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.

\* - Mathematical operator

'hello' - String

-87.8 - Float

- -Mathematical operator

/ - Mathematical operator

* - Mathematical operator

6 - Integer

2. What is the difference between string and variable?

Ans:

String is written within double quote or single quote and its printed as it is. E.g- print(“this is good”) it will print *this is good* it can be anything either letter or number or symbol.

Variable : It is defined by us during writing the code to fulfil our purpose. E.g- to add “A” & “B” first we have to define the both like this way

A=10

B=20

and if we write now A+B then output will be 30.

3. Describe three different data types.

Ans: The three different data type are following:

1. Text data type- “str” i.e string where text are written within double quote or single quote or triple quote.
2. Numeric data type – int, float, complex. In this data type we assign the value to variable. For example a=10,b=10.5, complex=45+4j
3. Sequence data type – lst,

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

Ans: expression is combination of value and operator. Expression execute the program.

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

Ans: expression is combination of value and statement is combination of expression and operator.

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: variable cannot begin with number, due this 100 will be invalid. We can use combination like “k25k” it will be valid variable name.

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

Ans: type() is function used to find the version of value.

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

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

Ans: when executing this line the error is coming due to type of data used to execute this properly we have to write the expression in following way:

'I have eaten ' + str(99) + ' burritos.'