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

Values are: -87.8, ‘hello’ and 6.

Expressions: \*, -, /, +.

2. What is the difference between string and variable?

Strings is a data type and can be anything, that is alphabets, numbers, symbols mentioned in single quotes or double quotes.

Variable is word which can be used to store any datatype and object and to assign values, which can be used later by calling the variable.

3. Describe three different data types.

Integers, float, string, complex numbers.

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

An expression is made up of int, float, variables, mathematical expressions and symbols used in mathematics (<,>, =). All expressions draw some logical value for desired output.

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

Expression evaluates a value, whereas statement like spam= 10 is assigning a value of 10 to variable spam.

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

bacon = 22

bacon + 1

Variable bacon contains 23

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

'spam' + 'spamspam'

'spam' \* 3

Ans: 'spamspamspam'

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

A variable always starts with alphabet, it is a standard practice to mention variable.

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

Int(), float() and str()

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

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

Str+int+str, will give error because we cannot concat str and int or float.

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