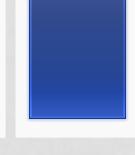
# **INFORMATION RETRIEVAL**

HOMEWORK EXERCISES LO3. EVALUATION



**SUZAN VERBERNE 2024** 



## **EXERCISE 1**

The following list of Rs and Ns represent relevant (R) and nonrelevant (N) returned documents in a ranked list of 20 documents retrieved in response to a query from a collection of 10,000 documents. The top of the ranked list is on the left of the list. This list shows 6 relevant documents. Assume there are 8 relevant documents in total in the collection.

#### RRNNN NNNRN RNNNR NNNNR

- Calculate (show your calculations):
  - a. Precision
  - b. Recall
  - c. F1



## **EXERCISE 2**

#### RRNNN NNNRN RNNNR NNNNR

Given this same result list and the known number of relevant documents in the collection, calculate (show your calculation) the Average Precision

### **EXERCISE 3**

#### RRNNN NNNRN RNNNR NNNNR

- Assume that the gain for a relevant document (R) is 1 and for a non-relevant document (N) is 0.
- Calculate (show your calculations):
  - a. CG@20
  - b. DCG@20
  - c. nDCG@20