



## Classification Exercises

### Exercise 1.

 For the classification experiment on the digits dataset, compute the largest class baseline.

### Exercise 2.

 For the classification experiment on the digits dataset, plot the confusion matrix of the resulting classifier.

1. What is a confusion matrix?
2. How is it helpful, compared to accuracy?
3. What does an entry  $a_{ij}$  of the confusion matrix mean?
4. Which digits are always predicted correctly in the test data?
5. If a digit is predicted as 7, how likely is it to be actually a 7?
6. How can we determine the accuracy from the confusion matrix?