**[Homework and Projects](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950144_1)**

[Homework and Projects](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950141_1)

Programming Projects are end of chapter exercises that demonstrate your understanding and ability to apply the chapter concepts to a given scenario. If you haven't done so already, you should read chapter 12 "Natural Language Processing" on page 477 of your textbook.

NOTE: When completing projects in Python for submission in Blackboard, be sure to name the exercise as instructed in the assignment details in this folder.

**Project Assignment Exercise for Chapter 12:**

M5T1

M5T2

M5T3

**Module Five HW and Pro assignments are EXTRA CREDIT (optional).**

M5HW1\_Web Scraping

M5Pro\_ Sentiment Analysis

[**M5T1**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_6148525_1&course_id=_35059_1&group_id=&mode=view)

M5T1 - Setting up NLP Tools

For this assignment you should complete sections 12.2.1 - 12.2.6. This includes the sample code and Self Checks.

Doing this confirms that you have a working TextBlob NLP library installed (needed for future work in this chapter).

**Setup info:**

This is exactly as much a pain as any other virtual environment setup -- you may wish to download the ZIP of the environment instead. (TBA)

Modified commands:

it's now

**pip install textblob**

from inside your virtual environment.

Update (11/10): A video is now available: <https://youtu.be/ut2IGK6wntc>

If you need a virtual environment (doesn't have corpora installed, though), here's a copy of mine:  
 [ch12-textblob.zip](https://faytechcc.blackboard.com/bbcswebdav/pid-6148525-dt-content-rid-56161996_1/xid-56161996_1)

**Submitting:**

Please turn in a zip of your code (which you can generate in ipython with **%save filename 1-37** (or however many lines you have), as well as a screenshot (just of the last few lines being run is fine.)

[**M5T2**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_6158399_1&course_id=_35059_1&group_id=&mode=view)

M5T2 - Recursion

In this short side trek we'll be looking at Chapter 11, 11.1 - 11.5.

You can submit the code as listed directly in that section, or follow along with the way we did it in class. (If you do follow the video, be sure to stop at 32:00 as the extra things I tried didn't really pan out. 32:00 gets to the end of the info from the book.)

<https://youtu.be/lthdhFK6I6c>

[**M5T3**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_6159297_1&course_id=_35059_1&group_id=&mode=view)

M5T3 - Intro to Beautiful Soup

While the homework assignments that use webscraping have been made bonus (optional) assignments, we'd still like to cover the basics of BeautifulSoup library use.

Complete parts 1 and 2 of <https://pythonprogramming.net/introduction-scraping-parsing-beautiful-soup-tutorial/> and submit the code below. (You don't need to do the XML or JavaScript sections, just pages 1 and 2.)

Video version (no sound): <https://youtu.be/yOos0WYSSW0>

As demonstrated in the vid, we created a virtualenv using conda this time. (This will work fine on your home PC but may get reset at school.)

Our command in the anaconda prompt:

**conda create -n bs\_env beautifulsoup4 lxml**

then

**conda activate bs\_env**

then

**conda run spyder**

(If that doesn't work for you, you can simply conda install the beautifulsoup4 and lxml modules without using a venv.)

**M5HW\_Web Scraping ( assignment Instructions)**

[M5HW\_Web Scraping ( assignment Instructions)](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950144_1)

Open the link below to view for M6HW Web Scraping assignment instructions

[- Alternative Formats](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950144_1)  [M6HW\_ Assignment Details.docx](https://faytechcc.blackboard.com/bbcswebdav/pid-5950147-dt-content-rid-54266720_1/xid-54266720_1) [M6HW\_ Assignment Details.docx - Alternative Formats](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950144_1) [- Alternative Formats](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950144_1)

(opens in new window)

[**M5HW\_WebScraping**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_5950148_1&course_id=_35059_1&group_id=&mode=view)

**Module Five HW and Pro assignments are EXTRA CREDIT (optional). If you wish to submit them for extra credit, please do so by 12/6.**

Download instructions from post above ( **M5HW Web Scraping** (**Assignment Instructions)**)

**Submit** your finished code solution file(s) through this assignment link by the posted deadline

**M5Pro Sentiment Analysis ( assignment Instructions)**

[M5Pro Sentiment Analysis ( assignment Instructions)](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950144_1)

Open the link below to view for M6Pro Sentiment Analysis assignment instructions

 [M6Pro\_ Assignment Details.docx](https://faytechcc.blackboard.com/bbcswebdav/pid-5950149-dt-content-rid-54266722_1/xid-54266722_1) [M6Pro\_ Assignment Details.docx - Alternative Formats](https://faytechcc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_35059_1&content_id=_5950144_1)

(opens in new window)

[**M5Pro\_Sentiment\_Analysis**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_5950150_1&course_id=_35059_1&group_id=&mode=view)

**Module Five HW and Pro assignments are EXTRA CREDIT (optional). If you wish to submit them for extra credit, please do so by 12/6.**

Download instructions from post above ( **M5Pro Sentiment Analysis** (**Assignment Instructions)**)

**Submit** your finished code solution file(s) through this assignment link by the posted deadline

[**SCRATCH**](https://faytechcc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_6149402_1&course_id=_35059_1&group_id=&mode=view)

Not graded - never due - simply upload anything you need later to here, as needed.