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.

**Ans:**

\* : Expression

'hello' : Value

-87.8 : Value

- : Expression

/ : Expression

* : Expression

6 : Value

2. What is the difference between string and variable?

**Ans:**

A string is a set of alphabets, numeric values, and special characters enclosed with single or double quotes.

Example: “This is a string” , ‘Hello’ etc

Variable: A variable is a container to store values/data

Example: a = 25, here a is a variable that stores value 25

3. Describe three different data types.

**Ans:**

String: “Hello!!! I am string data type”

Int : Integer Values i.e. 1, 55, 78 etc

Float: Decimal Value i.e. 1.2, 4.6 , 5.7 etc

Boolean: True or False

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

**Ans:** An Expression is made of operands and operators to perform a special task.

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

**Ans:** An Expression returns a value while a statement doesn’t return anything

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?

**Ans:**

'spam' + 'spamspam'

**o/p :** ‘spamspamspam’

'spam' \* 3

**o/p :** ‘spamspamspam’

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

**Ans:** A variable name cannot start with a numeric value or a special character **except \_(underscore)**.

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

**Ans:**

a=10

#to convert it into string

str(a)

#to convert into float

float(a)

#to get the data type of any value of data set

type(a)

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

**Ans:**

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

Ans: 99 is an integer that’s why the same could not be concatenated to the string, for the same we have to convert 99 to string.

‘I have eaten’ + str(99) + ‘burritos’

Or

‘I have eaten’+ ‘99’+’burritos’