

AIS Learning

A/L Information & Communication Technology (ICT)

Practice Tutorial

Lesson 02: Database Management System

1. Definition of DBMS:

- a. What is a Database Management System (DBMS)?
- b. How does a DBMS differ from a traditional file system?

2. Importance of DBMS:

- a. Why are DBMS essential in modern information systems?
- b. Name two advantages of using a DBMS.

3. Components of DBMS:

- a. List the main components of a Database Management System.
- b. Explain the purpose of the Data Dictionary in a DBMS.

4. Relational Databases:

- a. What is a relational database?
- b. Provide an example of a table in a relational database.

5. SQL in DBMS:

- a. What is SQL, and how is it used in a DBMS?
- b. Write a simple SQL query to retrieve data from a table.

6. Normalisation in DBMS:

- a. Define normalisation in the context of databases.
- b. Why is normalisation important for database design?

7. Primary Key and Foreign Key:

- a. Define primary key and foreign key.
- b. Explain the relationship between a primary key and a foreign key.

8. Indexing in Databases:

- a. What is indexing in a database?
- b. How does indexing enhance query performance?

9. ACID Properties:

- a. Define the ACID properties in the context of database transactions.
- b. Why are ACID properties important for database reliability?

10. Database Security:

- a. Explain the importance of database security.
- b. Name two common methods used to secure a database.

AIS Learning
E m p o w e r e d
y o u r f u t u r e

Try those questions by yourself and submit your answers to us.

We can evaluate it for you!!!!

Happy Learning!!!!

-Evaluation Team AIS Learning