Part B

REPORT

Group No.: 13

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Result:-

1. PartA-Task 2:-

MAP@20 - 0.506167491894929 NDCG@20 - 0.552627162124762

2. Relevance Feedback (RF):-

alpha	beta	gamma	mAP@20	NDCG@20
1	1	0.5	0.608374375	0.637214834
0.5	0.5	0.5	0.571821499	0.635591163
1	0.5	0	0.665004453	0.700398204

3. Pseudo Relevance Feedback (PsRF):-

alpha	beta	gamma	mAP@20	NDCG@20
1	1	0.5	0.630065103	0.661056219
0.5	0.5	0.5	0.630065103	0.661056219
1	0.5	0	0.637786204	0.65803572

Observation:-

We observed an increase in map@20 and NDCG@20 values then previous after adding feedback to the queries which is expected.

Now, the result we get in case of Pseudo Relevance Feedback is better than we get in case of Relevance Feedback because in 1st case we considered the top 10 ranked documents as relevant while in 2nd case the documents with gold standard relevance judgment score = 2 as relevant. Since we already ranked the documents in the previous task as per query and if we considered all top 10 as relevant it obviously gives better results than if we considered only some documents as relevant.