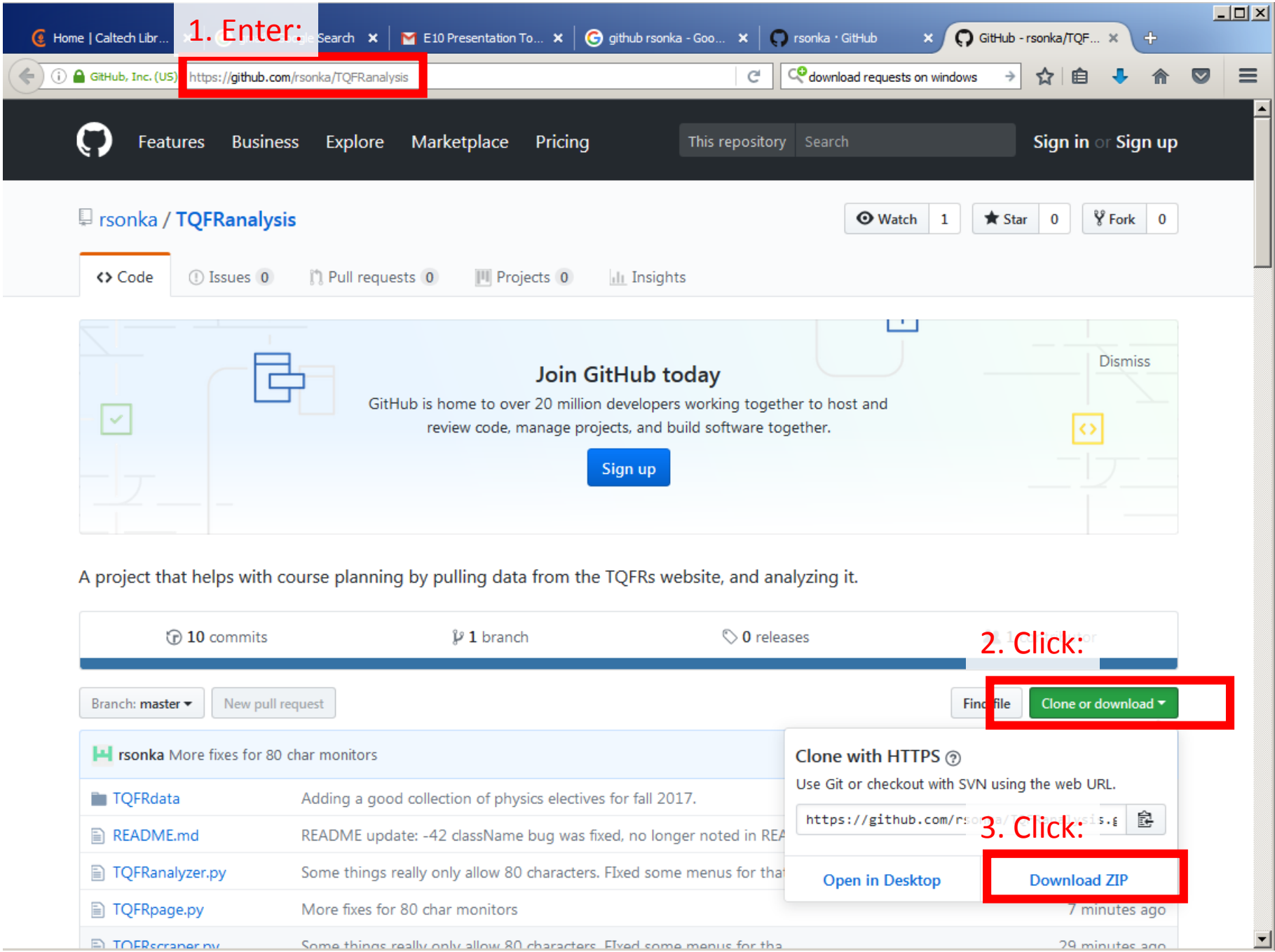
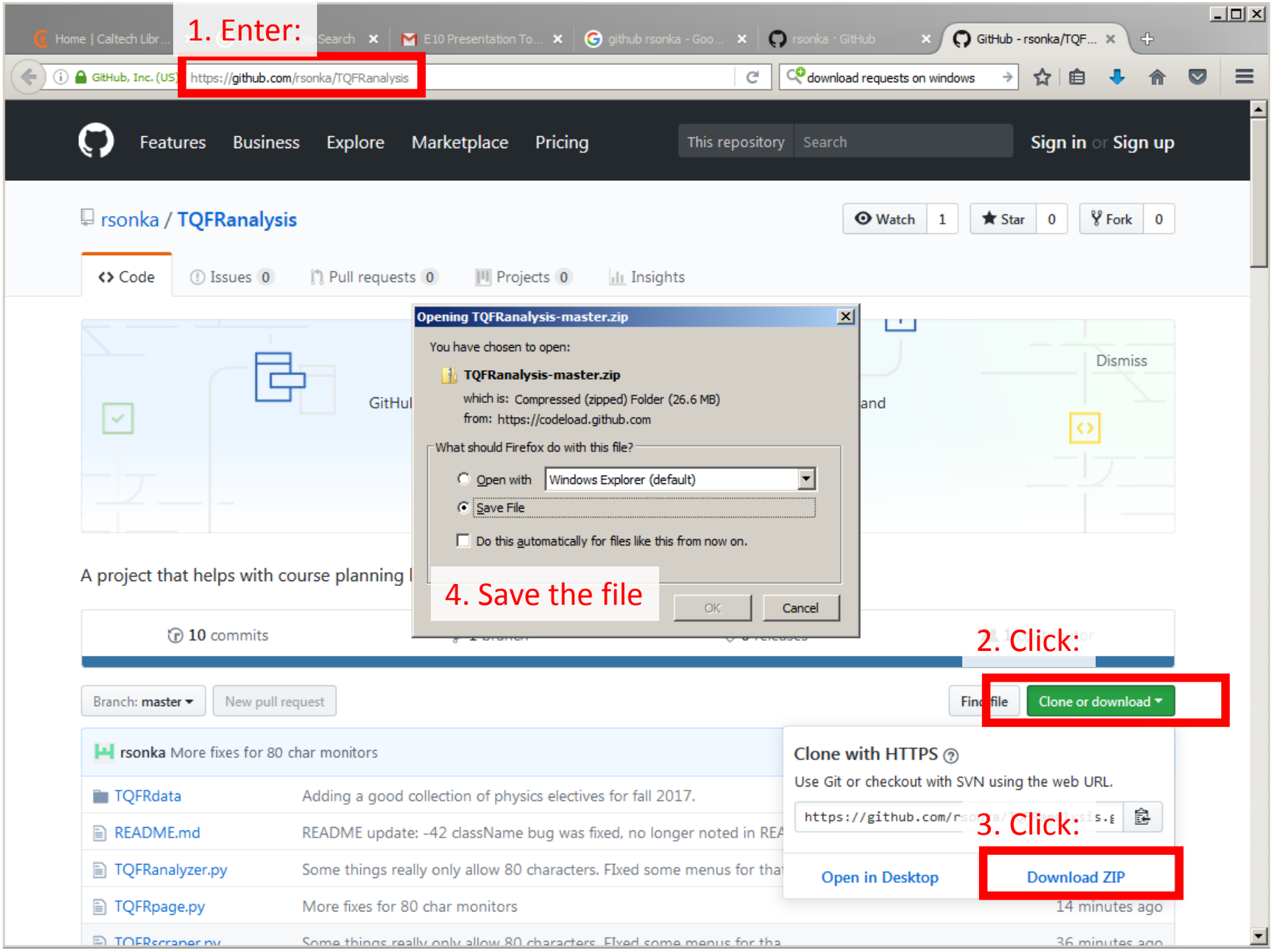

