

**WORKSHEET 1 SQL**

**Q1 and Q2 have one or more correct answer. Choose all the correct option to answer your question.**

1. Which of the following is/are DDL commands in SQL?
- |           |           |
|-----------|-----------|
| A) Create | B) Update |
| C) Delete | D) ALTER  |

Ans. A) Create  
D) Alter

2. Which of the following is/are DML commands in SQL?
- |           |           |
|-----------|-----------|
| A) Update | B) Delete |
| C) Select | D) Drop   |

Ans. A) Update  
B) Delete

**Q3 to Q10 have only one correct answer. Choose the correct option to answer your question.**

3. Full form of SQL is:
- |                            |                              |
|----------------------------|------------------------------|
| A) Strut querying language | B) Structured Query Language |
| C) Simple Query Language   | D) None of them              |

Ans. B) Structured Query Language

4. Full form of DDL is:
- |                                  |                             |
|----------------------------------|-----------------------------|
| A) Descriptive Designed Language | B) Data Definition Language |
| C) Data Descriptive Language     | D) None of the above.       |

Ans. C) Data Descriptive Language

5. DML is:
- |                               |                             |
|-------------------------------|-----------------------------|
| A) Data Manipulation Language | B) Data Management Language |
| C) Data Modeling Language     | D) None of these            |

Ans. A) Data Manipulation Language

6. Which of the following statements can be used to create a table with column B int type and C float type?
- |                                   |                              |
|-----------------------------------|------------------------------|
| A) Table A (B int, C float)       | B) Create A (b int, C float) |
| C) Create Table A (B int,C float) | D) All of them               |

Ans. C) Create Table A (B int,C float)

7. Which of the following statements can be used to add a column D (float type) to the table A created above?
- |                                      |                                     |
|--------------------------------------|-------------------------------------|
| A) Table A ( D float)                | B) Alter Table A ADD COLUMN D float |
| C) Table A( B int, C float, D float) | D) None of them                     |

Ans. C) Alter Table A ADD COLUMN D float

8. Which of the following statements can be used to drop the column added in the above question?
- |                    |                                |
|--------------------|--------------------------------|
| A) Table A Drop D  | B) Alter Table A Drop Column D |
| C) Delete D from A | D) None of them                |

Ans. B) Alter Table A Drop Column D

9. Which of the following statements can be used to change the data type (from float to int ) of the column D of table A created in above questions?

A) Table A (D float int)

B) Alter Table A Alter Column D int

C) Alter Table A D float int

D) Alter table A Column D float to int

Ans. B) Alter Table A Drop Column D int

10. Suppose we want to make Column B of Table A as primary key of the table. By which of the following statements we can do it?

A) Alter Table A Add Constraint Primary Key B

B) Alter table (B primary key)

C) Alter Table A Add Primary key B

D) None of them

Ans. C) Alter Table A Add Primary Key B

**Q11 to Q15 are subjective answer type questions, Answer them briefly.**

11. What is data-warehouse?

Ans. A data warehouse is a home of "Secondhand" data that originates in either other corporate application, or some data source external to a company.

12. What is the difference between OLAP VS OLTP?

Ans:-

OLAP (Online Analytical Processing)	OLTP (Online Transaction Processing)
1. OLAP term was introduced by E.F. Codd and it is a category of software technology that enables analysts, managers to analyze the complex data derived from the Data Warehouse.	It is characterized by large no. of short online transactions (INSERT, UPDATE, DELETE)
2. It involves historical processing of information	It involves day to day processing.
3. OLAP is used by executives and analyst	OLTP is used by DBA and clerks.
4. It focuses on information out.	It focuses on information in.
5. It is based on star schema, snowflake schema and constellation schema.	It is based on entity relationship Model.
6. Multidimensional view of data.	Detailed and flat relational view of data.
7. Records accessed in millions.	Record accessed in tens.
8. It is used to analyze the business.	It is used to run the business.
9. It provides summarized and consolidated data.	It provides primitive and highly detailed data
10. Database size is in 100gbs.	Database size in 1 to 100 gbs.
11. Highly Flexible.	Highly performance.

13. What are the various characteristics of data-warehouse?

**Ans.** Below are major characteristics of data warehouse:

1. **Subject Oriented**

- Datawarehouse is subject oriented because it provides information about a subject rather than organization ongoing operation.
- Subject can be products, customers, revenue etc.

2. **Integrated**

- A data warehouse is constructed by integrating data from heterogeneous sources such a relational database, flat files etc.

3. **Time-Variant**

- Data collected in a data warehouse is identified with a particular time period.
- Data in a data warehouse provides information from historical point of view.

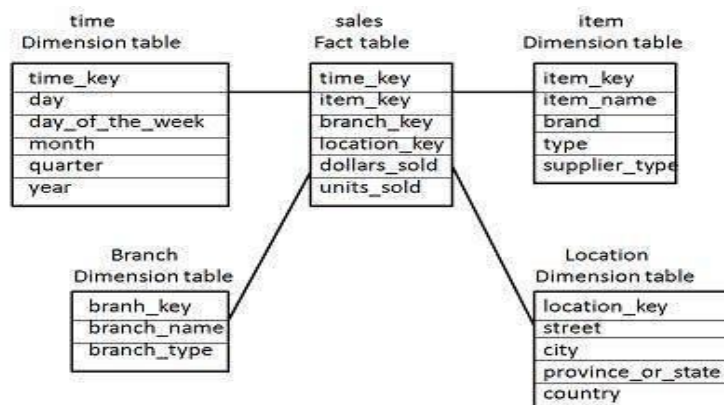
4. **Non- Volatile data**

- Non-Volatile means data is not erased when new data is added to it.
- Operational database is kept separate from Data Warehouse data So, frequent changes in operational Database do not affect the Data Warehouse.

14. What is Star-Schema??

**Ans.** A star schema is a relational schema where a relational schema whose design represents a multidimensional data model. The star schema is the explicit data warehouse schema.

In the following Star Schema example, the fact table is at the center, which contains keys to every dimension table.



15. What do you mean by SETL?

**Ans.** SETL is a programming language which was developed by Professor Jack Schwartz in the early 1970s. It based on set theory used for mathematical and telecommunications applications. It is a type of data integration that refers to the three steps (extract, transform, load) used to blend data from multiple sources. It's often used to build a data warehouse.