

# main

October 9, 2019

```
[12]: import pandas as pd
import os
import csv
```

```
[13]: # Set path for file
csv_path = ("Resources/election_data.csv")

# Import the election_data.csv file as a DataFrame and print the first 6 rows,
→ including the header
election_df = pd.read_csv(csv_path, encoding="utf-8")
election_df.head()
```

```
[13]: Voter ID County Candidate
0 12864552 Marsh Khan
1 17444633 Marsh Correy
2 19330107 Marsh Khan
3 19865775 Queen Khan
4 11927875 Marsh Khan
```

```
[15]: total_votes = election_df["Voter ID"].count()
```

```
[69]: name = election_df["Candidate"].unique()
```

```
[45]: candidate_votes = sum(x == name for x in election_df["Candidate"])
candidate_pctg = (candidate_votes/total_votes)*100
candidate_votes.max()
```

```
[45]: 2218231
```

```
[66]: election_results = [name, candidate_votes]
results_df = pd.DataFrame(election_results)
results_df = results_df.transpose()
results_df = results_df.rename(columns={0:"name", 1:"candidate_votes"})
winner = results_df.loc[results_df["candidate_votes"]==candidate_votes.
→ max(), ["name"]]
winner["name"][0]
```

```
[66]: 'Khan'
```

```
[68]: print("''''text")
print("Election Results")
```

```

print("-----")
print("Total Votes: " + str(total_votes))
print("-----")
for n in range(len(name)):
    print(str(name[n]) + ": " + "%.3f" % candidate_pctg[n] + "% (" + str(
candidate_votes[n]) + ")")
print("-----")
print("Winner: " + str(winner["name"][0]))
print("-----")

```

```

'''text
Election Results
-----
Total Votes: 3521001
-----
Khan: 63.000% (2218231)
Correy: 20.000% (704200)
Li: 14.000% (492940)
O'Tooley: 3.000% (105630)
-----
Winner: Khan
-----
'''

```

```

[: # Export file as a CSV, without the Pandas index, but with the header
election_df.to_csv("Output/fileOne.csv", index=False, header=True)

```