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.

\* String

'hello' Value

-87.8 Value

- String

/ String

* String

6 Value

2. What is the difference between string and variable?

A string is a sequence of characters enclosed in a single. Double or triple quotes.

eg:-“hello”, “ineuron” etc.

Variables provide a means to name values(integer or strings) so that they can be used and manipulated later on.

eg:-a=64

b=’hello’

3. Describe three different data types.

Numeric-Numeric data type represent data which has numeric value. It can be integer, float or complex number. Eg:-5, 6.7, 5+4i etc.

Sequence-Sequence is the ordered collection of similar or different data types. It can be string, list or tuple.

Eg:- ‘hello’, [1,4,5,’hello’], (1,4,5,’hello’)

Boolean-Data type with two built in values True or False.

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

An expression is a combination of values, variables and operators.

Expression may contain values, variables and operators.

Eg:- 1+1

a =’hello’

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

### ★Expression

* Expressions always returns a value
* Functions are also expressions. Even a non returning function will still return
* Functions are also expressions. Even a non returning function will still return value, so it is an expression.
* Can print the result value
* Examples Of Python Expressions: “Hello” + “World”, 4 + 5 etc.

### ★Statement

* A statement never returns a value
* Cannot print any result
* Examples Of Python Statements: Assignment statements, conditional branching, loops, classes, import, def, try, except, pass, del etc.

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

bacon = 22

bacon + 1

23

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

'spam' + 'spamspam'

'spam' \* 3

‘spamspamspam’

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

A variable name must begin with a letter or \_ but not integer.

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

int()

float()

str()

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

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

Only string can be concatenate into string.

Here 99 is an integer.

Correct statement is:-

'I have eaten ' + ‘99’ + ' burritos.'