**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:

values - [ 'hello' , -87.8 , 6 ]

Expression - [ \* , /,+,6]

1. What is the difference between string and variable?

Solution:

* Strings is one of the datatype in python. By default all the input data is considered as a string. It can be a sentence, word or even number enclosed in single or double quotes.
* Variable is used to store any any data

1. Describe three different data types.

Solution:

* Numeric : Numeric datatype can have numbers in the form of integer, float , complex
* List : list can have different type of data. Enclosed inside [ ], separated by comma.
* Dictionary : Dictionary stores data in Key and values pairs Enclosed inside { }.

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

Solution:

Expressions are combination of operators , numbers, stings and variables.

expressions are used to create value after executing.

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

Solution:

Here 10 is assigned to spam variable.

Expressions are combination of operators , numbers, stings and variables.

expressions are used to create value after executing.

Statements doesn’t give value. And expressions are part of statements.

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

bacon = 22

bacon + 1

Solution:

bacon =23

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

'spam' + 'spamspam'

'spam' \* 3

Solution:

'spam' + 'spamspam’ -> ‘spamspamspam’

'spam' \* 3 -> 'spamspamspam’

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

Solution:

eggs --> eggs is valid variable name because it has alphabets.

100 --> variable name cannot start with numbers.

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

Solution:

Integer - int()

floating-point number - float()

string - str()

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

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

Solution:

Strings and number cannot added.

Numer 99 has to be converted into string as well.

'I have eaten ' + ‘99’ + ' burritos.'