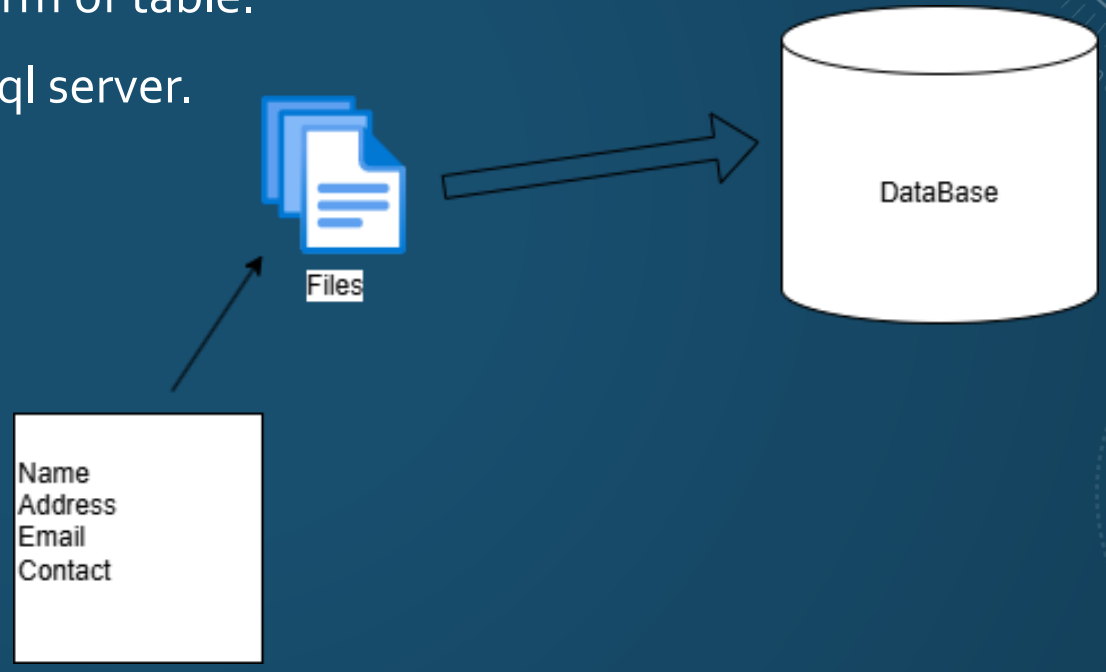
DATABASE

- Database is a structured collection of data that is stored in an electronic device.
- A relational database store data in the form of table.
- Example: MySql, Oracle, PostgreSql, & Sql server.

