***short documentation***

* 1. Explains your process and any significant decision/insight you would like to share

Explains the following:

1. Your choice of the two models to train and test their performances
2. Your choice of the performance measurements
3. Your decision which model to use, to provide the final predictions
   1. Includes answers for the following:
4. Predict which party will win the majority of votes
5. Predict the division of voters between the various parties (the percentage of votes per party)
6. The (test) confusion matrix and test error for the predicted votes
   1. **Non-Mandatory Assignments:**
      * + 1. A. Automate the model selection procedure, i.e. the selection of the best model based on the performance measurements of all the trained models (Step 5 of the mandatory process)

\* Provide a Python script file and a document that explains the process, your insights, and conclusions.

1. B. It may very well be that “one size doesn’t fit all”, namely that modeling differently each of the tasks provides better results. Check this paradigm:
   1. 1. Use a different modeling procedure (train and test) for each of the three mandatory prediction tasks

2. Compare results with the results obtained using the one model approach Note that “Better results” are not merely a higher accuracy, but also simpler models (why is it important?), stable predictions, etc.

3. Provide a Python script file for each of the tasks and a document that explains the process, your insights, and conclusions.

C. Handle the fourth predication task :

1. 1. Identify the factor (voters’ characteristic) which by manipulating you are most likely to change which party will win the elections

Provide a document that list these factors, the manipulation needed (e.g. increase voters yearly income), and the new winning party

* you may provide a few such scenarios, each of which results with a new winner
* handle this task strictly from a technical perspective, meaning please ignore the semantic of the features

2. Provide a Python script file/s that implements such a manipulation

3. Explain how did you identify these key factors