1. Enter:
https://github.com/rsonka/TQFRanalysis
Features
Business
Explore
Marketplace
Pricing
This repository
Search
Sign in or Sign up
rsonka / TQFRanalysis
Watch 1
Star 0
Fork 0
Code
Issues 0
Pull requests 0
Projects 0
Insights
Join GitHub today
GitHub is home to over 20 million developers working together to host and review code, manage projects, and build software together.
Sign up
Dismiss
A project that helps with course planning by pulling data from the TQFRs website, and analyzing it.
10 commits
1 branch
0 releases
2. Click:
Branch: master
New pull request
Clone or download
rsonka More fixes for 80 char monitors
TQFRdata
Adding a good collection of physics electives for fall 2017.
README.md
README update: -42 className bug was fixed, no longer noted in REA
TQFRanalyzer.py
Some things really only allow 80 characters. FIxed some menus for tha
TQFRpage.py
More fixes for 80 char monitors
7 minutes ago
Clone with HTTPS
Use Git or checkout with SVN using the web URL.
3. Click:
Open in Desktop
Download ZIP


1. Enter:
https://github.com/rsonka/TQFRanalysis
Features
Business
Explore
Marketplace
Pricing
This repository
Search
Sign in or Sign up
rsonka / TQFRanalysis
Watch 1
Star 0
Fork 0
Code
Issues 0
Pull requests 0
Projects 0
Insights
Opening TQFRanalysis-master.zip
You have chosen to open:
TQFRanalysis-master.zip
which is: Compressed (zipped) Folder (26.6 MB)
from: https://codeload.github.com
What should Firefox do with this file?
Open with
Windows Explorer (default)
Save File
Do this automatically for files like this from now on.
4. Save the file
OK
Cancel
Dismiss
A project that helps with course planning
10 commits
2. Click:
Branch: master
New pull request
Clone or download
rsonka More fixes for 80 char monitors
Clone with HTTPS
Use Git or checkout with SVN using the web URL.
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TQFRdata
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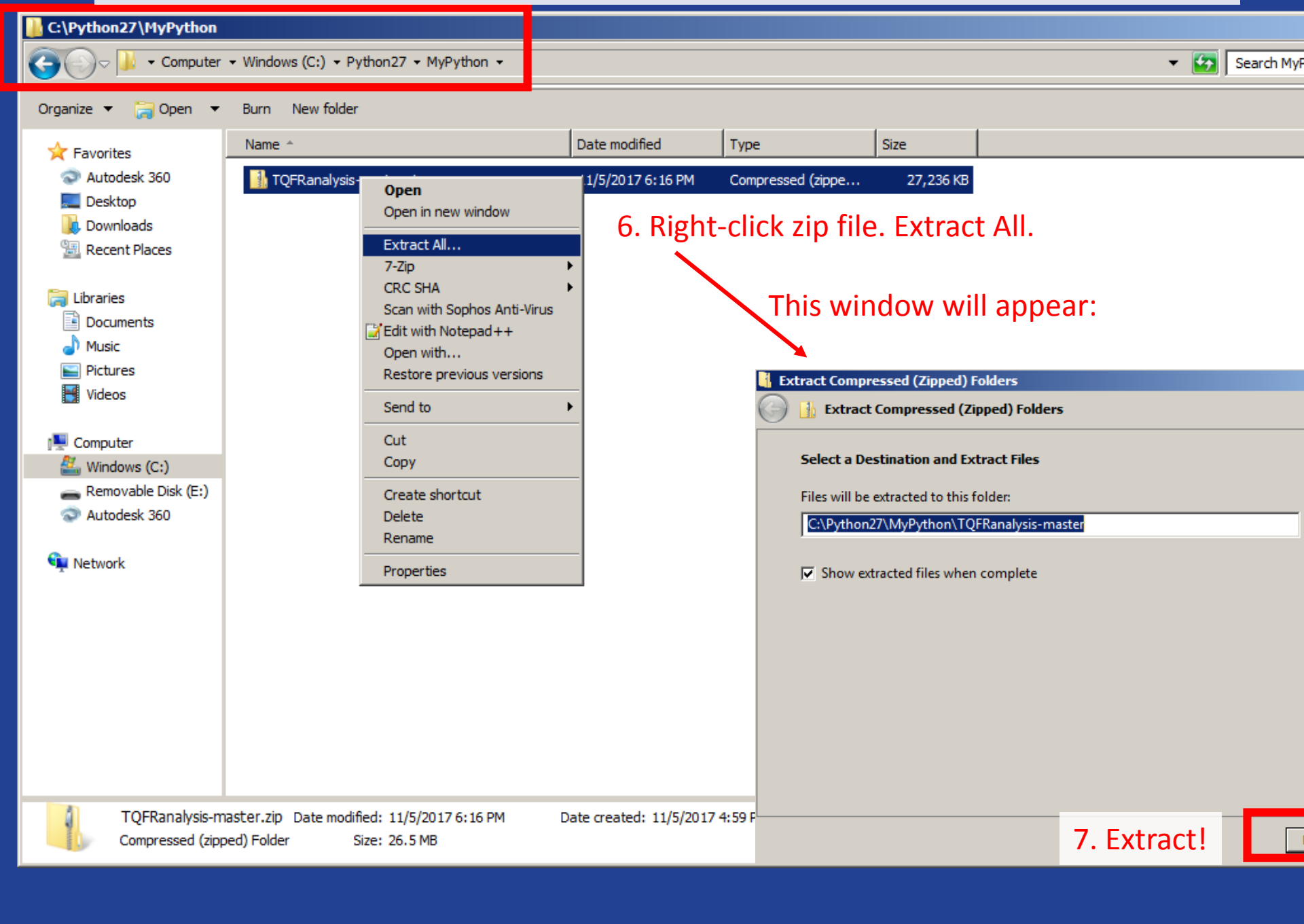
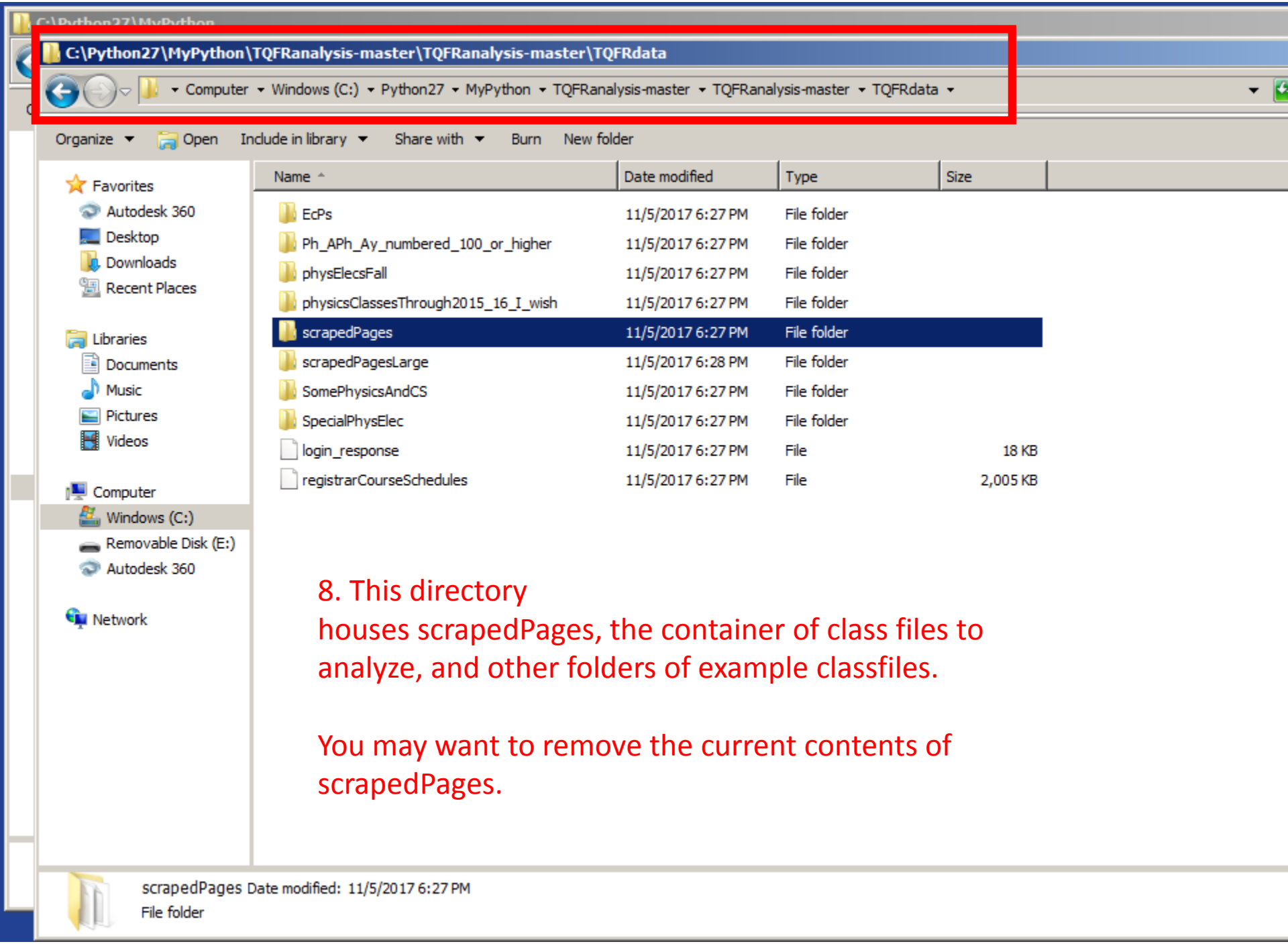
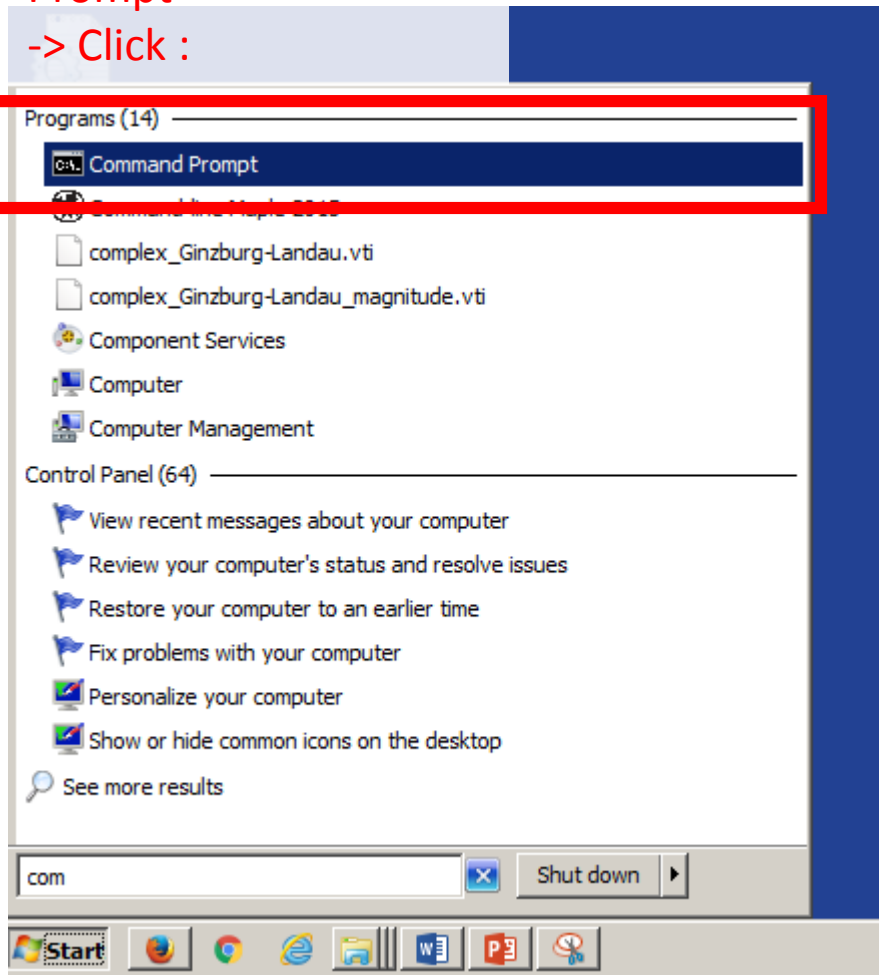
TQFRanalyzer.py
Some things really only allow 80 characters. FIxed some menus for tha
TQFRpage.py
More fixes for 80 char monitors
14 minutes ago
36 minutes ago