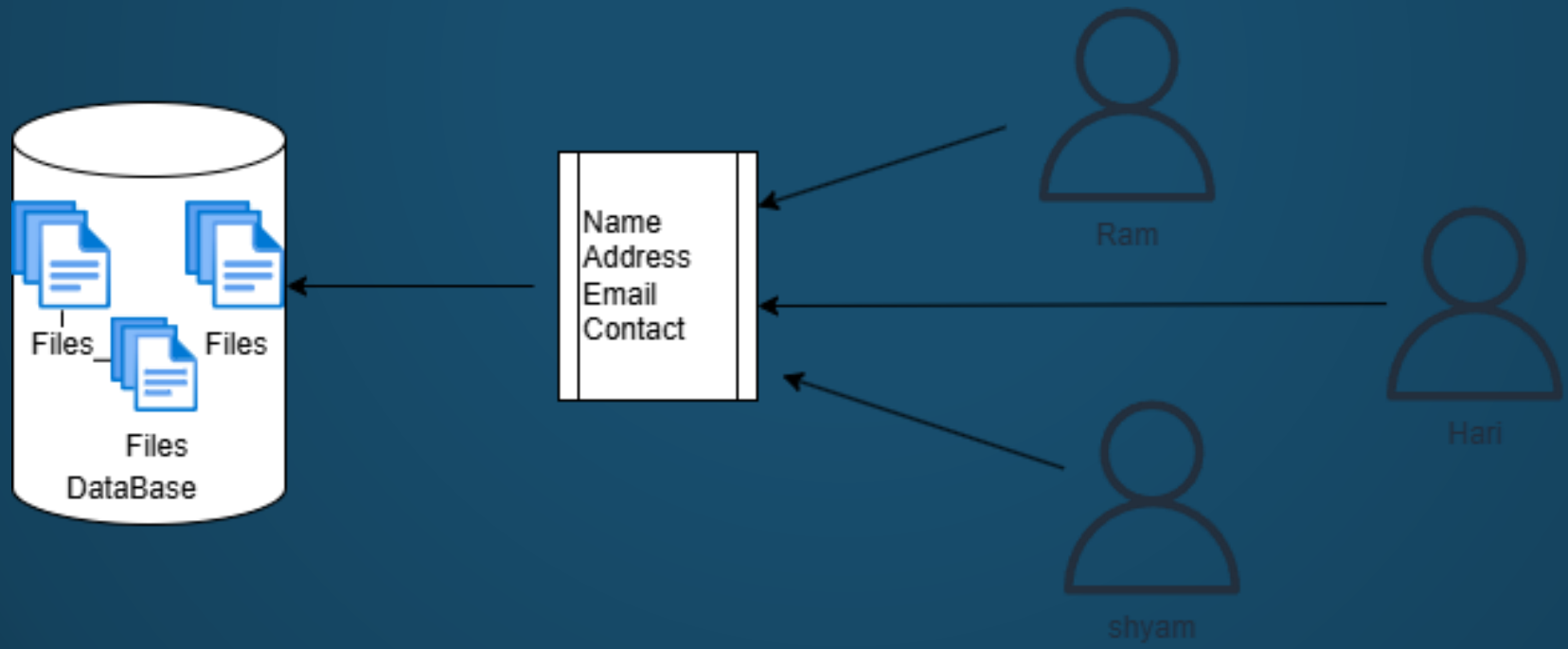


DATABASE MANAGEMENT SYSTEM (DBMS)

- DBMS is a Software used to manage data from a database.
- It acts as an interface between the database and end user or applications ensuring data is consistently organized, easily accessible and secure.
- A DBMS is a software that allows to create, update, and retrieval of data in an organized way.
- It also provides security to the database.

WHY DBMS?

- DBMS reduce data redundancy by avoiding duplicate data.
- It ensure data consistency, integrity and security while multiple user acess and manipulate data simultaneously.



DATABASE LANGUAGE IN DBMS

- Database languages are specialized languages used to interact with a database.

A. User perform different tasks such as defining, controlling and manipulating the data.

B. There are several type of database language in DBMS.

C. The four main DB language categorized.

DATABASE LANGUAGES IN DBMS

- Database languages are specialized languages used to interact with a database.

