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:** values=(-87.8,6,’hello’) ,expressions=(\*,-,/,+)

2. What is the difference between string and variable?

**Answer:** String is a datatype and variable is used to store values of any datatype.

3. Describe three different data types.

**Answer:** Number: It can have any value number,floating and complex type

Example:2,4,7.8,1+4j

String : String can have any character values.

Example:’A’,’Ineuron’

List : List is ordered and mutable collection of data.

a=[12,34,60,’Hello’]

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

**Answer :**

Expression is made of mathematical operators.

Example a=a+2

Expression is used to do all mathematical calculations which is required to build logic in code.

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

**Answer:** Expression evaluates value based on some mathematical calculation while statement represents an action or command like print statement, assignment statement etc.

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

bacon = 22

bacon + 1

**Answer:** 22

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

'spam' + 'spamspam'

'spam' \* 3

**Answer:** For both values ‘spamspamspam’

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

**Answer:** Python variable should start with either ‘\_’ or letter.so egg is valid but 100 not.

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

**Answer:** For String version=Str(10)

For floating version =float(10)

For integer version=int(10.0)

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

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

**Answer:** can only concatenate string ,number not allowed.

To fix this convert ‘99’.