Types of databases.

- Hierarchical database model
- Relational model
- Network model
- Object-oriented database model

What is very large database?

While there is apparently no official or standard definition for the term Very Large Database (VLDB), it is sometimes used to describe databases occupying magnetic storage in the terabyte range and containing billions of table rows. Typically, these are decision support systems or transaction processing applications serving large numbers of users.

Top 10 Biggest database:

- 1. Library of Congress
- 2. Central Intelligence Agency
- 3. Amazon
- 4. YouTube
- 5. ChoicePoint
- 6. Sprint
- 7. Google
- 8. AT&T
- 9. National Energy Research Scientific Computing Center
- 10. World Data Centre for Climate

Big Data

- 1. **Volume**. Organizations collect data from a variety of sources, including business transactions, social media and information from sensor or machine-to-machine data. In the past, storing it would've been a problem but new technologies (such as Hadoop) have eased the burden.
- 2. **Velocity**. Data streams in at an unprecedented speed and must be dealt with in a timely manner. RFID tags, sensors and smart metering are driving the need to deal with torrents of data in near-real time.
- 3. **Variety**. Data comes in all types of formats from structured, numeric data in traditional databases to unstructured text documents, email, video, audio, stock ticker data and financial transactions.

Difference Ontology and Database:

- 1. Databases has closed world assumption, ontologies has open world assumption
- 2. In databases each individual has a single unique name, but in ontologies individuals might have more than one name
- 3. You can infer implicit information from ontologies, in databases you can't.
- 4. The schema in ontology is large and complex but databases have simple and smaller schema. In other words, The focus on formal semantics is much stronger in ontologies than in databases. Because the aim of ontologies is to represent meaning rather than data.