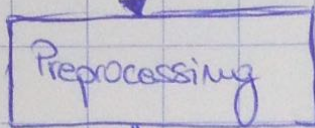**Reviews** (database cylinder)
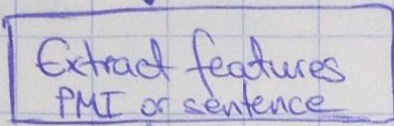
Preprocessing → → NLP
- Tokenization
- Stemming
- POS tagger
- Lemmatization
- Remove stop words
- Sentence splitter
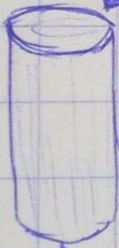
Wifi

Extract features
PMI or sentence
- Ontology based
- Double Propagation
- Word Net (domains & synonyms)

Extract sentiment words
- SentiWordNet
- Score evaluation
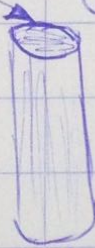
Score value of each sentiment - feature pair
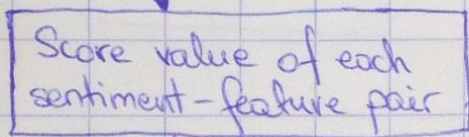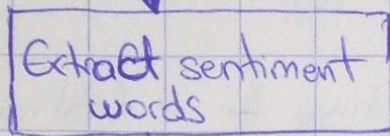
$O_{ikl} = ($ Review i of listing l has a score O_{ikl} for aspect $K)$

query the DB for each listing

$listing = \{L_1, L_2, L_3 \dots L_n\}$

. . .

Sentiment of feature k for the listing l
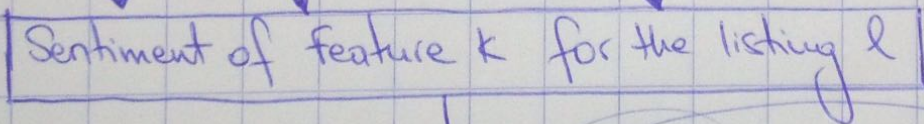
User search the aspect *
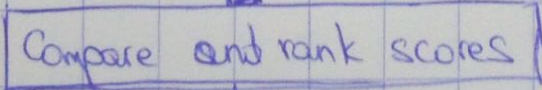
Choose from Ontology

Compare and rank scores

Output: Ranked listings based on feature scores & evidence