

## WORKSHEET 1 SQL

1. a) & d)
2. a) & b)
3. b)
4. b)
5. a)
6. c)
7. b)
8. d)
9. d)
10. a)

11. A Data Warehousing (DW) is process for collecting and managing data from varied sources to provide meaningful business insights. A Data warehouse is typically used to connect and analyze business data from heterogeneous sources. The data warehouse is the core of the BI system which is built for data analysis and reporting

12. The basic difference between OLTP and OLAP is that OLTP works with the processing of transactions, and OLAP is more focused on analytical processing. Transactions refer to independent processes that are responsible for managing the data in a database. Relational Databases store transactional data

13. Subject-oriented: A data warehouse typically provides information on a topic (such as a sales inventory or supply chain) rather than company operations.

Time-variant: Time variant keys (e.g., for the date, month, time) are typically present.

Integrated: A data warehouse combines data from various sources. ...

14. A star schema is a database organizational structure optimized for use in a data warehouse or business intelligence that uses a single large fact table to store transactional or measured data, and one or more smaller dimensional tables that store attributes about the data. It is called a star schema because the fact table sits at the center of the logical diagram, and the small dimensional tables branch off to form the points of the star.

15. SETL (SET Language) is a very high-level programming language based on the mathematical theory of sets. It was originally developed by (Jack) Jacob T. Schwartz at the New York University (NYU) Courant Institute of Mathematical Sciences in the late 1960s