• What are the five constraints that Oracle SQL supports for table construction?

- 1. Unique
- 2. Not null
- 3. Primary key
- 4. Foreign key
- 5. Check (boolean condition like >5)

• Explain the importance of generating an ERD diagram.

An ERD diagram is a high-level graphical representation of a system of SQL tables. It is easier to look at, manipulate, and think about than an SQL script or series of relational algebra expressions.

It can be shown to nontechnical people and is much more approachable. It is essentially a 'blueprint' of relational algebra tables.

How many join conditions are needed to join five tables? Four join conditions.

• The last query in this lab involves top - n analysis. Define top - n analysis and the ROWNUM identifier.

Top-N analysis is analysis that only considers data that is at the extremes with regards to a specific category. For example, you could look at rows that include the top 10 paid employees in the company, or people with the highest amount of sales.

The ROWNUM identifier in SQL will tell you the position that a row is sorted in. This can allow you to limit your result set to rows that are only the 'top 10' or 'top 50' for a specific criterion.

How are analytical functions helpful in providing business information?

Analytical functions can provide breakdowns of many, many combined data sources to make new insights that are actionable.

For example, an analytical function can show you the highest (or lowest) performing section in your company with respects to SLAs (aka deadlines) and allow you to promote (or yell at) based off of the results.

It could show you peak times, shortages, popular products, etc. All of these things can help your business run more smoothly and correct for inefficiencies.