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.

* \* - mathematical operator (expression)
* 'hello' - string
* -87.8 - float
* - - mathematical operator (expression)
* / - mathematical operator (expression)
* + - mathematical operator (expression)
* 6 - integer

2. What is the difference between string and variable?

* Variable: Variables are the symbols that are used for storing of the data in a program
* String: String is a sequence of characters(one or more) ie., numbers, symbols and letters that are represented in single or double quotes

3. Describe three different data types.

* Numeric data type: it consists of integer, float and complex class type of data (ex: 1,1.1,1+j)
* String data type: it consists of string class type of data (ex: ‘Vinay’)
* Boolean data type: it consists of Boolean class type of data (ex: True, False)

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

* An expression is made up of variables, operators, strings ,values and functions, which are constructed sequentially according to the syntax
* An expression evaluates to a single value

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

* Statement is the standalone unit of execution and it does not return any output
* Expression is a combination of values and functions that are combined and interpreted by compiler for creating a new value

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

Bacon = 22

bacon + 1

* After running the variable bacon contains value as 22

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?

* As per the rules of declaration of a variable, the variable should start with a letter or an underscore but should not start with a number

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

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

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

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

* There is an error because we can concatenate only str to str but not int
* We can fix the error by converting 99(int value) to string using str(99)
* print('I have eaten ' + str(99) + ' burritos.')