

Thursday, October 8, 2020 | **Class #2**

# Debugging, strings, and thinking like a computer

OCEAN 215 | Autumn 2020

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# Warmup activity: debugging

```
1 Here are the Beatles' names
2 1st_beatle = 'John'
3 2nd_beatle = 'Paul'
4 3rd_beatle = 'George'
5 4th_beatle = 'Ringo'
6
7 # Here are the Beatles' ages
8 age1 = '23'
9 age2 = '21'
10 age3 = '20'
11 age4 = '23'
12
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', age1 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
```

## Group Activity:

1) Introduce yourselves

2) There are numerous (at least 9 unique)

mistakes in this code. Work together to find as many as you can and correct them.

# Quick review: slicing and indexing

How python counts characters (indexing):

<b>string =</b>	<b>P</b>	<b>y</b>	<b>t</b>	<b>h</b>	<b>o</b>	<b>n</b>	<b>i</b>	<b>s</b>	<b>f</b>	<b>u</b>	<b>n</b>	<b>!</b>	
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>

**Length = 14 characters**

<b>Individual characters</b>	<b>Character Groups</b>	<b>Whole string</b>
<code>string[0]</code>	<code>string[10:13]</code>	<code>string[:]</code>
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'  
            0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43
```

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.)