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?

Answer : A Variable is place to store information i.e int, float, string, boolean, Whereas String is a data type, to store information in a variable i.e a collection or sequence of characters within single and double quotes (‘ ’ or “ “).

3. Describe three different data types.

Answer : Integer : An Integer is a Positive, or Negative numbers along with Zero . ex- 1,2,3,0,-1,-2,-3, etc.

Float : A float is a positive, negative whole numbers with a decimal point. Ex- 1.5, 0.5, -1.25, etc.

String : A collection or sequence of characters within single and double quotes (‘ ’ or “ “). Ex- ‘Aravind’, “AK”

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

Answer : An Expression is a combination of operators and Values that is interpreted to produce some other value. Ex: Addition, Substraction, Multiplication, Division, etc.

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

Answer : An Expression is a combination of operators and Values that is interpreted to produce some other value. A Statement is an execution of value to a variable.

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

bacon = 22

bacon + 1

Answer : 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?

Answer : Eggs is a valid variable name because it is String, variable name should be string or starting with string. we can’t give integer number as variable.

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

Answer : int(), float(), str()

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

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

Answer : We can’t concatenate the string with integer, so we have to convert the integer to string using by typecasting using str() function.