**DATABASE ASSIGNMENT 1.**

**1.1.1.** Database-is an organized collection of structured information, or data, typically stored electronically in a computer system.

**1.1.2.** A table is a data structure used to organize information.

**1.1.3**. Record is a collection of fields, possibly of different data types, typically in a fixed number and sequence.

**1.1.4.** Field is a variable of any type that is declared directly in a class or struct.

**1.1.5**. Primary Key is the column or columns containing values uniquely identifying each row in a table.

**1.1.6.** SQL is a programming language for storing and processing information in a relational database.

**1.1.7.** Query is a question or a request for information expressed formally.

**1.1.8.** Index-s is an alpha-numerical code used for quick identification of the index.

**1.1.9.**  Normalization -is the process of organizing data in a database.

**1.1.10.** s an alpha-numerical code used for quick identification of the index.

**2. Section B: Discussions**

**2.1.1.** Describe the purpose of a primary key in a database table and provide an example.

The primary key is to ensure that each row in the table is unique.

Example: Customers table where each customer has a unique customer ID number.

**2.1.2.** Explain the difference between a database management system (DBMS) and a database.

DBMS is the software system responsible for managing databases, and providing tools and services for data management tasks while a database refers to the organized collection of data itself, which is stored and managed within the DBMS.

**2.1.3.** Discuss in short, the importance of normalization in database design and provide an example of how it can improve data integrity.

Normalization helps maintain data integrity by reducing the chances of anomalies such as insertion, update, and deletion anomalies. It ensures that each piece of data is stored in only one place, preventing conflicting information and ensuring accuracy and consistency throughout the database.