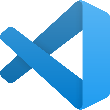
**Pandas - Continue**

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 A close up of a screen

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**Before You Start**

* The directory path shown in screenshots may be different from yours.
* Some steps might not be explained in the tutorial.  If you are not sure what to do:
  + Consult the resources listed below.
  + If you cannot solve the problem after a few tries, ask a TA for help.

**Learning Outcomes**

* Understand pandas object
* Learn the basic functionality

**Resources**

* Tutorialpoint
* Pandas User Guide: <https://pandas.pydata.org/pandas-docs/stable/user_guide/index.html>
* McIntire, G., Martin, B., & Washington, L. Pandas A Complete Introduction. Retrieved from <https://www.learndatasci.com/tutorials/python-pandas-tutorial-complete-introduction-for-beginners/>

**Basic Functionality**

1. We will explore some functionalities in pandas. First, create a new file named “**functionality.ipynb**”.
2. Creating a small data about companies that will be used in this file as the following.

*Run selected cell to see the result for every single cell.*

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As you can see here, we created:

* 3 columns: Value, Change, Sector.
* 5 rows with data and name index

**Viewing Data**

1. We can view data with some of the built-in functions.

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1. View a short statistic summary with **describe()**

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**Selecting data**

1. We can see specific data or filter out unwanted data from DataFrame with the following:

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1. Selecting data by position. Using indexing and slicing similar to Python’s List.

A screenshot of a video game

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**Operations**

1. We can apply mathematics’ operations such as adding, subtract, multiply, divide to the DataFrame like the following:

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**divmod()** is also provided here.

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**Descriptive statistics**

1. The following will perform descriptive statistics on DataFrame like sum(), mean(), std(), and so on.

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That’s the basic pandas, there is a lot more from pandas that you can do. Learn more here: <https://pandas.pydata.org/pandas-docs/stable/user_guide/index.html>

**Push your work to GitHub**

Run the following commands to push your work to the GitHub repository:

Open the terminal from the VSCode by hitting the control + ~ key and type the following command:

>>> git add .

>>> git commit -m “Submission for Module 4”

>>> git push origin YOUR\_BRANCH\_NAME

If you cannot remember your branch name, run the command “git status” to check.

**Create a pull request**

* Go to the remote repository in GitHub
* Create a pull request