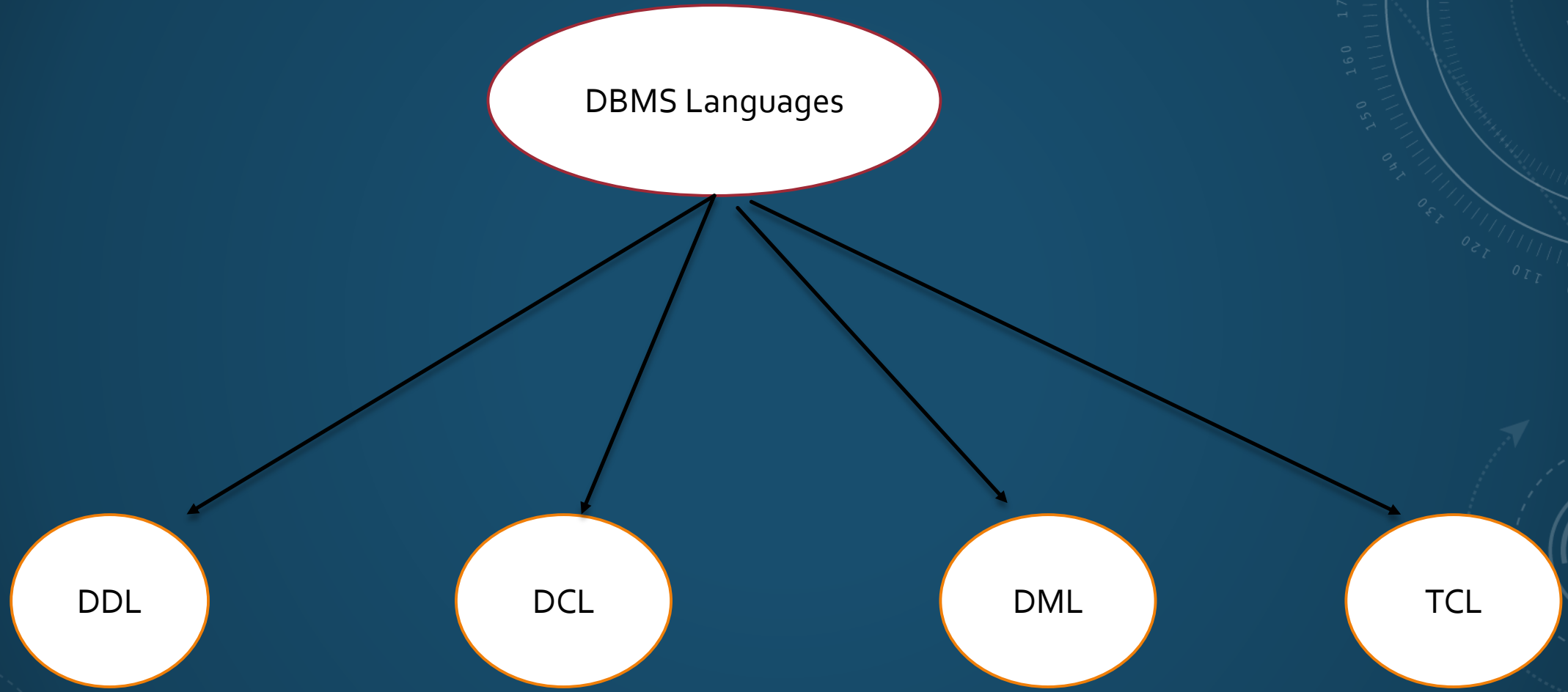
A. User perform different tasks such as defining, controlling and manipulating the data.

B. There are several type of database language in DBMS.

➢ The four main DB language categorized.

TYPE OF DATABASE LANGUAGE

- .



DDL(DATA DEFINITION LANGUAGE)

- The DDL used to define and modify the structure of data base itself.
- Including the table, views, indexes and other schema-related objects.
- The following five DDL commands in SQL

a) Create: Used to create database objects like table, indexes or view.
b) Alter: Used to modify the existing database object, suchas adding a new column in table.
c) Drop: Used to delete database objects.
d) Truncate: Used to remove all rows from a table.
e) Rename: used to change the name of DB objects.

CREATE DATABASE

```
mysql> create database Academia;
Query OK, 1 row affected (0.538 sec)
```

Create Table in database

```
mysql> create table student(id int, Name varchar(50),Address varchar(50), Email varchar(30),Contact int
(10));
Query OK, 0 rows affected, 1 warning (1.133 sec)
```

- Insert the data in table.

```
mysql> insert into student values(1,'RAVI','Bara','ravig7427@gmail.com','98');
Query OK, 1 row affected (0.754 sec)
```

View/ Display the data in table.

```
mysql> select *from student;
+------+------+---------+---------------------+---------+
| id   | Name | Address | Email               | Contact |
+------+------+---------+---------------------+---------+
|    1 | RAVI | Bara    | ravig7427@gmail.com |      98 |
+------+------+---------+---------------------+---------+
1 row in set (0.224 sec)
```

- Desc

```
mysql> desc student;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| id      | int         | YES  |     | NULL    |       |
| Name    | varchar(50) | YES  |     | NULL    |       |
| Address | varchar(50) | YES  |     | NULL    |       |
| Email   | varchar(30) | YES  |     | NULL    |       |
| Contact | int         | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
5 rows in set (2.067 sec)
```