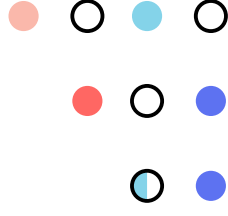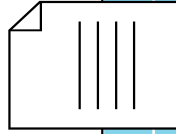March 17, 2022

@P0BJFKHS

String methods in Python

find() & index()

Ms. Park

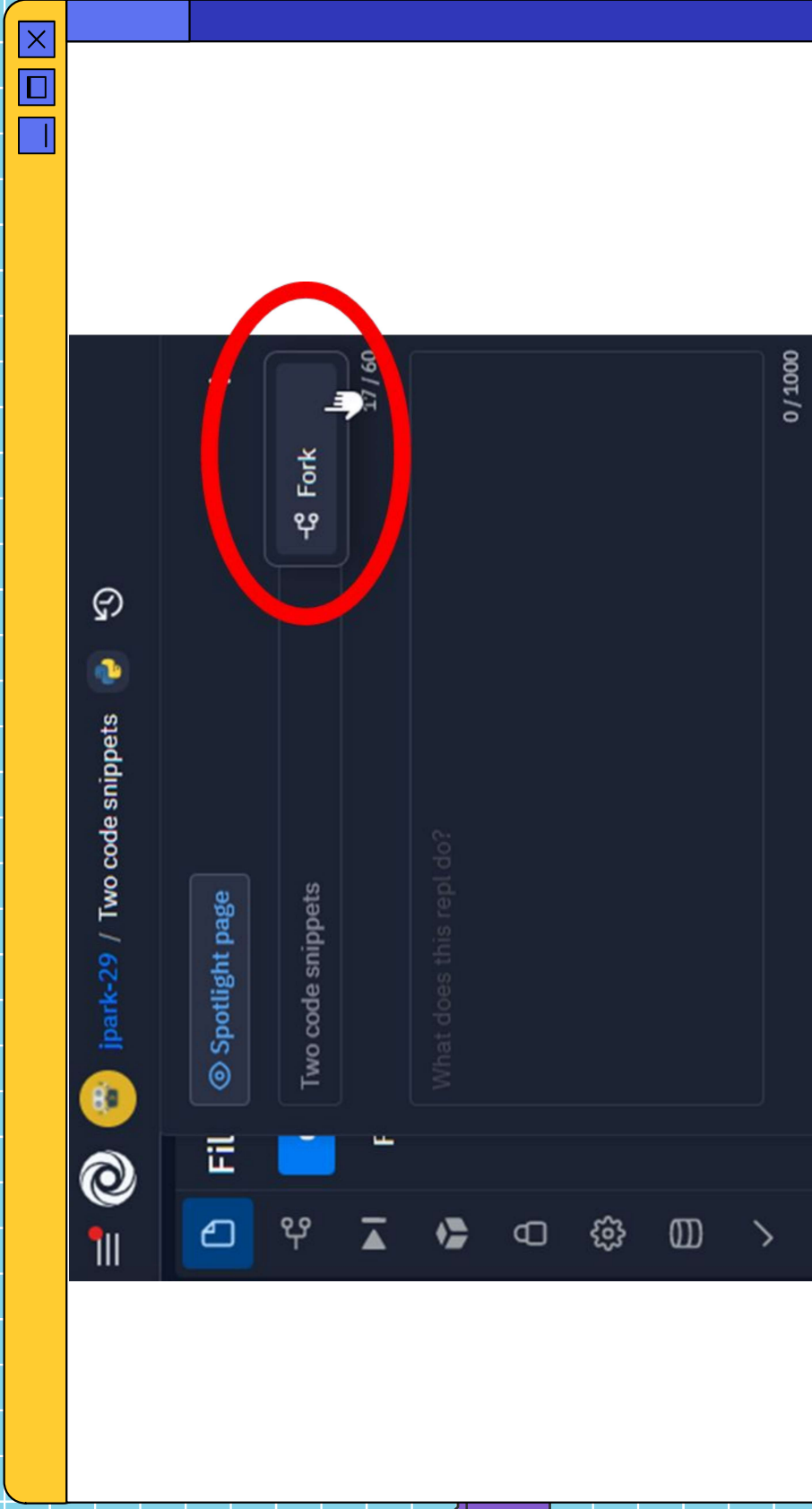**Aim: How can we determine the index of a substring in a string in Python?**

Do Now:

Write your name on the index card, fold it in half and place it on your table so that I can see your name 😛

Write down the names of your top 3 favorite artists/athletes.

Aim: How can we determine the index of a substring in a string in Python?

<u>Activity 1 – Exploration</u>

1. Go to www.tinyurl.com/8tcuhdry for the Padlet page.

2. Click on "Activity 1 - Exploration code" link and make a copy of the code by forking the file.

jpark-29 / Two code snippets

Spotlight page

Two code snippets

What does this repl do?

Fork

17 / 60

0 / 1000

Fil

F

Aim: How can we determine the index of a substring in a string in Python?

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'")
```

Aim: How can we determine the index of a substring in a string in Python?

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.

Aim: How can we determine the index of a substring in a string in Python?

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.

Aim: How can we determine the index of a substring in a string in Python?

Differences

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: _____ .

Aim: How can we determine the index of a substring in a string in Python?
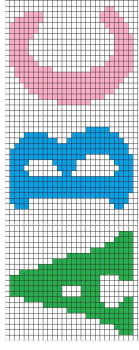
<u>Activity 2 - Lab</u>

<u>Goal:</u> 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 "Activity 2 - Lab code" link and make a copy of the code by forking the file.

Aim: How can we determine the index of a substring in a string in Python?

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.

Aim: How can we determine the index of a substring in a string in Python?

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

Aim: How can we determine the index of a substring in a string in Python?

EXIT TICKET

Thank you for having me
today! :)

—Ms. Park

@POBJFKHS