Part I
Entity Ranking

Part I is dedicated to the problem of entity ranking: Given an input query, return a ranked list of entities. Entity ranking is a multifaceted problem involving a variety of interrelated factors, such as the task at hand (ad-hoc entity ranking, list completion, related entity finding, etc.), query formulation (from keyword-only to queries with additional components, such as target types or example entities), and data source (unstructured, semi-structured, structured, as well as their combinations). Chapter 3 considers keyword queries and focuses on obtaining term-based representations for entities, referred to as entity descriptions. Once created, these entity descriptions can be ranked using traditional document-based retrieval models. Chapter 4 presents semantically informed retrieval models that utilize specific characteristics of entities (attributes, types, and relationships) for retrieval. Some of these methods assume a semantically enriched keyword++ query. The entity ranking methods discussed in this part lay the foundations for all the various approaches discussed in the rest of the book. As we will see, entity ranking turns out to be an indispensable tool to address many sub-tasks in the systems that we will subsequently discuss.