**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

Ans:-

values:-

‘hello’,-87.8,6

expressions:-

-,/,+

2. What is the difference between string and variable?

Ans:-

string:-

1.A string can be defined as a set of characters.

2.we can perform multiple operations on strings.

variable:-

1.A variable can be defined as ,it will just store the data values in it.

2.A variable can store a constant value in it.

3. Describe three different data types.

Ans:-The different data types are given below:

Integer :-Integer is a one of the datatype,which is used to determine the size and type of integer variables.The integer datatype is defined using ‘int’ keyword.

Ex:- int a=10

Float:-Float is a one of the datatype,which is used to determine the size and type of float variables.The float datatype is defined using ‘float’ keyword.

Ex:- float a=10.0

Boolean:-Boolean is one of the datatype,which gives either the given statement is true or not.Boolean data type have two values TRUE and FALSE.

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

Ans:-

Expression:-An *expression*  is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value.

* In any programming language,an expression is evaluated as per the precedence of operators.So that if more than one operator in an expression,their precedence decides which operation will be performed first.

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

Ans:-

Expression:-

* An expression evaluates to a value.
* Evaluation of an expression always produces or returns a result value.
* Ex:- >>> a+10
* 15

Statement:-

* A statement executes something.
* Execution of a statement may or may not produce a result value,it only does whatever the statement says.
* Ex:-

>>>x=5

>>>print(x)

>>>output:-5

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

bacon = 22

bacon + 1

Ans:-

the bacon contain ‘23’.

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

Ans:-

'spam' + 'spamspam' = ’spamspamspam’

'spam' \* 3 = ’spamspamspam’

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

Ans:-

rules for variable name,:-

* A variable can not start with a number.
* A variable can only contain alphabets or alphanumeric ,not numerics.

Because of the above rules,

‘eggs’ is a valid variable name.

‘100’ is not a valid variable name.

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

Ans:-

For integer:-’int()’ function.

For floating :-point number:- ‘float()’ function.

For string :- ‘str()’ function.

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

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

Ans:-

The above expression causes an error,because 99 is an integer.The string can only concatenate with other string using ‘+’ operator.In the give expression the string is concatinating with the integer,so it cause an error.

The correct expression is:-

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