5. I suggest creating the MyPython directory and saving to C:\Python27\MyPython.

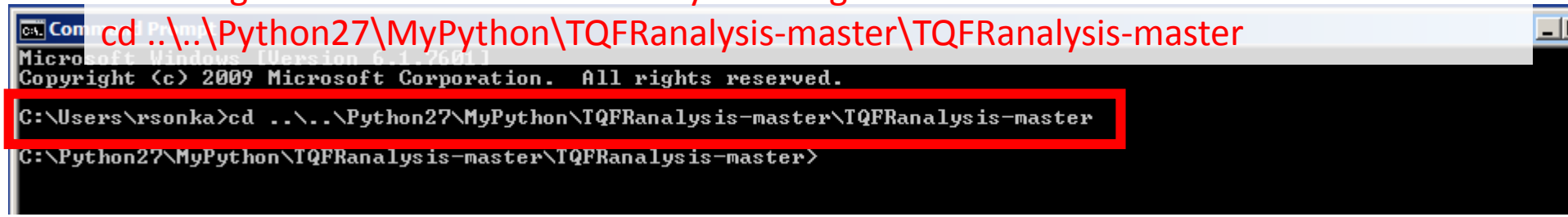



C:\Python27\MyPython\TQFRanalysis-master\TQFRanalysis-master\TQFRdata
Computer ▸ Windows (C:) ▸ Python27 ▸ MyPython ▸ TQFRanalysis-master ▸ TQFRanalysis-master ▸ TQFRdata
Organize
Open
Include in library
Share with
Burn
New folder
Favorites
Autodesk 360
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Computer
Windows (C:)
Removable Disk (E:)
Autodesk 360
Network
Name
Date modified
Type
Size
EcPs 11/5/2017 6:27 PM File folder
Ph_APh_Ay_numbered_100_or_higher 11/5/2017 6:27 PM File folder
physElecsFall 11/5/2017 6:27 PM File folder
physicsClassesThrough2015_16_I_wish 11/5/2017 6:27 PM File folder
scrapedPages 11/5/2017 6:27 PM File folder
scrapedPagesLarge 11/5/2017 6:28 PM File folder
SomePhysicsAndCS 11/5/2017 6:27 PM File folder
SpecialPhysElec 11/5/2017 6:27 PM File folder
login_response 11/5/2017 6:27 PM File 18 KB
registrarCourseSchedules 11/5/2017 6:27 PM File 2,005 KB
8. This directory
houses scrapedPages, the container of class files to analyze, and other folders of example classfiles.
You may want to remove the current contents of scrapedPages.
scrapedPages Date modified: 11/5/2017 6:27 PM
File folder

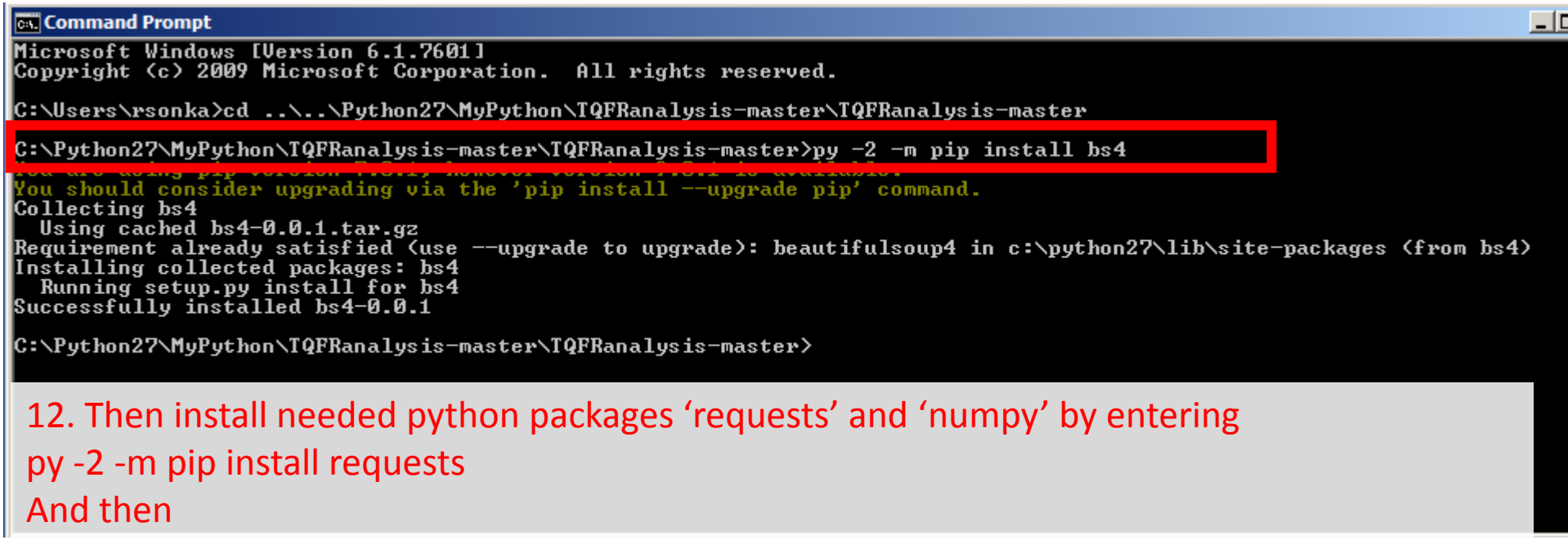
9. Windows Start menu
-> type “Command Prompt”
-> Click :



