ASSIGNMENT – 1

QUESTION 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

ANSWER: *, -, /, + are the expressions and 'hello', -87.8, 6 are the values.

QUESTION 2: What is the difference between string and variable?

ANSWER: Variable is used to store the data values such as integers, strings, lists, tuples etc. Whereas, the string contains the value which is enclosed in quotes.

Ex: a = 'Ineuron' here 'a' is a variable and 'Ineuron' is a string.

QUESTION 3: Describe three different data types.

ANSWER: The datatypes that exists in python are, Numerics, text, sequence, dictionary and boolean.

* Numerics are integers, float numbers and complex numbers. Ex: 2, 2.5, i+2j

* Text is nothing but it would contain strings which are enclosed in quotes. Ex: 'Ineuron'

* Sequence contains list and tuple. Ex: list = [1,2,3], Tuple = (1,2,3,4). Lists and Tuples can store multiple data items in a single variable

* Dictionary is used to store values along with the key. Ex: a = {"name" : "Ineuron", "Subject" : "DataScience"}

* Boolean contains only two values which are true and false.

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

ANSWER: An expression contains values, variables, operators and function calls. All the expressions will be evaluated by the interpreter to display the result.

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

ANSWER: An expression contains values, variables, operators and function calls whereas a statement is just like a command that can be executed by the interpreter such as print

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

bacon = 22

bacon + 1

ANSWER : 23

QUESTION 7: What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' * 3

ANSWER:

Expression 1: spamspamspam

Expression 2: spamspamspam

Both are same

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

ANSWER: The reason is that a variable cannot be started with a number. It should always start with an alphabet or underscore. It can contain alpha numeric characters and underscore only. Moreover, the variable names are case sensitive. INEURON is different from ineuron.

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

ANSWER: int(), float(), str()

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

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

ANSWER: There is a numeric value 99 in the above statement. Number cannot be concatenated with the string directly. We need to do typecasting to convert number into string format and then we can print it.

It needs to be: 'I have eaten' + str(99) + 'burritos.'