

Experiment No. 1: Install the provided Database Software

I. Practical Significance

A database management system is used to store, retrieve data for an organization or for an individual. DBMS is used in the fields like Banking, Ticket reservation system, Finance company, Retail industries, Education etc. Students should be able to understand the basic functioning of DBMS, install the DBMS software and should be able to identify the Entities and relationship among them. The proper ER diagram should be transformed into proper tables using Normalization concepts to eliminate redundant data, minimize data modification errors and simplify the query process. This practical is useful for students to understand the Normalization and Create ER diagram for any given application.

II. Industry/Employer Expected Program Outcomes (POs)

The aim of this course is to design databases and use any RDBMS package as a backend for developing database applications

III. Course level learning outcomes

This practical is expected to develop the following skills in you:

1. Understand what is Database management system software.
2. Install the relevant database system software.

IV. Laboratory Learning Outcome(s)

Install the Database management system software.

V. Relevant Affective domain related Outcome(s)

1. Follow ethical practices.
2. Install appropriate DBMS software.

VI. Relevant Theoretical Background

Oracle database express Edition (XE) is a free, small foot-print edition of oracle database. It includes all advanced database features like multitenant, In-memory, partitioning, advanced analytics and advanced security.

DATABASE MANAGEMENT SYSTEM (313302)

Step1:

Open any browser and navigate to oracle database 21c XE download.

Step 2:

Download Oracle database 21c express edition for windows depending on your windows configuration. Choose the location as per the requirements and download the compressed zip file.

Step 3:

Follow the Installation procedure and provide the proper Username and password.

Step 4:

Open the SQL PLUS and provide the proper credentials to open it. The Oracle express edition is now ready to use.

VII. Required Resources with specifications:

| Sr. No | Instrument/ Object | Specification |
|--------|--------------------|---|
| 1 | Operating system | Windows 10 or higher |
| 2 | Disk space | 8.5 gigabytes min for oracle software, plus 2 gigabytes or more for temporary storage |
| 3 | RAM | 2 Gigabytes RAM minimum |

VIII. Precautions to be followed

1. Use of appropriate syntax
2. Select required relations and use relevant conditions.
3. Provide proper Username and password.

IX. References/ Suggestions for further Reading

1. <https://blogs.oracle.com/sql/post/how-to-use-create-table-alter-table-and-drop-table-in-oracle-database>

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2. <https://support.microsoft.com/en-us/office/database-design-basics-eb2159cf-1e30-401a-8084-bd4f9c9ca1f5>

X. Assessment Scheme

| Performance indicators | | Weightage |
|----------------------------|---|-----------|
| Sr. No | Process related (10 Marks) | 30% |
| 1. | Tool Selection Ability | 20% |
| 2. | Follow Ethical Practices | 10% |
| Product related (15 Marks) | | 70% |
| 3. | Verifying System Requirement for Installation | 20% |
| 4. | Correctness in Use of Command Tools | 15% |
| 5. | Use of Attribute/s Options | 15% |
| 6. | Timely Submission | 10% |
| 7. | Answering Sample Questions | 10% |
| Total (50 Marks) | | 100% |

List of Students /Team Members

1. Vaishnavi Keshavshetty
2.

| Marks Obtained | | | Dated signature of Teacher |
|----------------------|----------------------|------------|--|
| Process Related (15) | Product Related (35) | Total (50) | |
| | | 45 |  |