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.

\* : Expression

'hello' : Value

-87.8 : Value

- : Expression

/ : Expression

* : Expression

6 : Value

2. What is the difference between string and variable?

A string is a Python Data type, whereas a variable can store any of the Python Data types like string,List,tuple,set, dictionary, float.

3. Describe three different data types.

Three data types are :

1.List: A collection of objects enclosed by square braces.

Ex: [1,2,3,4,”Aeroplane”,38.5]

Lists are mutable. Implies we can change the value of the object in a list at a particular index.

2. Tuples: A Python data type representing a collection of objects enclosed by parenthesis.

Ex: (1,2,3,45,”Aeroplane”,34.5)

Tuples are immutable, implies that we cannot alter the value of an object in a tuple at a particular index.

3. Strings: A python data type representing a collection of characters.

Ex: s= ”ertyuio”

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

Examples of expression operators in Python are :

+ Addition

* Subtraction

/ Division

\*Multiplication

// Quotient

% Remainder, Modulo Function

Expressions return a value.

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

spam=10 is a statement, whereas

a=3

b=2

c= a+b is an expression

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

bacon = 22

bacon + 1

Ans : 22

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

'spam' + 'spamspam'

'spam' \* 3

Ans : Values of 2 terms would be same and is ‘spamspamspam’

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

In Python variable names cannot start with integers. ‘’eggs’’ being a string is a valid variable name.

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

To get the integer version of value we use int(value)

To get the float version of value we use float(value)

To get the string version of the value we use float(value)

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

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

The above expression causes an error because can only concatenate str (not "int") to str.

We can fix this issue by rewriting 'I have eaten ' + ‘’99’’+ ' burritos.' By enclosing the term 99 in quotes as shown.