query: q $(t_1, t_2, ..., t_n)$ ①   ⑥ results: title, url, snippet

Front-end Web Server

Forward query q ② $d_1, ..., d_k$ ③   ④ $q, d_1, ..., d_k$ $r_1, ..., r_k$ ⑤

Query Parser

Index Searcher

Index Reader	**Index Operator**

Scorer

Index Manager

Index Server

Document Reader

Snippet Generator

Analyzer	**Fragmenter**	**Scorer**

Result Assembler

Document Manager

Document Server