

# Document Length Normalization

- Penalize a long doc with a doc length normalizer
  - Long doc has a better chance to match any query
  - Need to avoid over-penalization
- A document is long because
  - it uses more words → more penalization
  - it has more contents → less penalization
- Pivoted length normalizer: average doc length as “pivot”
  - Normalizer =  $1$  if  $|d| = \text{average doc length (avdl)}$