## CS 150

## Voting Machines!

Your task is to build an electronic voting machine using Visual Studio. This project requires you to use loops, ifs, arrays, and files to get input from the users and tally the votes.

Each election has a set of candidates stored in a file. Each file contains the election name (President), and the first and last name of each candidate on a new line (see the sample below). There will be at most 25 candidates for any one election.

The files "President.txt", "Governor.txt", and "Senator.txt" should be created and used. Read in these files and ask the user which election they want to vote in. Present the user with the candidates for that election and a numerical menu. Ask the user for a number corresponding to the candidate. Only accept valid input. Continue asking for input until you receive valid input. After a user votes, clear the screen and go back to the initial screen asking for the user to choose an election.

The user should also have the option of seeing the results and quitting. This should display the vote tallies for each election to the screen and to the file "results.txt".

Be sure that it is easy to update this machine in four years so we can use it again!

## SAMPLE OUTPUT



President

1. Barack Obama
2. John McCain
3. Ralph Nader

Your choice: 5

Please try again:
President

Write the algorithm in English for the main function. Based on this, determine what data you will need to declare and what other functions you can write.

Determine the function prototypes and a brief description of what each function should do.

President.txt
President Barack Obama
John McCain
Ralph Nader

1. Barack Obama
2. John McCain
3. Ralph Nader

Your choice: 1

Thank you!
[NEW SCREEN]


Pick an election:

1. President
2. Governor
3. Senator
4. See results and quit
$>1$
[NEW SCREEN]


President

1. Barack Obama
2. John McCain
3. Ralph Nader

Your choice: 2
Thank you!
[NEW SCREEEN]


Pick an election:

1. President
2. Governor
3. Senator
4. See results and quit
$>4$

NEW SCREEEN]

| President | VOTES |
| :---: | :---: |
| Barack Obama | 1 |
| John McCain | 1 |
| Ralph Nader | 0 |
| Governor | VOTES |
| Sally Smith | 0 |
| George Johnson | 0 |
| Senator | VOTES |
| Polly Smith | 0 |
| Frank Johnson | 0 |

