

**Short Report**  
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1. Bias may occur if the dataset is divided in a 50-25-25 split.
2. According to the result in validation dataset with different regularization constant, the best accuracy is 0.8764705882352939. And the regularization constant is 0.01.
3. By applying the constant computed above, and training on both training and validation sets, the accuracy of the test set is 0.98823529. The following table lists the fail cases for each class.

1	None
2	None
3	None
4	246
5	None
6	None
7	None
8	565, 574
9	None
10	None
11	None
12	None
13	973
14	None
15	None
16	None
17	None