COMP3009J: Information Retrieval

Exercise Sheet: IR Evaluation

An Information Retrieval system has returned a set of results in response to a query. These results are:

Retrieved = [d12, d1, d19, d15, d2, d4, d8, d9, d6, d14, d3, d5, d16, d18, d13, d20, d7, d11]

Relevance judgments have been performed and some documents have been judged to be relevant or non-relevant. For judged relevant documents, the level of relevance is included after each). Any document not included in these sets has not been judged.

Relevant = {[d1, 3], [d3, 2], [d7, 1], [d10, 3], [d11, 2], [d16, 3], [d17, 2], [d18, 1]}

Non-Relevant = {d2, d6, d8, d12, d13, d14, d15, d20}

Calculate the following evaluation metrics:

1. Precision

2. Recall

3. P@10

4. R-Precison

5. MAP

6. bpref

7. NDCG@10