10. Navigate to location of our files by entering
cd ..\..\Python27\MyPython\TQFRanalysis-master\TQFRanalysis-master

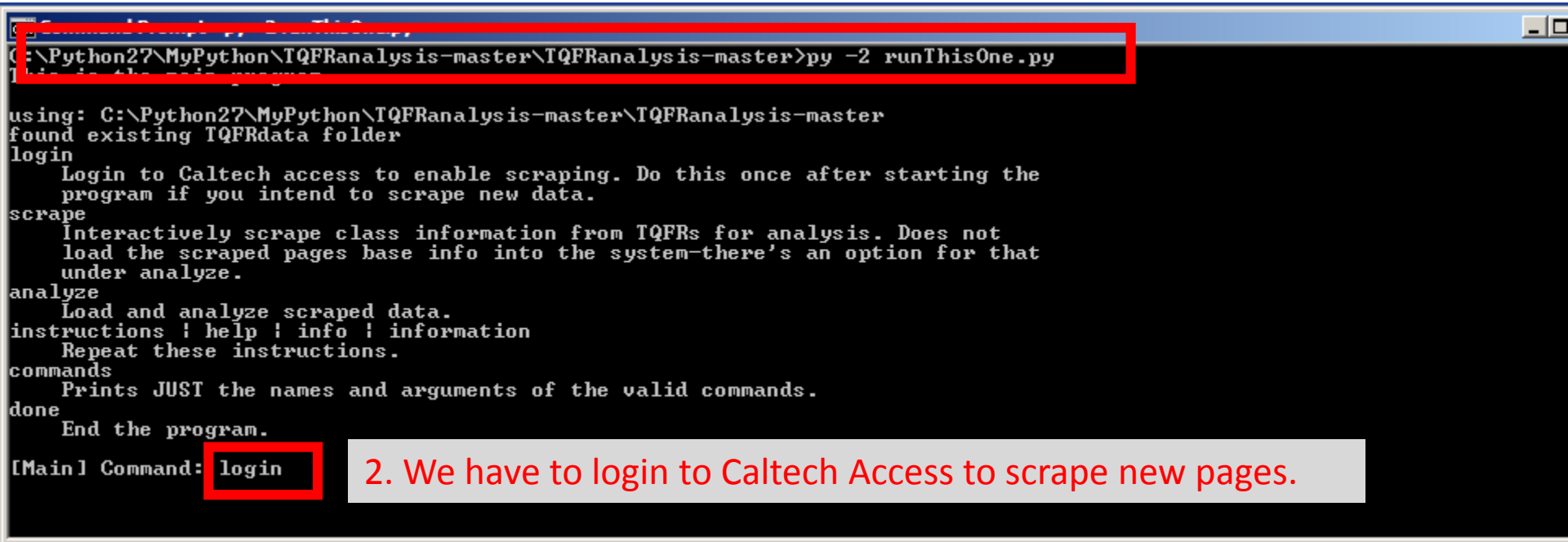


11. Install needed python package ‘bs4’ by entering
py -2 -m pip install bs4

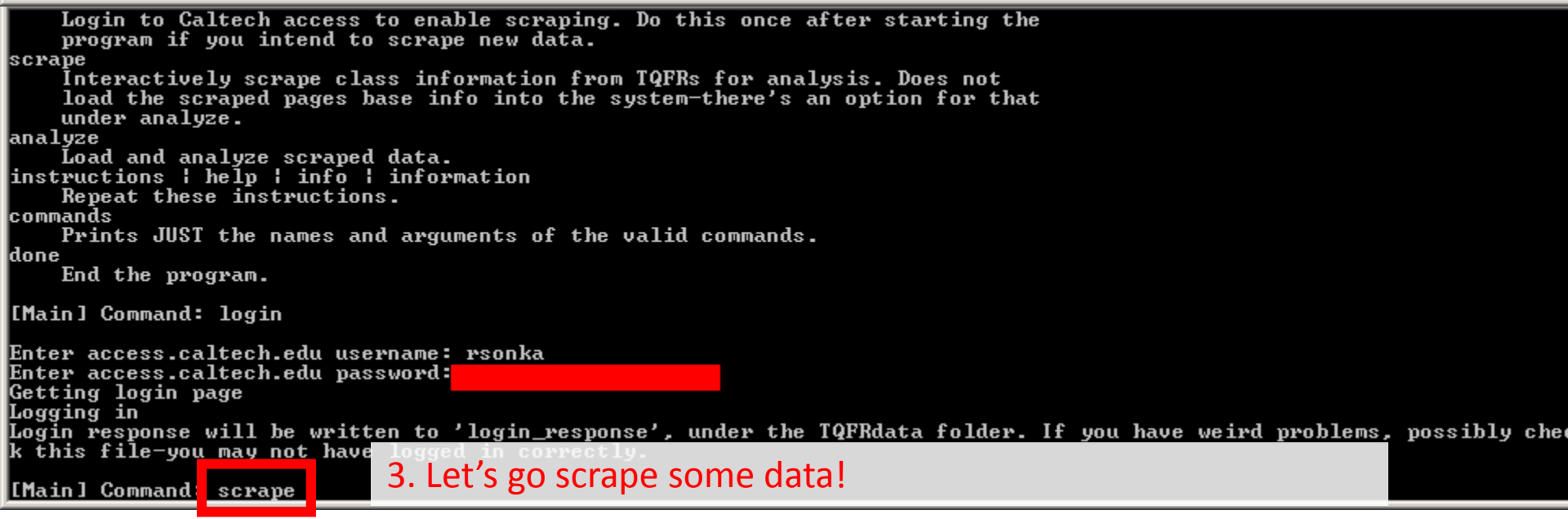


12. Then install needed python packages ‘requests’ and ‘numpy’ by entering
py -2 -m pip install requests
And then
py -2 -m pip install numpy
Your installation is now complete! I was able to log out and back in and it was still there, so you should only have to do this once.

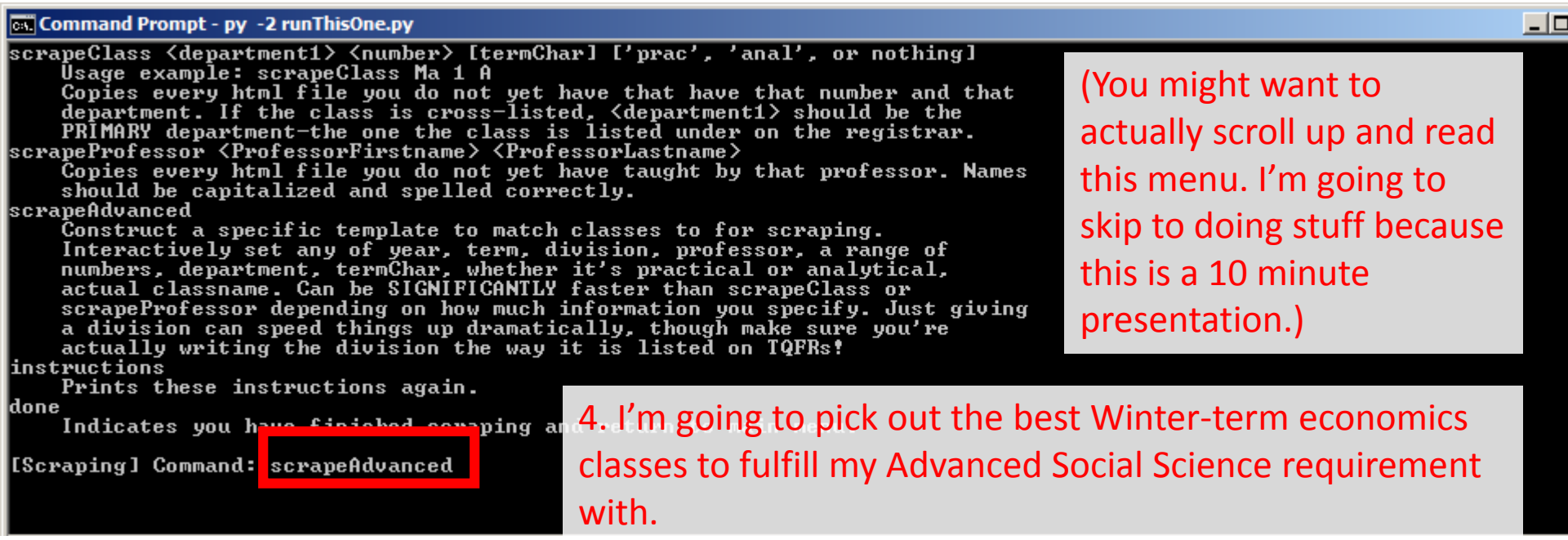
1. Now we can run our program. Enter
py -2 runThisOne.py



