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### Part 2:

1. 0 qid:testData 1:1 2:0 3:1 4:0 # D1
2. 1 qid:testData 1:0.5 2:1 3:0.5 4:0 # D2

In order to calculate map on the small data set...

I used the command:

```
java -jar RankLib.jar -load model.txt -rank  
src/main/java/ranking/TestRankLibFeatureVectorFile.txt -score score.txt
```

This produced a file score.txt which had every document and corresponding score. So I sorted by score and got the ranking. I then computed map and got **.7777777**

```
testData      0      0.11650012583740761  
testData      1      0.013528609139623796  
testData      2      0.09725282353929646  
testData      3      0.12415037768453607  
testData      4      0.16470910354256046  
testData      5      0.09320010205871582  
testData      6      0.1417768167536474  
testData      7      0.12553306419509305  
testData      8      0.15378017221605284  
testData      9      0.013661163954567337  
testData     10      0.009289591586818049  
testData     11      0.006557358551623933
```

### Part 3:

We did not get a proper solution for TF IDF on program 3. I asked on piazza but the request was never granted. I decided to use the built in TFIDF in lucene for the comparison.

We successfully were able to create the runLib file for part 3 and it can be found in the rankings directory.

ISSUES: When I use the -metric2T MAP

Option on RankLib I get zeros for training.

I looked and tried for a long time on how to produce the ranking file from the model. But I could not find anything on it. Without the ranking model I am unable to calculate MAP. The only thing I found was the -score option which displayed the score for each doc and query.

THESE ARE THE SCORES FOR EACH DOC.

Brush%20rabbit 0	0.17761215559425036
Brush%20rabbit 1	0.12333236089042035
Brush%20rabbit 2	0.21928211506356748
Brush%20rabbit 3	0.04927515574550059
Brush%20rabbit 4	0.05551064251437031
Brush%20rabbit 5	0.17114543028629767
Brush%20rabbit 6	0.07031052640931527
Brush%20rabbit 7	0.08623923769890499
Brush%20rabbit 8	0.03515526320465764
Brush%20rabbit 9	0.031639737669973224
Brush%20rabbit 10	0.038670788739342044

Overall we got all the coding done, but our understanding of RankLib and confusing documentation prevented us from figuring out how to get the ranking file.