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In [ ]: 1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be
*
'hello'
-87.8
-
/
+
6
A) Values are 'hello', -87.8, 6.
   Expressions are *, -, /, +, .
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In [ ]: 2. What is the difference between string and variable?
• Variables are symbols that you can use to store data in a program. You can think of them as an empty box that you fill with data.
• Strings are data, so we can use them to fill up a Variable. Declaring strings as variables can make it easier for us to use them.
Eg: String X = "Tom";
// Here X is variable and type of value it stores is in string.
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In [ ]: 3. Describe three different data types.
1. Strings: Strings are the text that is anything between "" double quotes.
   Strings are the data. Strings are immutable.

eg: "Hello !", "23.34"
2. Integers : Integers are whole numbers, They are immutable.
   eg: 5324
3. Floats : Floats are decimal numbers, They are immutable in nature.
   eg: 4.1215
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In [ ]: 4. What is an expression made up of? What do all expressions do?
A) An Expression is a combination of values, variables, operators and calls to functions. Expressions need to be evaluated. If you evaluate an expression, you get a value.
   What do all expressions do?
   Expressions are representation of value. They are different from statement in the fact that statements do something while expressions do not.
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In [ ]: 5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?
A) An Expression evaluates to a single value. A statement does not.
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In []: 6. After running the following code, what does the variable bacon contain?

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bacon = 22  
bacon + 1
```

A)The bacon variable is set to 22. The bacon +1 does not reassign the value in bacon (that would need an assignment statement : l

In []: 7. What should the values of the following two terms be?

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'spam' + 'spamspam'  
'spam' * 3
```

A) Both expressions evaluate the string 'spamspamspam'.

In []: 8. Why is eggs a valid variable name while 100 is invalid?

A)Variable names cannot begin with a number.

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

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

In []: 10. Why does this expression cause an error? How can you fix it?

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

A)The Expression causes an error because 99 is an integer, and only strings can be concatenated to other strings with the + operator.
The correct way is 'I have eaten'+str (99) + 'burritos.'