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 - String – ‘hello’

Mathematical operators - \*, -, /, +

Float - -87.8

Integer - 6

2. What is the difference between string and variable?

Ans – Variable is like symbol that can use to store any data in a program. String is a data, we can use it to fill data in variable.

3. Describe three different data types.

Ans – String – String is a data type which stores the characters. E.g. a = ‘Ineuron’

If we execute above expression and check the type of data type(a) answer would be string.

Integer- Integer data type stores numbers. E.g. a = 22

Type(a) is integer

Float – float data type stores numbers in decimal format. E.g. a = 22.6

Type(a) is float

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

Ans - An expression is a combination of operators and operands that is interpreted to produce some other value. Expressions are representations of value.

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

Ans - Expressions are representations of value. They are different from statement in the fact that statements do something while expressions are representation of value.

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'

'spam' \* 3

Ans – Both the statement is having same Ans – spamspamspam

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

Ans – Variable name should start with the character only not with number and should not contain any special characters like @, %, #. As ‘eggs’ is starting with character ‘e’ so it is valid while ‘100’ is staring with ‘1’ and 1 is number that’s why is invalid.

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

Ans – int(), float() and str()

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

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

Ans - Above expression is having combination of string and integer data type. Statements ‘I have eaten’ and ‘burritos’ are in string format while 99 is in integer format.

To fix above statement we need to convert 99 into string format by writing it in single coats like ‘99’.

Corrected expression as below-

'I have eaten ' + ‘99’ + ' burritos.'