Modern Big Data Analysis with SQL

Coursera Specialisation (Offered by Cloudera)

Course-1: Foundations of Big Data Analysis with SQL
Week-1: Data and Databases

Question-1: Which of the following are examples of digital data? Check all that apply.
Answer-1: A recording on a smartphone of a song played live by a solo guitarist.
A downloaded recording of a song played in a studio by a solo guitarist.
A PDF with biographies of the presenters at a full-day business meeting.

Question-2: Which of the following are benefits of organising data? Check all that apply.
Answer-2: Faster counting of records that fits a particular category.
Easier lookups for particular information within the data.

Question-3: Why is the DML (Data Manipulation Language) category needed in a good database system?
Answer-3: Keeping the current values in a database system up to date.

Question-4: Which list of SQL statements below are DQL (Data Query Language) or Data Retrieval statements?
Answer-4: SELECT

Question-5: Which list of SQL statements below are DDL (Data Definition Language) statements?
Answer-5: CREATE, ALTER, DROP

Question-6: Why have relational databases and SQL been so successful for the last 35 years or more? Choose two.
Answer-6: The mathematical rigour that spawned the beginning of RDBMSs supplied a strong, robust foundation for many different database systems and applications.
- SQL so closely tied to relational databases is easy to learn and use, and so we have had an explosion of analysts, programmers and application tools that can use SQL.

Question-7: Which of the following applications would best be supported by an operational database? Check all that apply.
Answer-7: A school enrolment program, scheduling which students go in which sections of which classes.
- A bicycle assembly plant, identifying assembly parts that need to be ordered to replenish supplies as bicycles are produced.

Question-8: Which are true statements about how operational and analytic database systems are different? Check all that apply.
Answer-8: Operational databases are more likely to receive frequent DML commands than analytic databases are.
- Operational databases are more likely to receive frequent lookup or search commands than analytic databases are.