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

Answer:

Values: ‘hello’, -87.8, 6

Expression: \*, -, /, +

2. What is the difference between string and variable?

Answer:

Variable is the name assigned to a memory space which can be used to store some data.

String is data type for collection of characters written in single quotes or double quotes. A variable can be used to store string data type.

3. Describe three different data types.

Answer

Integer: It contains positive and negative whole numbers eg: 1, -2, 0. It is represented by int class.

String: It is a collection of unicode characters written within single quote or double quote eg: “karl, ‘hello’. It is represented by str class.

List: List is an ordered collection of data. The data in the list can be of different data types, eg: [4, “ineuron”,5.12].

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

Answer:

An expression is a combination of values, operators, variables and functions.

All expressions evaluate to a single value.

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

Answer:

An expression is a combination of values, operators, variable and functions that returns a single value.

A statement is a piece of code which asks computer to perform a task and might not return a value like expression.

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

bacon = 22

bacon + 1

Answer: 22

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

'spam' + 'spamspam'

'spam' \* 3

Answer:

‘spamspamspam’

‘spamspamspam’

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

Answer:

A variable name cannot start with a number hence 100 is an invalid variable name.

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

Answer:

int(), float(), str()

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

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

Answer:

Error occurs because 99 in an integer and we cannot concatenate it with other strings, we will have to convert it to string first. Fixed expression is 'I have eaten ' + str(99) + ' burritos.'