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.

\* : It is an expression. Multiplication operator.

'hello' : This is value of type string.

-87.8 : Value of type Float.

- : It is an expression. Subtraction operator.

/ : It is an expression. Division operator with return type Float.

* : It is an expression. Addition operator.

6 : This is value of type int.

2. What is the difference between string and variable?

**Answer**: String is a pre defined data type where as variable is the name of the address location to store input values.

3. Describe three different data types.

**Answer**:

1. Non-iterating data types : Integer,float
2. Iteratable data types : string,list,tuple,dictionary.
3. Boolean type( True or False).

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

**Answer:** Expressions made up of Variables, Operators in a syntactical way. Expressions evaluates/calculates and returns result values.

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

**Answer**: statements with equal(=) sign are called assignment statements. Example: spam=10.

Statements with other operators except equal(=) sign are called expressions.

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'

'spam' \* 3

**Answer** : ‘spamspamspam’ for both above expressions.

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

**Answer**: Variable name shouldn’t start with number.

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

**Answer:** int() , float() , str() are the functions used to get values of integer, floating-point number, string respectively.

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

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

**Answer:** 99 is of type integer. We can’t concatenate integer with string.

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

Output: 'I have eaten 99 burritos.'