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' ------ Values

-87.8 ------- Values

- ------------ Expression

/ ----------- Expression

+ --------- Expression

6 ----------- Values

2. What is the difference between string and variable?

Ans:

String is a data type and variable is the name or identifier.

3. Describe three different data types.

Ans:

a. List data type: It contains the group of heterogeneous values.

In this insertion sequence is maintain.

Square brackets are used.

Duplicate values are allowed in list.

e.g. a=[“MSD”,1,2,3,4,1,2,3,4,”Sidh”]

b. Set data type: It contains the group of heterogeneous values.

In this insertion sequence is not maintain.

Curly brackets are used.

Duplicate values are not allowed in set.

e.g. a={“MSD”,1,2,3,4,”Sidh”}

c. Dictionary data type: It contains the group of “Key: value” pairs.

In this insertion sequence is not maintain.

Duplicate key are not allowed.

e.g. a={1:”MSD”,2:”Sidh”,3:”iNeuron”}

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

Ans.:

Expression is made up of by the different operators like arithmetic operators, logical operators, assignment operators etc.

Expressions do the certain operation.

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

Ans.:

Expression is made up of by the different operators like arithmetic operators, logical operators, assignment operators etc.. Expressions do the certain operation.

Statement is an instruction. E.g. print(a+b)

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

bacon = 22

bacon + 1

Ans.: 23

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

'spam' + 'spamspam' = ‘spamspamspam’

'spam' \* 3 = ‘spamspamspam’

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

Ans.:

The variable name eggs is follows the rule of identifiers and 100 is not follows the rule.

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

Ans.: Integer value: int()

Floating point : float()

String: str()

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

'I have eaten ' + 99 + ' burritos'

Ans.:

It is not possible to concate the int data type value and string data type value. We need to convert 99 into string.

‘I have eaten’+’99’+’burritos’