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:

\* - Expression

'hello' - Value

-87.8 - Value

- Expression

/ - Expression

+ - Expression

6 - Value

2. What is the difference between string and variable?

String is a primitive data type in python which is a collection of characters or words enclosed within single (‘) or double quotes (“).

Variable is a container / memory location where the value/data is stored. It is used to reference/point the data/value

3. Describe three different data types.

Integer is a numeric data type which comprises whole numbers, positive/negative numbers without any decimal point.

Float is a numeric data type which comprises numbers with decimal point or precision.

String is a primitive data type in python which is a collection of characters, words enclosed in single (‘) or double quotes (“).

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

Expression is a combination of variables, constants and operators. Expression is evaluated to obtain a value.

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

Expression is a combination of variables, constants and operators.

Statement is a set of instructions/code to perform an action.

Expression evaluates to a value while a statement need not.

Expression is also a statement.

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

bacon = 22

bacon + 1

Ans

22

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

'spam' + 'spamspam'

'spam' \* 3

'spamspamspam'

'spamspamspam'

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

Egg is a valid variable name as variable name must start with a letter or the underscore character.

100 is invalid variable name as variable name cannot start with a number.

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

int ()

float ()

str () are three functions that can be used to get the integer, floating-point number, or string version of a value

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

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

This expression causes an error as str & int type can’t be concatenated. The error can be fixed by converting the number into string.

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

'I have eaten ' + ‘99’+ ' burritos.'