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

**Answer1 :** [ ‘hello’ , -87.8 , 6 ] are values and [ / , - , + , ] are expression.

2. What is the difference between string and variable?

**Answer2 :** A Variable is a store of information, and a String is a type of information you would store in a Variable.

3. Describe three different data types.

**Answer3 : (a)**String (combination of 1 or more characters).

Ex. “ineuron”

**(b)**List (Array like structure but you can store any datatype).

Ex. [“ineuron”,7,7.7]

**(c)**Dict (key value pair).

Ex. { “ineruon” : 7}

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

**Answer4 :** An expression is a combination of operators and operands that is interpreted to produce some other value.

Ex. A sequence of operands and operators, like a + b - 7 , is called an expression.

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

**Answer5 :** A statement is a complete line of code that performs some action, while an expression is any section of the code that evaluates to a value.

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

bacon = 22

bacon + 1

**Answer6 :** bacon = 22

22 + 1 = 22

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

'spam' + 'spamspam'

'spam' \* 3

**Answer7 :** 'spam' + 'spamspam' = spamspamspam

'spam' \* 3 = spamspamspam

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

**Answer8 :** A variable name must start with a letter or the underscore character. A variable name cannot start with a number**.** That’s why 100 can’t be a variable name.

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

**Answer9 :** integer = int()

floating-point number = float()

string = str()

10. Why does this expression cause an error? How can you fix it? 'I have eaten ' + 99 + ' burritos.'

**Answer10 :** we can only concatenate str (not "int") to str so we have to convert int to str.

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