Make sure you have the tutorial open when answering the following questions. All of the questions in this module use the Python Tutorial at:ad

· http://www.letslearnpython.com/learn/

Note: You should use the black area of Repl to try the simple Python expressions listed in the questions below.

Lesson 4: Strings – Strings and Lesson 4: Strings – Examples

1. What is a string? Explain in words and provide an example.
.A string is a data type used in programming, such as an integer and floating point unit, but is used to represent text rather than numbers. ... For example, the word "hamburger" and the phrase "I ate 3 hamburgers" are both strings. Even "12345" could be considered a string, if specified correctly.'Hello!'

2. Explain why typing "apple" works and why typing apple without quotes gives an error.
Because Python has a rule where if you type something in quotes then python will just read it wheras when you dont then python wont be able to read it since it requires quotes to understrand the word.

3. Is there a difference between typing "apple" and 'apple'. (i.e. is there a difference between using single or double quotes.
In Python, such sequence of characters is included inside single or double quotes. As far as language syntax is concerned, there is no difference in single or double quoted string. Both representations can be used interchangeably.

4. Explain why typing "apple' gives an error.
The error occurs because on the left side of the apple there is two (") whereas ther should only be one (')

5. Explain why "2 + 5" does not equal 7 and how it is different from typing 2 + 5.
Becuse when you put 2+5 then pyhton reads the statement whereas if you just put 2+5 just like that it would end up adding the statement up to 7

Lesson 4: Strings – Operators

1. Type "appl" + "e" and explain what it does. Why do you think this works?
It is easy for phython to add things

2. Type "apple" - "e" and explain what it does. Why do you think this gives an error?
It is impossible to make python subtract things

3. Type "Hello" * 10   and explain what it does. Why do you think this works?
With the star it tells pyhton to multuply hello 10 times, this works because it the star is also known as a form of multiplication.

4. Type "Hello" / 10 and explain what it does. Why do you think this gives an error?

It gives the error becasue python is unable to divide things in these situations, also it just doesnt make any sense

5.   The concatenation operator (+) is very useful for working with strings. Explain concatenation with words and examples.

Concatenation is a little bit like adding - we use it to put strings together side by side.

"Hi" + "there!"

'Hithere!'

Lesson 4: Strings – Indexes and Lesson 4: Strings – Indexes Examples

1.   Create a string using the letters in your first name and write down the index number for each letter.

print ("S" + "E" + "H" + "A" + "J")

 SEHAJ

2.   Explain why print("Hello!"[4]) does not print "l".

Doesn't count the first letter

3.   What does print("Hay, Bob!"[4]) print? For a hint try print("Hay, Bob!"[3]) and print("Hay, Bob!"[5])

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4.   Answer True or False: "String indexes in Python begin at 0". Do you need to know the reason for this or do you just need to remember this?

 True

Lesson 5: Variables

1.   Complete "Lesson 5: Variables – Save a Value" by typing the sample commands in the black area of the IDE.

a.   What do you get if you type puppies / 3?

Pyhton cant divide words

b.   Why doesn't typing kittens / 3 work?

Does not work because you are dividing it

2.   Complete "Lesson 5: Variables – Math Operators" by typing the sample commands in the black area of the IDE.

a.   Explain what happens for following sequence of commands:

·   colour = "red" it reads it as a string

·   puppies = 36 reads it as an integer

·   colour + puppies you can't add a string and integer together

3.   Complete "Lesson 5: Variables – String Operators" by typing the sample commands in the black area of the IDE.

a.   Explain why the following commands give different results:

· Color + day * fishes

· (Color + day) * fishes

Does not work because it can't read variables and strings together

4.   Complete "Lesson 5: Variables – Indexes" by typing the sample commands in the black area of the IDE.

a.   What is the index of 'r' in "watermelon"?

The index is 4

b.   Write an expression using mynumber to return 'r'

print("mynumber[7])

5.   Integers (numbers) and Strings (letters) are different data types in Python?

a.   What doesn't "friend" + 5 work?

It gives a syntax error

b.   What is the difference between the int and str data types?

"A word that you put in quotes is just a string of letters called a "str" in python. Numbers that don't have a decimal point are integers and are called "int" in python. You can't add a str and an int. But you can turn a number into a string if you use the str() function."