

3.6.2 Write the Candidates' Results to a Text File

Tom has asked you to add the candidates' results to a text file just below the election results. This will involve some modification to your original script, but don't worry. If you break the code from the original script, you can retrieve the old version from GitHub. But to make sure you don't make any mistakes that break your code, Tom is going to guide you through the editing process.

Now that we have modified the script to print the election results to a text file, we're going to save each candidate's election results to the `election_analysis.txt` file.

REWIND

The code for printing each candidate's election results is as follows:

```
print(f"{candidate_name}: {vote_percentage:.1f}% ({votes:,})\n")
```

To add each candidate's election results to the `election_analysis.txt` file, we are going to take out the code inside the `print()` function and place it in a variable, `candidate_results`, like this:

```
candidate_results = (f"{candidate_name}: {vote_percentage:.1f}% ({votes:,})\n")
```

We can print the `candidate_results` to the output terminal.

Below the `candidate_results` variable, add the following code to save the `candidate_results` to the `election_analysis.txt` file, and print the candidate's election results to the terminal.

```
# Print each candidate, their voter count, and percentage to the terminal.
print(candidate_results)
# Save the candidate results to our text file.
txt_file.write(candidate_results)
```

The output to the terminal after executing this code will look like this:

```
Election Results
-----
Total Votes: 369,711
-----
Charles Casper Stockham: 23.0% (85,213)
Diana DeGette: 73.8% (272,892)
Raymon Anthony Doane: 3.1% (11,606)
-----
```

Our text file, `election_results.txt`, will look like this:

```
analysis ▶ ≡ election_analysis.txt
1
2 Election Results
3 -----
4 Total Votes: 369,711
5 -----
6 Charles Casper Stockham: 23.0% (85,213)
7 Diana DeGette: 73.8% (272,892)
8 Raymon Anthony Doane: 3.1% (11,606)
9 -----
```

The difference between lines 6–8 in the text file and what you see in the terminal output has to do with when we add a newline character, `/n`, in the print statement for the candidate's election results.

When we print to the terminal, the `print()` function will create a newline for the next output. When we add a newline character, `/n`, in the print statement we are telling Python to add another newline. This is why you see a double-space between the candidates' results in the terminal. In the text file, there is no print statement, so we need to add the newline escape sequence, `/n`, to print each candidate's election results on a newline.