

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

Ans:

\* ( expression)

'hello' (value)

-87.8 (value)

-( expression)

/( expression)

+ ( expression)

6 (value)

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2. What is the difference between string and variable?

ans

Variable we can assign any value like string, integer, float, Boolean and complex but string is string we can assign value in double quotes or single quotes

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3. Describe three different data types.

Ans

Boolean (bool) is output will be True or False

Integer(int) : we can assign value -1,0 1

Eg: a=-1

String : string we can assign value in double quotes or single quotes

Eg: a="suman"

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

Ans

Expression is a combination of values, variables, operators and function calls that always produces or returns a result value.

eg: x = 5, y = 3, z = x + y

output z=8

In the above example x, y and z are variables, 5 and 3 are values, = and + are operators.

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

Ans

Expression returns a value. The evaluation of an expression does not change state and produces at least one value as a result.

Statement is any instruction that a python interpreter can execute (carry out). The execution of a statement changes state. Execution of a statement may or may not produce or display a result value, it only does whatever the statement says.

Eg= x=3

Print (x)

The first line is an assignment statement that gives a value to x. The second line is a print statement that displays the value of x.

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

bacon = 22

bacon + 1

Ans

variable bacon contain 22

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

'spam' + 'spamspam'

'spam' \* 3

Ans

Same ie ('spamspamspam')

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

Ans

Variable name can't start with numbers but Variable names can contain numbers

Eg: v20=20

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

Ans

The int(), float(), and str() functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.

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

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

Ans

We cannot concatenate a string and int (ie here is 99)

We can fix this by type conversion

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

Or

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