PYHTON: 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.

```
*
'hello'
-87.8
-
/
+
6
SOLUTION:
Expressions - *, -, /, +
Values- 'hello', -87.8,6
```

2. What is the difference between string and variable?

SOLUTION- A variable can be used to store or hold some values in it. A variable can store data of different data types. And string is a type of data. Which we can store in side any of the variable. String is a data type.

3. Describe three different data types.

SOLUTION-

- 1. INT: The integer data type can store the whole number from a range of -2147483647 to +2147483647.Example- 1,23,10
- 2. Float: The float can store the data with floating point numbers or decimal numbers. Example- 0.4, 1.83
- 3. String: A string is a collection of one or more characters put in a single quote, double quote or triple quote. Example "Yogender Kushwaha", "iNeuron".
- 4. What is an expression made up of? What do all expressions do? **SOLUTION-** An expression is made up of the operator and operands. The expression generates some value as a result after being run or interpreted by python. Example: a = b +c
- 5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

SOLUTION- A statement in pythons is used to create variables or display some values or data. Example: a = 6, print(a).

6. After running the following code, what does the variable bacon contain?bacon = 22bacon + 1

SOLUTION- The bacon will contain 22.

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

'spam' + 'spamspam'

'spam' * 3

SOLUTION- 'spamspamspam', 'spamspamspam'

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

SOLUTION- Because a variable cannot start with a number and any special character. That is why egg 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?

SOLUTION-

int(): this can be used to get the integer.

float(): this can be used to get the floating point number.

str(): this can be used to get the string version of a value.

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

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

SOLUTION- To perform the addition here all the data should be of same data type. We can fix this by putting 99 in single quote. Like: 'I have eaten ' + '99' + ' burritos.'