

4.4.4 Commit Your Code

Congratulations! You got a lot done today. Before moving on, take a moment to commit your code to GitHub. Make sure you share your code with Maria so she can look over your work.

Before we can update the GitHub repository, we need to make sure our work is saved properly on our computers. Save `PyCitySchools.ipynb` to the `School_District_Analysis` folder. Make sure the `Resources` folder containing the CSV files is also in the `School_District_Analysis` folder.

How you commit changes to GitHub from the command line depends on whether you're using macOS or Windows. Follow the instructions below that correspond to your operating system.

macOS

1. Launch the command line.
2. Navigate to the `School_District_Analysis` folder on your computer.
Your command line should look like this:

```
<your_computer_name>:School_District_Analysis <your_home_folder>$
```

3. Type `git status` and press Enter. You should see something like this in your command line:

- The `PyCitySchools.ipynb` file
- The Resources folder
- The `jupyter_practice.ipynb` file
- The `student_practice.ipynb` file

For example:

```
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)

PyCitySchools.ipynb
    /Resources
    jupyter_practice.ipynb
    student_practice.ipynb

nothing added to commit but untracked files present (use "git add" to tr
```

4. Type `git add PyCitySchools.ipynb Resources/` and press Enter to add the CSV files and the `PyCitySchools.ipynb` file only. After you press Enter, you will see something like this:

```
On branch main
Your branch is up to date with 'origin/main'.

Your branch is up to date with 'origin/main'.
```

Changes to be committed:

(use "git reset HEAD <file>..." to unstage)

new file: PyCitySchools.ipynb

new file: Resources/school_complete.csv

new file: Resources/student_complete.csv

Untracked files:

(use "git add <file>..." to include in what will be committed)

jupyter_practice.ipynb

student_practice.ipynb

5. Type `git commit -m "Adding PyCitySchools.ipynb file and Resources folder."` and press Enter to commit the files to be added to the repository. The output should look similar to the following:

```
[main e3ee6a3] Adding PyCitySchools.ipynb file and Resources folder.  
3 files changed, 39437 insertions(+)  
create mode 100644 PyCitySchools.ipynb  
create mode 100644 Resources/school_complete.csv  
create mode 100644 Resources/student_complete.csv
```

6. Type `git push` and press Enter to add the file to your repository. The output should look like this:

```
Enumerating objects: 7, done.  
Counting objects: 100% (7/7), done.  
Delta compression using up to 8 threads  
Compressing objects: 100% (6/6), done.  
Writing objects: 100% (6/6), 466.25 KiB | 6.66 MiB/s, done.  
Total 6 (delta 0), reused 0 (delta 0)  
To https://github.com/<your_GitHub_account>/School_District_Analysis.git  
ab468df..e3ee6a3 main -> main
```

7. Refresh your GitHub page to see the changes to your repository.

Windows

1. Launch Git Bash.
2. Navigate to the School_District_Analysis folder on your computer.
Your command line should look like this:

```
<your_computer_name>@<your_home_folder> MINGW32  
~/Class/School_District_Analysis (main)  
$
```

3. Type `git status` and press Enter. You might see something like this in your command line:

1. The `PyCitySchools.ipynb` file
2. The Resources folder
3. The `jupyter_practice.ipynb` file
4. The `student_practice.ipynb` file

```
On branch main  
Your branch is up to date with 'origin/main'.  
  
Untracked files:  
  (use "git add <file>..." to include in what will be committed)  
  
PyCitySchools.ipynb  
  /Resources  
    jupyter_practice.ipynb  
    student_practice.ipynb  
  
nothing added to commit but untracked files present (use "git add" to track)
```

4. Type `git add PyCitySchools.ipynb Resources/` and press Enter to add the CSV files and the `PyCitySchools.ipynb` file only. After you press Enter, you will see something like the following:

```
On branch main
Your branch is up to date with 'origin/main'.

Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    new file:   PyCitySchools.ipynb
             new file:   Resources/school_complete.csv
             new file:   Resources/student_complete.csv

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    jupyter_practice.ipynb
    student_practice.ipynb
```

5. Type `git commit -m "Adding PyCitySchools.py file and Resources folder."` and press Enter to commit the files to be added to the repository. The output should look like this:

```
[main e3ee6a3] Adding PyCitySchools.py file and Resources folder.
3 files changed, 39437 insertions(+)
create mode 100644 PyCitySchools.ipynb
create mode 100644 Resources/school_complete.csv
create mode 100644 Resources/student_complete.csv
```

6. Type `git push` and press Enter to add the files and folder to your repository. The output should like the following:

```
Enumerating objects: 7, done.  
Counting objects: 100% (7/7), done.  
Delta compression using up to 8 threads  
Compressing objects: 100% (6/6), done.  
Writing objects: 100% (6/6), 466.25 KiB | 6.66 MiB/s, done.  
Total 6 (delta 0), reused 0 (delta 0)  
To https://github.com/<your_GitHub_account>/School_District_Analysis.git  
ab468df..e3ee6a3  main -> main
```

7. Refresh your GitHub page to see the changes to your repository.

Congratulations—you added the updated files to your GitHub repository!

NOTE

For more information about Python modules and packages, reading CSV files, and using the `head()` and `tail()` methods in Pandas, refer to the following documentation:

- [Importing Python modules and packages](https://www.pythonlikeyoumeanit.com/Module5_OddsAndEnds/Modules_and_Packages.html)
(https://www.pythonlikeyoumeanit.com/Module5_OddsAndEnds/Modules_and_Packages.html)
- [Reading a CSV file into a Pandas DataFrame](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.read_csv.html)
(https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.read_csv.html)
- [Using .head\(\) on a DataFrame](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.head.html) (<https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.head.html>)
- [Using .tail\(\) on a DataFrame](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.tail.html) (<https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.tail.html>)