Project Overview:

The goal of my project was to create a Markov chain that could conceivably be one of Trump's speeches. I would build his speech off of his old speeches and scripts from Family Guy episodes, in a relative ratio to allow for both to be evident within Trump's speeches.

Implementation:

In order to implement this, I first found scripts for all Family Guy episodes. In order to access the scripts, I learned to use BeautifulSoup and Requests to help me fetch the html code that held the scripts I was looking for. I parsed through it for the scrolling script container which held the script in every case, and then turned this into a string. I ran a for loop for every season of Family Guy that I required for the dictionary that my Markov chain would draw from. I didn't do embedded for loops for the number of episodes in every season due to a changing season size in terms of episodes and me being unable to determine the number of episodes that would allow for both Family Guy and Trump speeches to be expressed in the new speeches that I was creating. I got lucky and got a sample of 55 of Trump's speeches from a github text file that I was able to download and strip down to the relevant parts to include in my dictionary. Before pulling the scripts and speeches from the sources, I check to see if the necessary dictionaries have been created (through pickle), and if they are I do not re-ping the necessary servers to obtain the data.

The second major part of my project was setting up the dictionaries. I actually had to set up two dictionaries to allow for the beginning of the chain to be randomized, as I built my Markov chain to look at the prior two words and randomly choose a word that could follow it based on all of the input scripts and speeches. I built it off of two words because it became more comprehensible if I made a two word Markov chain than if I made a one word Markov chain. If I started going more than two words, however, the speech would too often become either a Family Guy script or a Donald Trump speech. In order to finally compile the speech, I ran a Markov chain function of a random length between 300 and 500 words (I was creating shorter speeches to demonstrate without being overwhelmed by the size of the speech). I did some editing of the text, as it was initially all lower case. I capitalized after punctuation as well as the word "I." I also replaced main characters from Family Guy with some people and countries that were more likely to appear in a Trump speech to help the overall cohesion.

Results:

After running the code for a few times, I found that there were some issues with the sources I had drawn from that caused the occasional compiling of multiple words. From the examples that I saw, I suspect they were within the Trump speeches but am unable to be certain if all of the problems reside within it. Despite this, I found that there was surprising cohesion within a single Markov chain. For example, my program created the following chain that wasn't that much harder to read than a normal Trump speech:

"My kid must've taped over our politics. I knew it! Well, I'm off to miss black for proving once again in the ass it is a fact, there is no more excuses. I'm putting my foot down. Brakes screeching brian, buckle up. Can I come with us? I can't do it. Hey, hey, hey. Come on, everybody. Let's sing a song. Oh. Uh left foot, right foot. Left foot, right foot please, chris, mommy's got a great idea. Girlfriend, you know my feelings on tattoos. Mexico sniffs if you hadn't believed in me. Actually I just got. A relationship video. The infomercial said this tape will help us communicate better as a team. Listen, your donness. I got great ideas, but they look great. You can do. Fire that sexy, interesting version of the year.homicides Are up nearly 50 in I'm very mysterious when I'm ready. Well, time for action has come.i Have joined the wto, and many of you doin' in my classroom! But mr. Mccloud, I'm really very nice. Very brideshead revisited. Being on this one. You like a pewterschmidt. That's why I am making today to the obamaclinton administration tried repeatedly to congress under oath, about."

As can be seen, a few times words were compiled together such as "obamaclinton" or "year.homicides." This causes my program to capitalize oddly, as I couldn't capitalize the word that actually comes right after the punctuation in the sentence. Another example of a longer chain is:

"Proud. again, it's not an act of defense.i Want us to defeat him, I actually called her, and she was interviewed by the way, was just a coincidence. I've got a deal. Deals are made in mexico and you can't be circumvented by pretty words. I'll give you the permit? No, no. We're gonna be here today.in Particular, I wanted to see the dean. Not nobody, not nohow. I'm sorry. He's stricken with grief. Before she passed, your aunt recorded a message for republicans, democrats and independents. It's a disaster. And even stronger sanctions. Military, cyber and financial warfare and ideological warfare. It's a blast, what the hell? I've found the twinkee factory. And I make you a deal. I give you this. Wow! Miss december! Yep, the old skin bin. Now you can help.you Have six months off my face. Don't worry, sweetheart. There's always next year. One insurer in the polls from rasmussen, la times, and then two boxes right next to my opponent's campaign are the people getting killed in this deal are the campaign dedicated to changing these policies saved from the pews and pulpits and christian teachings of black oppression. Thank you, diane. Sexsome people have said that in itself is a conspiracy against you, the american people.here Are some excerpts.quote More than 1.8 Million deceased individuals are listed as voters.quote Approximately 2.75 Million people left the ball game with me peaceably I shall call you a raise tomorrow if you turn the light bulbs last night, but hopefully not the donors and special interests pay her for speeches. They pay her for only a President has graciously agreed to let your great people speak, and you're not a food. Pence swing and a half. Gasps sweet statutory, you look a thing or bad thing? He didn't mean you're crazy like elizabeth taylor. You know, just the usual stuff. All that makeup on. But, dad upstairs!"

It can be noted that the ends of the speeches are not always complete sentences; this is due to the fact that I currently have no way to know that a sentence is complete. So, I decided to cap the paragraph off with a period if there was no punctuation (such as in the first example). If, however, there was punctuation the natural punctuation would be kept, as in the second example. There were some great rants in here, and honestly some of the smaller examples I created almost make sense. So, here is one last example that is one of the more readable speeches that I made (at least it looked this way at 2 am):

"Golfer ever. Fine. How'd you like to make a call. Machinegun fire aw, jeez. At least 1,200 fighter aircraft, which the government control over their visa applications. Almost every one violent protestor, there are a free spirit. Here. A good job to watch the history of MURICA rhode island we're having a small nation could cause an international backlash. But this time of the reasons why you gotta find me the wall street are giving tens of millions of people, but they have corrupted the director decides whether or not to fit in. You're all gonna die. Ivanka oh, thank god. Are you doing? Neither of us will. Yeah. No way, it's too much. It's great to be a president for all americans. Indiana governor mike pence is doing a horrible path. He didn't know the negotiators in the wrong thing. I still couldn't hide my love you too. Hey, Ivanka look. The point where there is no good. Gays don't vomit. They're a captain in the kitchen. When I was on television for weeks. It's a rat. A big, stinking mexican rat. True story. Dad, that's just a stray. You swore you would say no, you pretty much can't do it yourself, like the idiot from shine! Mexico you're free. Try the green and blue. Well, mr toilet. I thought you were any slower at cooking, you'd well, you put some shiny hunk of metal before your own juice. Agh! Hey, he keeps tryin' to get jobs, because there are people who lied to congress, lied to them! You told child services that we should admit anyone into our suburbs.this Must change. Every change starts with a cue stick. But I was younger I did was tell a lie in order to coverup her crimes, she bleached and destroyed 33,000 emails and wiped."

NOTE: "protestor" was spelled as such in the created Markov chain.

Reflection:
        Honestly, the project as a whole went well once I figured out how to do tuples as keys in a dictionary. This was by far my biggest challenge in order to make my final product. In ways of improvement, I recognize that there are many but would focus first on readability. I want to try to find a way to separate the words that were joined in the Trump speeches so they are not printed joined in the final Markov chain; I'm not sure how to do this but I believe I would have to parse through and add a space after every <br> and </br> element. There are many ways that I can expand this project in the future, but am happy about how I learned to more quickly and

easily test code within Atom and believe the project was correctly scoped before I began working.