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

'spam' + 'spamspam'

'spam' \* 3

Ans:

spamspamspam

spamspamspam

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

Ans:

Variable name cannot start with a number. Since 100 is a number, it is a valid variable name.

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

Ans:

int() is for interger, float() is for floating-point number and str() is for string.

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

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

Ans:

For an expression to execute successfully, all the operators should have same data type. The corrected expression will be: 'I have eaten ' + str(99) + ' burritos.'