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:

A variable is a reserved memory location to store values.

A string is a sequence of characters. It is a value that can be stored in a variable and it is a derived data type.

3. Describe three different data types.

Answer:

int() 🡨 used for integer values

float()🡨used for floating-point numbers

string()🡨used for the strings

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

Answer:

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

We can evaluate an expression. Like a=b + c.

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, variables.

But in a statement a value in the left-hand side is assigned to a variable in the right-hand side.

And a statement does not return any value.

spam=10 🡨 value 10 is assigned to variable spam.

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:

100 is invalid because a variable name should not start with a “digit”.

A variable consist of uppercase and lowercase letters (A-Z , a-z ), digits ( 0-9 ), and the underscore character ( \_ ). And variable may contain digits, but the first character of a variable name cannot be a digit.

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

Answer:

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.'

Answer:

This expression cause an error because we can inly concatenate str to str but 99 is an integer.

'I have eaten ' +’ 99’ + ' burritos.'

Or

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