Org Mode and Homework

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Contents

```
import os
import csv
```

Here I am declaring dictionary lists to store the total votes and the percentages. Each candidate is the key for the dict file. The two dictionary lists are `totals` and `percentages` which will contain the total votes and the percentage of votes received for each candidate.

```
totals = {}
percentages = {}
```

For the four candidates Khan, O'Tooley, Li, and Correy, I am setting their total votes to 0. By setting the totals to 0, I am also declaring the variables. If you try to run the line `totals["Khan"] = totals["Khan"] + 1` you will get an error, unless the key has been initiated.

```
totals["Khan"] = 0
totals["O'Tooley"] = 0
totals["Li"] = 0
totals["Correy"] = 0
total_vote = 0
```

The following code opens election data csv file. Then each row is inputed into `csv_reader` which is a $\text{csv}_{\text{reader}}$ object. You can think of it as an array of lists. Each list will contain a list of values that were separated by a comma.

```
csvpath = os.path.join("/home/nikd/Dropbox/jhw","Resources", "election_data.csv")

with open(csvpath) as csvfile:
    csv_reader = csv.reader(csvfile, delimiter = ",")
    csv_header = next(csv_reader)

    for row in csv_reader:
total_vote = total_vote + 1
candidate = row[2]
totals[candidate] += 1

    for candidate in totals:
percentages[candidate] = totals[candidate] / total_vote * 100

    for candidate in totals:
print(candidate, " Total = ", totals[candidate], " Percentage = ", percentages[candidat

print("Winner = ", max(totals, key=totals.get))
```

```
Khan  Total =  1  Percentage =  100.0 %
O'Tooley  Total =  0  Percentage =  0.0 %
Li  Total =  0  Percentage =  0.0 %
Correy  Total =  0  Percentage =  0.0 %
Winner =  Khan
```