**Assignment 1**

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' | Values (String) |
| -87.8 | Values (Float) |
| - | Expressions |
| / | Expressions |
| + | Expressions |
| 6 | Values (Int) |

2. What is the difference between string and variable?

Ans : Variable is an area that store an information. Variable will allocate a space in main memory, String is a type of information. A String is usually words, we can store a string inside variable

3. Describe three different data types.

Ans : Three different data type are (Integer, Float, String)

Integer is positive or negative numbers, Floating point number with decimal like 1.002, String is a text that written in either single quotes or double quotes

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

Ans : The expression is contain combination of values, variables, operators. the python interpreter evaluates the expression and displays the result.

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

Ans : The expression are evaluates a condition or value the sample expression is 5 > 4. Statements represent an action or command e.g print statements, comment statements.

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

bacon = 22

bacon + 1

Ans : the variable bacon contain 22, because here we are just incrementing the value. Not assigning the incremented value to bacon variable

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

'spam' + 'spamspam'

'spam' \* 3

Ans : The above two terms will return same output as ‘spamspamspam’

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

Ans: The variable name must start with string. Not a integer and special character except underscore(\_). that’s why the eggs is valid and 100 is invalid

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

Ans : The Three functions are

1. int (For interger)
2. float (For Float Value)
3. str (For String )

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

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

Ans: Python can only concatenate str with str and int with int. not "int" to “str”. So, we can fix it by typecast the int into string by using str function

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

This will produce the output : I have eaten 99 burritos.