**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?
   1. Create B) Update

C) Delete D) ALTER

**Answer1: - A and D**

1. Which of the following is/are DML commands in SQL?
   1. Update B) Delete

C) Select D) Drop

**Answer2: - A, B and C**

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

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| --- | --- | --- |
| 3. Full form of SQL is: |  |  |
| A) Strut querying language |  | B) Structured Query Language |
| C) Simple Query Language  **Answer3: - B**  4. Full form of DDL is: |  | D) None of them |
| A) Descriptive Designed Language |  | B) Data Definition Language |
| C) Data Descriptive Language  **Answer 4: - B**  5. DML is: |  | D) None of the above. |
| A) Data Manipulation Language |  | B) Data Management Language |
| C) Data Modeling Language  **Answer5 : - A** |  | D) None of these |

1. Which of the following statements can be used to create a table with column B int type and C float type?
   1. 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

**Answer 6: - C**

1. Which of the following statements can be used to add a column D (float type) to the table A created above?
   1. 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

**Answer 7: - B**

1. Which of the following statements can be used to drop the column added in the above question?
   1. Table A Drop D B) Alter Table A Drop Column D

C) Delete D from A D) None of them

**Answer8 : - B**

1. 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?
   1. 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

**Answer: - B**

1. 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?
   1. 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

**Answer: - A**

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

1. What is data-warehouse?

**Answer 11: -** A **data warehouse** essentially combines information from several sources into one comprehensive database. For **example**, in the business world, a **data warehouse** might incorporate customer information from a company's point-of-sale systems (the cash registers), its website, its mailing lists and its comment cards.

1. What is the difference between OLTP VS OLAP?

**Answer 12 : - OLTP and OLAP**: The two terms look similar but refer to different kinds of systems. Online transaction processing (**OLTP**) captures, stores, and processes data from transactions in real time. Online analytical processing (**OLAP**) uses complex queries to analyze aggregated historical data from **OLTP** systems.

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

**Answer 13 : -** There are three prominent data warehouse characteristics:

* **Integrated**: The way data is extracted and transformed is uniform, regardless of the original source.
* **Time-variant**: Data is organized via time-periods (weekly, monthly, annually, etc.).
* **Non-volatile**: A data warehouse is not updated in real-time. It is periodically updated via the uploading of data, protecting it from the influence of momentary change.

1. What is Star-Schema??

**Answer 14 : - Star schema** is the fundamental schema among the data mart schema and it is simplest. This schema is widely used to develop or build a data warehouse and dimensional data marts. It includes one or more fact tables indexing any number of dimensional tables. The star schema is a necessary case of the snowflake schema. It is also efficient for handling basic queries.

1. What do you mean by SETL?

**Answer 15 : - SETL** (SET Language) is a [very high-level programming language](https://en.wikipedia.org/wiki/Very_high-level_programming_language) based on the mathematical [theory of sets](https://en.wikipedia.org/wiki/Set_theory). SETL provides two basic aggregate data types: *unordered sets*, and *sequences* (the latter also called *tuples*). The elements of sets and tuples can be of any arbitrary type, including sets and tuples themselves. *Maps* are provided as sets of *pairs* (i.e., tuples of length 2) and can have arbitrary domain and range types. Primitive operations in SETL include set membership, union, intersection, and power set construction, among others.

SETL provides quantified boolean expressions constructed using the [universal](https://en.wikipedia.org/wiki/Universal_quantifier) and [existential quantifiers](https://en.wikipedia.org/wiki/Existential_quantifier) of [first-order predicate logic](https://en.wikipedia.org/wiki/First-order_predicate_logic)