2. We have to login to Caltech Access to scrape new pages.

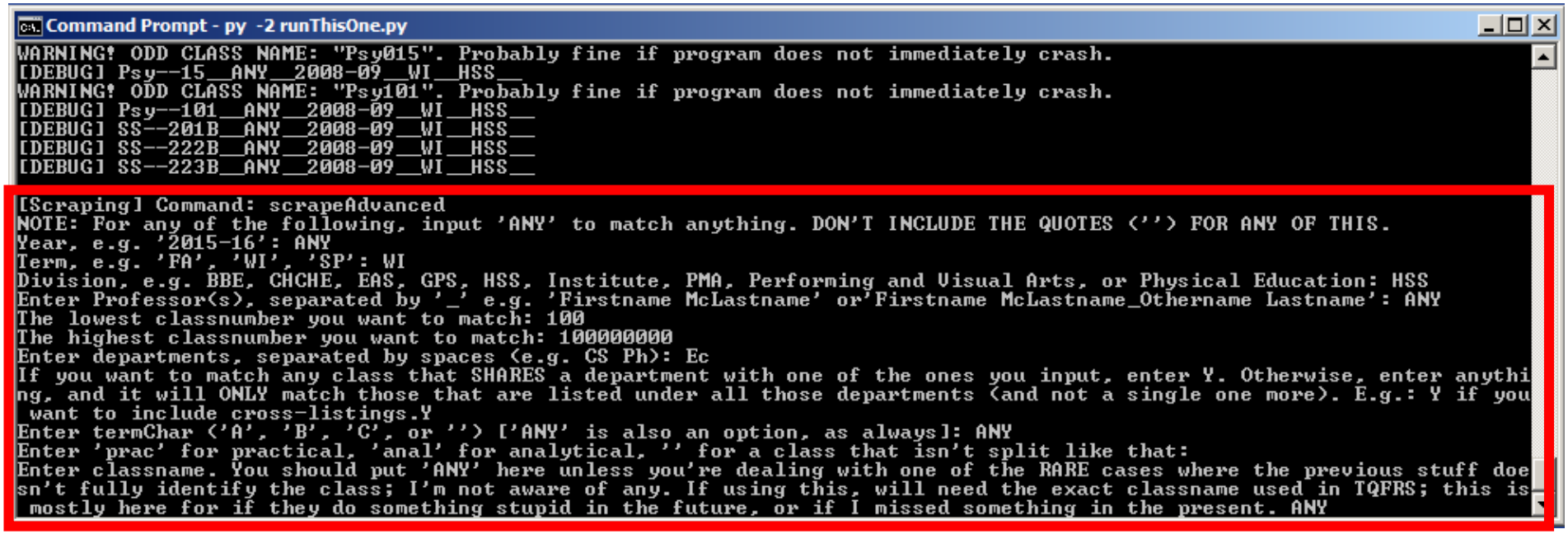


3. Let's go scrape some data!



(You might want to actually scroll up and read this menu. I'm going to skip to doing stuff because this is a 10 minute presentation.)

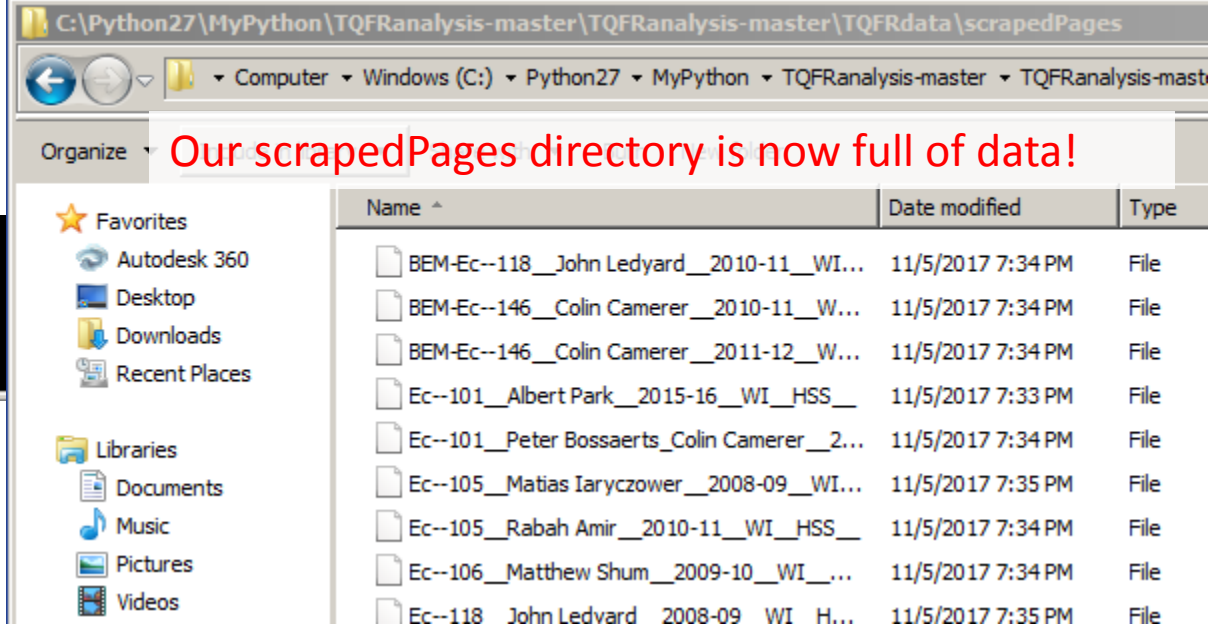
4. I'm going to pick out the best Winter-term economics classes to fulfill my Advanced Social Science requirement with.



The program then downloads TQFR reports for every winter Economics class #100 or above.

```
[DEBUG] SS--201B__ANY__2008-09__WI__HSS__
[DEBUG] SS--222B__ANY__2008-09__WI__HSS__
[DEBUG] SS--223B__ANY__2008-09__WI__HSS__

[Scraping] Command: done

[Main] Command: analyze
```

5. Time to examine our options.



Command Prompt - py -2 runThisOne.py

```
analyzeClagg <className, exactly as listed on one of the clagg displays>
    Does what analyzeClass does, except by picking an already constructed clagg
    from the list. Unlike analyzeClass, analyzeClagg will affect which pages are
    included in the stats displayed for the clagg in
    claggStats/sortClaggs/importantNumbers etc. Try looking at/excluding the
    individual pages with this option if you see weird things in the claggStats,
    or just to look at a class in more detail.
importantNumbers
    Prints the numbers I look at first for hums for all classAggs constructed.
constructProfessorAggregates
    # TODO!!!!:
    Assigns every loaded page to a ProfessorAggregate, if it is not already
    assigned. Necessary if you want to search for a professor by their aggregate
    data qualities (e.g., 'overall teaching' score).
instructions | help | info | information
    Prints these instructions again.
commands
    Prints JUST the names and arguments of the valid commands.
done
    Indicates you have finished analyzing and return to main menu.

Typical usage:
fullLoad -> constructClaggs -> claggStats or sortClaggs or analyzeClagg

[Analyzer] Command: fullLoad
```

(Again, you might want to actually scroll up and read this menu.)

```
PS-Ec--172__Omer Tamuz__2016-17__WI__HSS__
PS-Ec--173__Christopher Chambers__2009-10__WI__HSS__

[Analyzer] Command: constructClaggs
```

6. A couple setup commands to load our data and calculate the stats for the classes.

7. If you're like me, you probably don't really care about economics. Thus, your first instinct is to ask "which class is the least work?"

```
Command Prompt - py -2 runThisOne.py

[Analyzer] Command: sortClaggs
Legit statNames:
['expectedGrade', 'homeworkCompletion', 'hoursOutsideClass', 'lectureAttendance', 'passFail', 'co
untPerception']
Enter statname to sort by exactly as above: hoursOutsideClass
['expectedGrade', 'homeworkCompletion', 'hoursOutsideClass', 'lectureAttendance', 'passFail', 'co
untPerception']
|className   |hoursOutsideClass|
|Ec 140      |2.75             |
|Ec 121B     |3.24             |
|BEM/Ec 146  |3.31             |
|Ec 101      |3.71             |
|Ec/SS 124   |4.47             |
|BEM/Ec 118  |4.7              |
|Ec 118      |5.0              |
|Ec/Psy 109B|5.0              |
|Ec/SS 129   |5.0              |
|PS/Ec 173   |5.0              |
|Ec 105      |6.2              |
|PS/Ec 172   |6.48             |
|Ec 106      |6.5              |

[Analyzer] Command:
```

This list takes about 1.5 numbingly boring hours to compile by hand due to how TQFR report is laid out. I guarantee you can install TQFRscraper on an SFL computer and get this list in way less than 1.5 hours.

