Name: Date:



**<u>Aim:</u>** How can we determine the index of a substring in a string in Python?

#### **Do Now:**

- 1. Write your name on the index card, fold it in half and place it on your table so that I can see your name  $\stackrel{\square}{=}$
- 2. Write down the names of your top 3 favorite artists/athletes.

#### **Activity 1- Exploration**

- 1. Go to <a href="https://www.tinyurl.com/8tcuhdry">www.tinyurl.com/8tcuhdry</a> for the Padlet page.
- 2. Click on the "Activity 1- Exploration code" link and make a copy of the code by forking the file.
- 3. Follow the instructions and answer the questions below:
  - a. What happens when you run s\_find()? What do you think those numbers in the output represent?
  - b. What happens when you run s\_index()? What do you think those numbers in the output represent?
  - c. What is the purpose of the lines below?

```
a = string.find('good day')
if a!=-1:
  print("The string contains 'good day'")
else:
  print("The string does not contain 'good day'")
```

d. Fill in the banks in the table below to compare the two methods.  $\,$ 

# **String methods**

find()	index()		
Syntax: str.find(substr, start, end)	Syntax: str.index(substr, start, end)		
Similarities			
Parameters: substr: (Required) The substring whose has to be found. start: (Optional) The starting index position from where the searching should start in the string. Default is end: (Optional) The ending index position until the searching should happen. Default is of the string.			
Return value: an integer value indicating the of the occurrence of the specified substring.  • Both methods perform case-sensitive search.			
Differences			
Returns if substring isn't found.	Returns if substring isn't found.		
It is the method to use when you are not sure about the presence of a substring.	It is the method to use when you are not sure about the presence of a substring.		
It be used with a conditional statement to execute a statement if a substring is found or not.	It be used with a conditional statement to execute a statement if a substring is found or not.		
Data structures it can be applied to:	Data structures it can be applied to:		

Name: Date:



**<u>Aim:</u>** How can we determine the index of a substring in a string in Python?

#### **Activity 2 - Lab**

**Goal:** In this lab, you will find and print the index of substrings in a string. For the CHALLENGE task, you will use the index to print out messages.

Go to Padlet and click on the "Activity 2 - Lab code" link and make a copy of the code by forking the file.

#### Part 1 - Letter Hunt



1. Write a program that prints out the position of a letter in the alphabet. For example, if the user enters 'A', it will print 1. If the user enters 'Z', it will print 26. Consider setting up a variable as below:

alphabet = 'ABCDEFGHIJKLMNOPQRSTUVWXYZ'

2. **CHALLENGE(optional):** Modify your code to print out the message, "Invalid character" if the user enters a lower case letter or any other character that is not in the alphabet.



## Part 2 - Number One Fan

1. Create a list of your top 3 favorite artists/athletes. Write a program that prints out the position of the artist/athlete in your list. For example, given the list below, it will print 2 if the user enters 'Beyonce'.

fav\_artists = ["Ariana Grande", "Beyonce", "Ed Sheeran"]

2. **CHALLENGE(optional)**: Modify your code to print out a message with the name of the artist/athlete and their position. For example, if the user enters 'Beyonce', it will print out "Beyonce's ranking is 2" as shown below.

Enter the name of the artist. Make sure to write the name correctly: Beyonce Beyonce's ranking is: 2

### Functions/Concepts You Might Need for Part 1 and Part 2 😉

- input()
- conditionals
- casting with str()

	ew-Old Bethpage JFK High School uction to Computer Science/ Ms. Park ket	Date:	
1.	What is the output of the following code?		
	<pre>string = 'Have a good day! - Ms. Park' print(string.find('good'))</pre>		
2.	Which string method can we use to determine	ine the index of "coffee" for the following c	ode- find() or index()?
	fav_breakfast = ["coffee", "pancake", "apple"	נ <u>'</u>	
	ew-Old Bethpage JFK High School uction to Computer Science/ Ms. Park eket	Date:	
1.	What is the output of the following code?		
	<pre>string = 'Have a good day! - Ms. Park' print(string.find('good'))</pre>		
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	fav_breakfast = ["coffee", "pancake", "apple"	"]	
	ew-Old Bethpage JFK High School uction to Computer Science/ Ms. Park ket	Date:	
1.	What is the output of the following code?		
	<pre>string = 'Have a good day! - Ms. Park' print(string.find('good'))</pre>		

2. Which string method can we use to determine the index of "coffee" for the following code- find() or index()?

fav\_breakfast = ["coffee", "pancake", "apple"]