MEET Y1 - Module 3 - Lab 2

String + String Operations

STRINGS

1. Open an IDLE3 shell by typing `idle3 &` in the terminal. Type the code below and see what python shows you.

```
>>> "Don't" + "forget" + "to" + "conserve" + "water"
```

```
>>> 'Don't' + ' forget' +  'to' + ' conserve ' +
'water'
```

```
>>> "the"*3
```

```
>>> 'the' + 3
```

```
>>> "the"*3 + "beautiful" + "Earth"
```

```
>>> 2*"True"
```

---

2. The following variable assignments are made in Python:

```
>>> a = 'save'
>>> b = 'the'
>>> c = 'planet'
```

Write the code you need to get Python to output `'save the planet'` in the space below. Include only quotation marks, the variable names,

spaces, and plus signs in your answer. (For example: `a + b*5`)

Answer: _____

Check your answer in IDLE3.

3. The following variable assignments are made in Python:

```
>>> a = 4
>>> b = 'panda bears'
```

Write the code you need to get Python to output '4 panda bears' in the space below. Include only quotation marks, variable names, spaces, plus signs, and builtin Python functions in your answer.

Answer: _____

Check your answer in IDLE3.

Hint: `str(4) and "4"` are the same

4. In lecture, you saw some functions that can change strings. Now, let's practice! In IDLE3, assign a string to a variable. You can write anything you want, but **DON'T** copy the example:

```
>>> test = "I love MEET"
```

Using the `len()` function, write down the length of your string: _____

Not sure how to do this? Look at the Python Docs (or ask a TA/instructor) for help with syntax.

For each of the following functions, guess what it will do, then try it out in

IDLE3!

Function	**What does it do?**
`upper()`	
`lower()`	
`capitalize()`	
`swapcase()`	
`replace("o", "i")`	

Not sure how to do this? Big hint:

```
>>> test = "I love MEET"
>>> test.upper()
```

5. Open IDLE3 and create 3 variables:

```
>>> a = "MEET"
>>> b = "meet"
>>> c = "Meat"
```

Now, use `==` and `!=` to compare the variables. You can use the following table:

Comparison	**Result** (hint: should be a boolean)
`a == b`	
`a == c`	
`b == c`	
`a != b`	
`a != c`	

`b != c`	

Based on the results of your exploration, what do `==` and `!=` do?

Function	**What does it do?**
`==`	
`!=`	

Now, how can you use a function from Question #4 to make `a == b` a true statement?

Answer: _____

BONUS: Challenge Question

6. Look carefully at the string below and find the MEET value:
`my_string = "bananayellowthinkhatgreyBIGcalifornia314"`

Check with a TA if you got it right. Then, use string splicing to set the string variable `meet_value` equal to the value you found.

Answer: _____

(*Confused? Hint: what does the + sign mean for strings?*)

(*Still confused? Bigger hint: what does my_string[0:6] do?*)

Now that you know some cool string functions, try them out on different sentences!