Cross-reference with registrar list of classes available next term (http://schedules.caltech.edu/WI2017-18.html) … 121B, 124, and 172 are offered next term, plus the completely-new or never-surveyed classes 101, 149, and 181.

So Ec 121B is our top contender, followed by Ec/SS 124. We don't really want to take the underunited PS/Ec 172.

8. Let's quickly check overall class stats to make sure we're not missing anything nasty, like an arbitrary grading scheme or horrific content quality.

```
[Analyzer] Command: claggStats
Legit statNames:
['expectedGrade', 'homeworkCompletion', 'hoursOutsideClass', 'lectureAttendance', 'passFail', 'contentQuali
Now prompting for stats. Enter statNames EXACTLY as above, or enter 'all' to include all of them.
Otherwise, enter 'done' when finished, 'undo' to remove last statName entered.
StatName, all, done, or undo: all
My stats: ['expectedGrade', 'homeworkCompletion', 'hoursOutsideClass', 'lectureAttendance', 'passFail', 'co
|className   |expectedGrade|homeworkCompletion|hoursOutsideClass|lectureAttendance|passFail|contentQuality|
|Ec 140      |4.0          |1.0               |2.75             |0.88             |1.0     |4.5           |
|Ec 121B     |3.82         |1.0               |3.24             |0.83             |-42     |3.31          |
|BEM/Ec 146  |3.86         |1.0               |3.31             |0.9              |1.0     |3.88          |
|Ec 101      |4.0          |1.0               |3.71             |0.97             |1.0     |4.71          |
|Ec/SS 124   |3.75         |0.99              |4.47             |0.66             |1.0     |4.0           |
|BEM/Ec 118  |3.0          |0.98              |4.7              |0.76             |1.0     |3.6           |
|Ec 118      |-42          |0.97              |5.0              |0.65             |1.0     |3.67          |
|Ec/Psy 109B |4.0          |1.0               |5.0              |1.0              |-42     |5.0           |
|Ec/SS 129   |3.67         |0.91              |5.0              |0.84             |1.0     |4.5           |
|PS/Ec 173   |4.0          |0.97              |5.0              |0.97             |1.0     |4.0           |
|Ec 105      |3.64         |0.96              |6.2              |0.8              |0.75    |3.6           |
|PS/Ec 172   |3.37         |0.98              |6.48             |0.56             |1.0     |3.88          |
|Ec 106      |3.5          |1.0               |6.5              |0.95             |-42     |4.0           |

[Analyzer] Command: analyzeClagg Ec/SS 124
```

9. Hmm, Ec/SS 124 gets a much higher contentQuality rating. Is it enough to justify the extra hour of work per week? Let's look at the class's consolidated TQFRdata in depth.

% Homework Completed:	0.99 +/- 0.03	[1.0, 1.0, 1.0]	17
Course Content Quality [0 (bad) to 5 (good)]:	3.98 +/- 0.86	[3.5, 4.0, 5.0]	47

PROFESSOR DATA: Robert Sherman

NOTE: if responders for individual item < responders for whole (under Percent Response), remainder selected

Statistical Quantity:	Average +/- stdev	Quartiles	Responde
Percent Response:	29.0		32
---Overall Ratings---			
The instructor's overall teaching	4.18 +/- 0.91	[4.0, 4.0, 5.0]	44
---Organization/Clarity---			
Set out and met clear objectives announced for the course	4.11 +/- 0.88	[3.0, 4.0, 5.0]	44
Displayed thorough knowledge of course material	4.66 +/- 0.71	[5.0, 5.0, 5.0]	44
Explained concepts clearly	4.18 +/- 0.83	[3.0, 4.0, 5.0]	44
Distinguished between more important and less important topics	3.98 +/- 0.89	[3.0, 4.0, 5.0]	44
Presented material at an appropriate pace	4.11 +/- 0.8	[3.0, 4.0, 5.0]	44
---Ability to Engage and Challenge Students Intellectually---			
Emphasized conceptual understanding and/or critical thinking	4.11 +/- 0.71	[4.0, 4.0, 5.0]	44
Related course topics to one another	4.05 +/- 0.93	[3.0, 4.0, 5.0]	44
---Interaction with Students---			
Demonstrated concern about whether students were learning	4.39 +/- 0.71	[4.0, 5.0, 5.0]	44
Inspired and motivated student interest in the course content	4.11 +/- 1.09	[4.0, 4.0, 5.0]	44
Was available for consultation outside of class	4.49 +/- 0.74	[4.0, 5.0, 5.0]	41
---Course Organization, Content, and Evaluation---			
Selected course content that was valuable and worth learning	4.18 +/- 0.83	[4.0, 4.0, 5.0]	44
Organized course topics in a coherent fashion	3.98 +/- 0.89	[3.0, 4.0, 5.0]	44
Chose assignments that solidified understanding	4.18 +/- 0.91	[3.0, 5.0, 5.0]	44
Explained clearly how students would be evaluated	4.59 +/- 0.61	[4.0, 5.0, 5.0]	44
Designed and used fair grading procedures	4.59 +/- 0.61	[4.0, 5.0, 5.0]	44
Gave tests and quizzes that accurately reflected material taught	4.53 +/- 0.66	[4.0, 5.0, 5.0]	32

Comments:

-----BELOW FROM CLASS: Ec-SS--124__Robert Sherman__2012-13__WI__HSS__ Introduction to Empirical Process Met

