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.

\* is a expression

'hello' is a value

-87.8 is a value

- is a expression

/ is a expression

* is a expression

6 is a value

2. What is the difference between string and variable?

There are many types of variables in python. String is type of variable like any variable string can be edited, sliced and modified in various ways . variable in python are flexible i.e they can be used as any types without any explicit type casting(although explicit type casting is supported in python ). An announced variable is simply an allocated memory. In case of string this memory is indexed so it can be iterated upon. Any variable can be an iterable if the value assigned to it is a iterable data data-type.

3. Describe three different data types.

: string :- text type iterable that can be sliced iterated upon concatenated and modified

: Boolean: as the name suggests I has only two stats True or False

: set :- can be explained as array with no repeated elements and no regard for order

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

Expression is simply the interaction between two or more values resulting in third value

All expressions perform a math operation and give out a result

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

Statement and expressions have key difference that is interaction, expressions perform an operation whereas statement is assignment or declaration

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

bacon = 22

bacon + 1

: 22

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

'spam' + 'spamspam'

'spam' \* 3

: spamspamspam

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

Numerals are not allowed as variable names

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

Int(value)

Float(value)

Str(value)

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

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

: cannot concatenate string to int

Solution

nBurritos=99

f'I have eaten {} burritos.'.format(nBurritos )