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:- \*, -, /, +

values:- ‘hello’, -87.8, 6

2. What is the difference between string and variable?

Ans:- A variable is a means to store values (data types). String is one of data types that can be stored in a variable. Strings are initialized using double and single quotes.

3. Describe three different data types.

Ans:- 1> Integer:- As the name suggests, it is used to store integer data in python. Eg:- x = -211.

2>Boolean:- It is used to store boolean datatype ie (True and False). True and False are reserved so they cannot be used else where.

3>String:- Any value that is between quotes (double or single) is string. Eg:- x = “[3-value@iNeuron](mailto:3-value@iNeuron)”.

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

Ans:- An expression is made up of operators (+, -, \*, \*\*, etc) and operands(values, variables).

All expressions have one aim, that is to be evaluated and provide some value or result.

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

Ans:-A statement performs some action such as printing values, looping, or if statement. On the other hand, expressions also produce values and we can assign these values to new variables.

Eg;- print("Hello World") is a statement, whereas “Hello World” is an expression.

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

bacon = 22

bacon + 1

Ans:- 22, as bacon+1 is an expression not an assignment statement

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

'spam' + 'spamspam'

'spam' \* 3

Ans:- both will result in 'spamspamspam'.

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

Ans:- The name of a variable can not start with an integer where as eggs is not a reserved keyword in python so it can be used.

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

Ans:- int(), float(), str().

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

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

Ans:- Integer(99) is not compatible with string, hence it cannot be added.

It can be solved as 'I have eaten ' + ‘99 ‘+ ' burritos.'