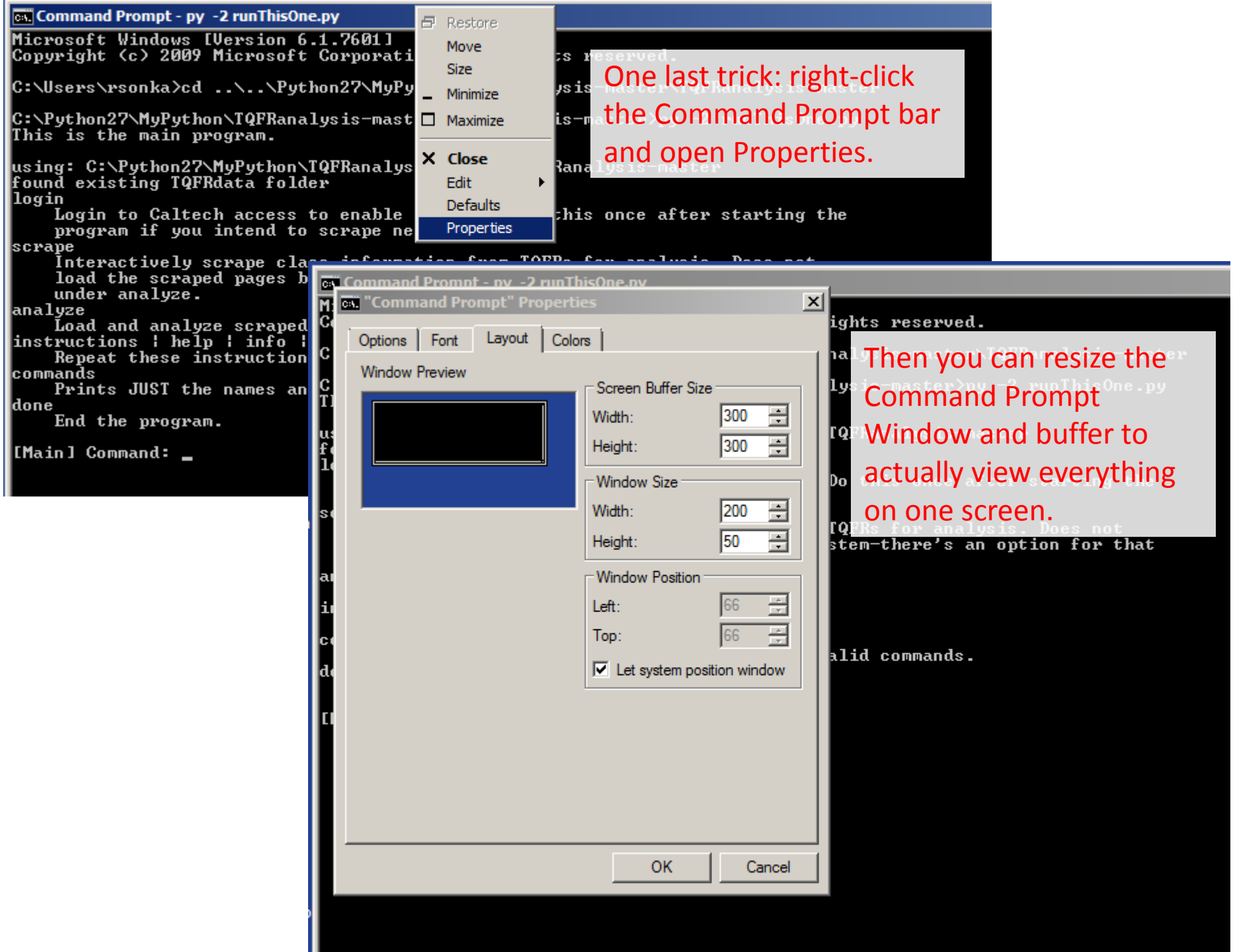
No comments were entered for this subject.

-----BELOW FROM CLASS: Ec-SS--124__Robert Sherman__2014-15__WI__HSS__ Indentification Problems in the Socia

This is a fairly easy course. The content is somewhat difficult to get excited about, as bounds analyses almost always end with the conclusion that you can't say anything about the quantity of interest. Having said that, this is extremely important to learn! Scientists need to be more aware of the assumptions that they make in performing data analysis, and going to the trouble of analyzing data with a variety of explicitly-stated assumptions, both on the homework and on the final project, serves this purpose well. I would be in favor of making this a generally required course (for undergraduates, graduate students, faculty...).

This class is a good follow-up to Ec 122 (econometrics), but can be done without 122 as well. The textbook is necessary as homeworks and notes were based on it, but it was super useful to have. The material, just like 122, was interesting to me as an ACM major and should be a good class to fulfill HSS requirements for anyone looking for a SS class without much writing. Also, Prof. Sherman cares a ton about the material and his students which is a definite plus.

```
¦The course is united appropriately and if you start the sets early enough there
is usually no issue. I would recommend that students be comfortable with
R/Python/Mathematica etc before taking this class.

¦Textbook necessary for homework3 sets and either a final or final project.

                                    ¦
¦-----BELOW FROM CLASS: Ec-SS--124__Robert Sherman__2016-17__WI__HSS__ Identification Problems in the

                                    ¦
¦Interesting course with a light workload. Three sets, a project, and a final.
Weeks that have an assignment are appropriately united, weeks that don't aren't.
Good class if you take about this sort of thing.

¦This class is not a lot of work. It's pretty boring at times, but the concepts
are not too challenging if you pay attention in class or read the book. There
are 3 homework assignments, a project, and a final.

COMMANDS: ========
selectIncluded
          Select which of the aggregate's files should be included in the analysis.
calculate
          Calculates and displays data, as calculated from all files in current included list.
displayComments <Y or N>
          Sets whether to display comments or not.
instructions
          Prints these instructions again.
done
          Return to main analyzer menu.

[Aggregate] Command: selectIncluded
¦# ¦In?¦Identifier                                ¦
¦--¦-  ¦---------                                 ¦
¦0 ¦Y  ¦Ec-SS--124__Robert Sherman__2012-13__WI__HSS__¦
¦1 ¦Y  ¦Ec-SS--124__Robert Sherman__2014-15__WI__HSS__¦
¦2 ¦Y  ¦Ec-SS--124__Robert Sherman__2015-16__WI__HSS__¦
¦3 ¦Y  ¦Ec-SS--124__Robert Sherman__2016-17__WI__HSS__¦
Enter which numbers to include, separated by spaces: 0 1 2 3

New included:
¦# ¦In?¦Identifier                                ¦
¦--¦-  ¦---------                                 ¦
¦0 ¦Y  ¦Ec-SS--124__Robert Sherman__2012-13__WI__HSS__¦
¦1 ¦Y  ¦Ec-SS--124__Robert Sherman__2014-15__WI__HSS__¦
¦2 ¦Y  ¦Ec-SS--124__Robert Sherman__2015-16__WI__HSS__¦
¦3 ¦Y  ¦Ec-SS--124__Robert Sherman__2016-17__WI__HSS__¦

[Aggregate] Command: calculate
```


Command Prompt - py -2 runThisOne.py
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporati
C:\Users\rsonka>cd ..\..\Python27\MyPy
C:\Python27\MyPython\TQFRanalysis-mast
This is the main program.
using: C:\Python27\MyPython\TQFRanalys
found existing TQFRdata folder
login
Login to Caltech access to enable
program if you intend to scrape ne
scrape
Interactively scrape clas
load the scraped pages b
under analyze.
analyze
Load and analyze scraped
instructions ! help ! info !
Repeat these instruction
commands
Prints JUST the names an
done
End the program.
[Main] Command:
Restore
Move
Size
Minimize
Maximize
Close
Edit
Defaults
Properties
this once after starting the
One last trick: right-click the Command Prompt bar and open Properties.
"Command Prompt" Properties
Options
Font
Layout
Colors
Window Preview
Screen Buffer Size
Width: 300
Height: 300
Window Size
Width: 200
Height: 50
Window Position
Left: 66
Top: 66
Let system position window
OK
Cancel
Then you can resize the Command Prompt Window and buffer to actually view everything on one screen.
alid commands.