# Debugging, strings, and thinking like a computer

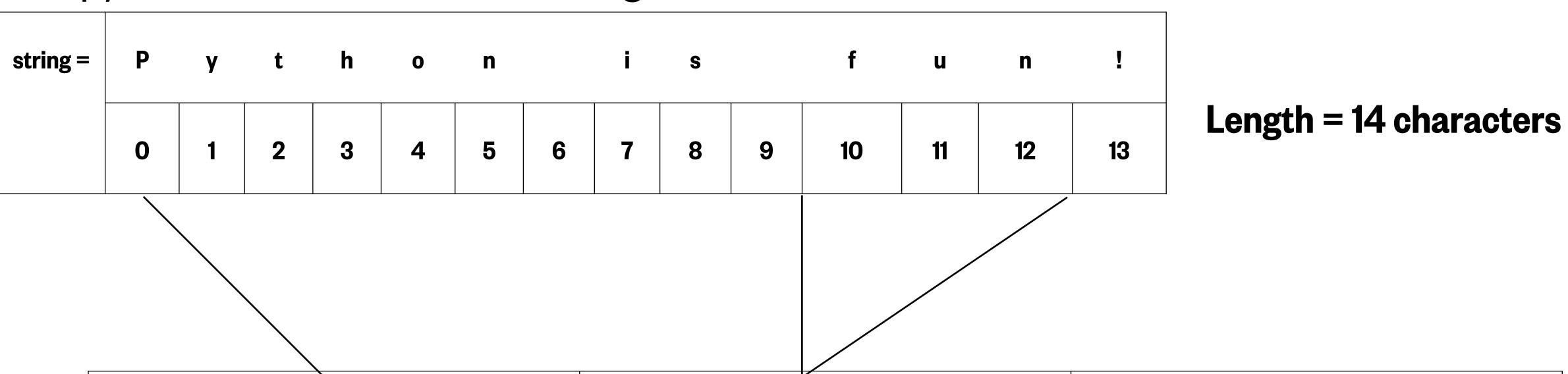
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# Warmup activity: debugging

```
1 Here are the Beatles' names
 2 1st beatle = 'John'
 3 2nd beatle = 'Paul
                                                Group Activity:
 4 3rd beatle = 'George"
 5 4th beatle = 'Ringo'
                                                1) Introduce yourselves
 7 # Here are the Beatles' ages
                                                2) There are numerous (at least 9 unique)
 8 age1 = '23'
 9 age2 = '21'
10 age3 = '20'
                                                mistakes in this code. Work together to find as
11 \text{ age4} = '23'
12
                                                many as you can and correct them.
13 # This is the age range of the Beatles
14 age range = age1 - age3
15
16 # Here are a few print statements
17 print('The Beatles were', agel age2 age3 'and' age4, 'when they arrived in America.')
18 print('Their names were:',1st_beatle+2nd_beatle+3rd_beatle+'and'+4th_beatle.)
19 print('The youngest Beatle's name was,' 3rd beatle')
20
```

### Quick review: slicing and indexing

#### How python counts characters (indexing):



Individual characters	Character Groups	Whole string
string[0]	string[10:13]	string[:]
P	fun	Python is fun!

You can select certain parts of a string by slicing it.

## Activity: indexing and slicing

```
1 abc_str = 'the quick brown fox jumped over the lazy dog'
```

- 1. Select the letters in your name (First and Last) by slicing this string using the index values shown.
- 2. Then create a single string out of the letters to write your full name
  - Capitalize the first letter of you first and last names using the upper function!
  - Separate your first and last names with a space
- 3. Write a print statement with the result:

My name is <Lastname>, <Firstname> <Lastname>. (Example: My name is Bond, James Bond.)