1. **[Topic 1: Data Quality]** (40) We have introduced the central aspects of data quality issues.
   a. (5) What is data consistency? Give an example.
   b. (5) What is data accuracy? Give an example.
   c. (5) What does information completeness mean?
   d. (5) What is data currency? Give an example.
   e. (10) What is the entity resolution problem? Give an example.
   f. (10) What are new challenges introduced by big data to data quality management?

* You may use a running example (e.g., a relational table) for the above questions.

2. **[Topic 2: Information visualization]** (30)
   a. (10) What is information visualization?
   b. (20) Give a list of at least three information representation methods, and explain each method with an example (including: data type, method, and possible pros/cons)

3. **[Topic 3: Privacy and Security]** (30)
   a. (10) What are the requirements of information security? Give an example to illustrate each requirement.
   b. (20) [Data anonymization] What are the concepts of k-Anonymity, l-Diversity and t-Closeness? Give an example to explain each concept.