**PART A**

**EXPERIMENT NO. 7**

**A.1 Aim: -** Designing the database for your system

**A.2 Theory**

**The design process**

The design process consists of the following steps:

* **Determine the purpose of your database**

This helps prepare you for the remaining steps.

* **Find and organize the information required**

Gather all of the types of information you might want to record in the database, such as product name and order number.

* **Divide the information into tables**

Divide your information items into major entities or subjects, such as Products or Orders. Each subject then becomes a table.

* **Turn information items into columns**

Decide what information you want to store in each table. Each item becomes a field, and is displayed as a column in the table. For example, an Employees table might include fields such as Last Name and Hire Date.

* **Specify primary keys**

Choose each table’s primary key. The primary key is a column that is used to uniquely identify each row. An example might be Product ID or Order ID.

* **Set up the table relationships**

Look at each table and decide how the data in one table is related to the data in other tables. Add fields to tables or create new tables to clarify the relationships, as necessary.

* **Refine your design**

Analyze your design for errors. Create the tables and add a few records of sample data. See if you can get the results you want from your tables. Make adjustments to the design, as needed.

* **Apply the normalization rules**

Apply the data normalization rules to see if your tables are structured correctly. Make adjustments to the tables, as needed.

**PART B**

(PART B: TO BE COMPLETED BY STUDENTS)

*(Students must submit the soft copy as per the following segments within two hours of the practicals. The soft copy must be uploaded on Blackboard LMS or emailed to the concerned Lab in charge Faculties at the end of practical; in case Blackboard is not accessible)*

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| Class: Btech CsBs 4th Year | Batch: 1 |
| Date of Experiment: 17-02-2023 | Date of Submission: 17-02-2023 |
| Grade: |  |

**B.** *(Students have to paste the screenshots)*

    