**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.**

Ans => \*,’hello’, - , /, + ,6

**2. What is the difference between string and variable?**

Ans=> ***String*** is a kind of information which can be stored inside any variable or it can be represented as a set or array of some information.

***Variables*** is a memory allocation inside a program to store some kind of information.

**3. Describe three different data types.**

Ans=> Int – In python, Integer value can be any length such as integers. Python has no restriction on the length of an integer. Its value belongs to **int.**

Float – In python, Float is used to store floating-point numbers like 1.9, 9.902, 15.2, etc. It is accurate upto 15 decimal points.

Complex – In Python, A complex number contains an ordered pair, i.e., x + iy where x and y denote the real and imaginary parts, respectively

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

Ans=> An expression is a combination of operators and operands that is interpreted to produce some other value.

In any programming language, an expression is evaluated as per the precedence of its operators.

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

Ans=> An expression always evaluates a value. And, a statement does something, like creating a variable or displaying a value, it only does whatever the statement says.

**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'**

**‘spam’\*3**

Ans=> **'spam'+'spamspam' ===>** ‘spamspamspam’

**‘spam’\*3** ===> ‘spamspamspam’

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

Ans=> A variable is like a box in which you can store a value. 100 is a value that can be stored in the variable. The input call returns a string, another value that can be stored in a variable. So, egg can store some information and can act like variables. But 100 itself is a information which can’t be stored as variables.

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

Ans=> The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

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

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

Ans=> The expression causes an error because 99 is an integer, and only strings can be concatenated to other strings with the + operator. The correct way is I have eaten ' + str(99) + ' burritos.'.