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:

+ , - , / , \*

The above four are known to be expression or mathematical operators.

‘hello’ , -8.87 , 6

And these above three are known to be values ( string , negative float , integer).

2. What is the difference between string and variable?

Solution:

Variables are name or location which is used to assign a value whereas strings are datatype and the data can be fillup the space of varaiable. The variable can holds the values of integer , string , float , list , tuple and dictionary.

3. Describe three different data types.

Solution:

The three different data types are:

* Integer
* Floating point Number
* String

Integers are represented in whole numbers. ( eg: 64, 2, 356,-1)

Floating point number are represented in decimal numbers. (eg: 2.56 , 10.0 , -2.6)

String are represented in words or numbers which are present in between single or double quotations. (eg: ‘good’ ,”welcome” , ‘100apples’ ).

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

Solution:

The expression is combination or made up of operators and operands. Expression will be mathematical operators involving calculation.

For example: y=24+2.5\*2/4-2//4 is a expression, where numbers are operands and symbols are operators.

5. This assignment statements, like spam = 10. What is the difference between an

expression and a statement?

Solution:

Statement which gives meaning to the code , the assignment statement tells about the variable carries particular value and no operations involves.

Whereas the expression performs operations with operators and operands , the result assigned to the variable.

For simple example, spam =10 is simply value assigned to a variable called spam. And again spam = 10 + 25 is a expression.

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

bacon = 22

bacon + 1

Solution:

After running the code the variable bacon becomes , bacon = 23.

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

‘Spam’ + ‘spamspam’

‘spam’ \* 3

Solution:

Both the terms will give same output are:

* ‘spam’ + ‘spamspam’ prints ‘spamspamspam’
* ‘spam’ \* 3 prints ‘spamspamspam’

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

Solution:

Since variable cannot be starts with numeric value but starting with underscore (ie.,\_100) can be valid whereas egg is a alphabetic variable name . And also alphanumeric combination is possible ie., valid variable name.

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

Solution:

* To get an integer version of a value;

First = int(input())

* To get a Floating-point number version of a value;

Second = float(input())

* To get a string version of a value;

Third = str(input()) or

THIRD=input() ‘’’’ by default it takes as a string value’’’’

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

‘I have eaten ‘ + 99 + ‘ burritos.’

Solution:

In this case integer and string are trying to concatenate but it is not possible. String value can only be added to string value. where string with integer multiplication is possible.

Which can be fixed by below code ;

‘ I have eaten’ + ‘99’ + ‘burritos.’