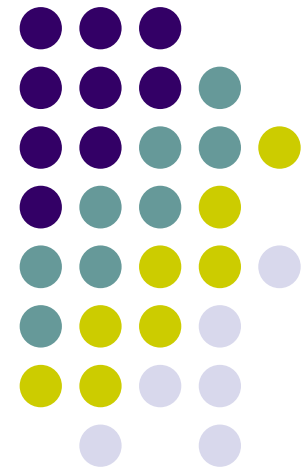


# MS Access Database Connection

---

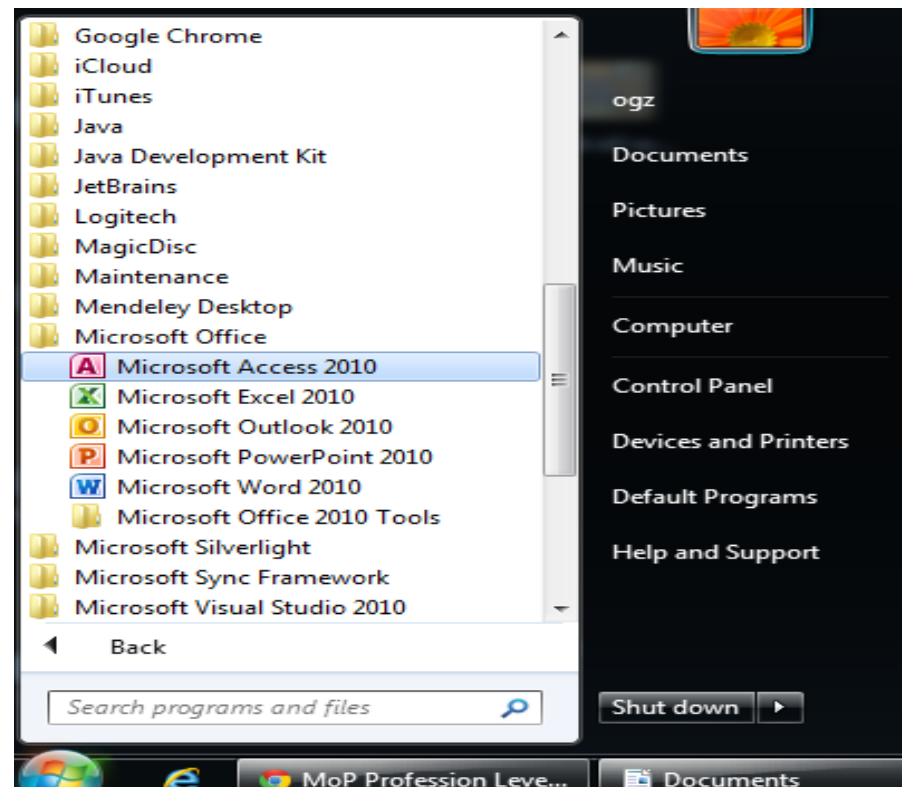




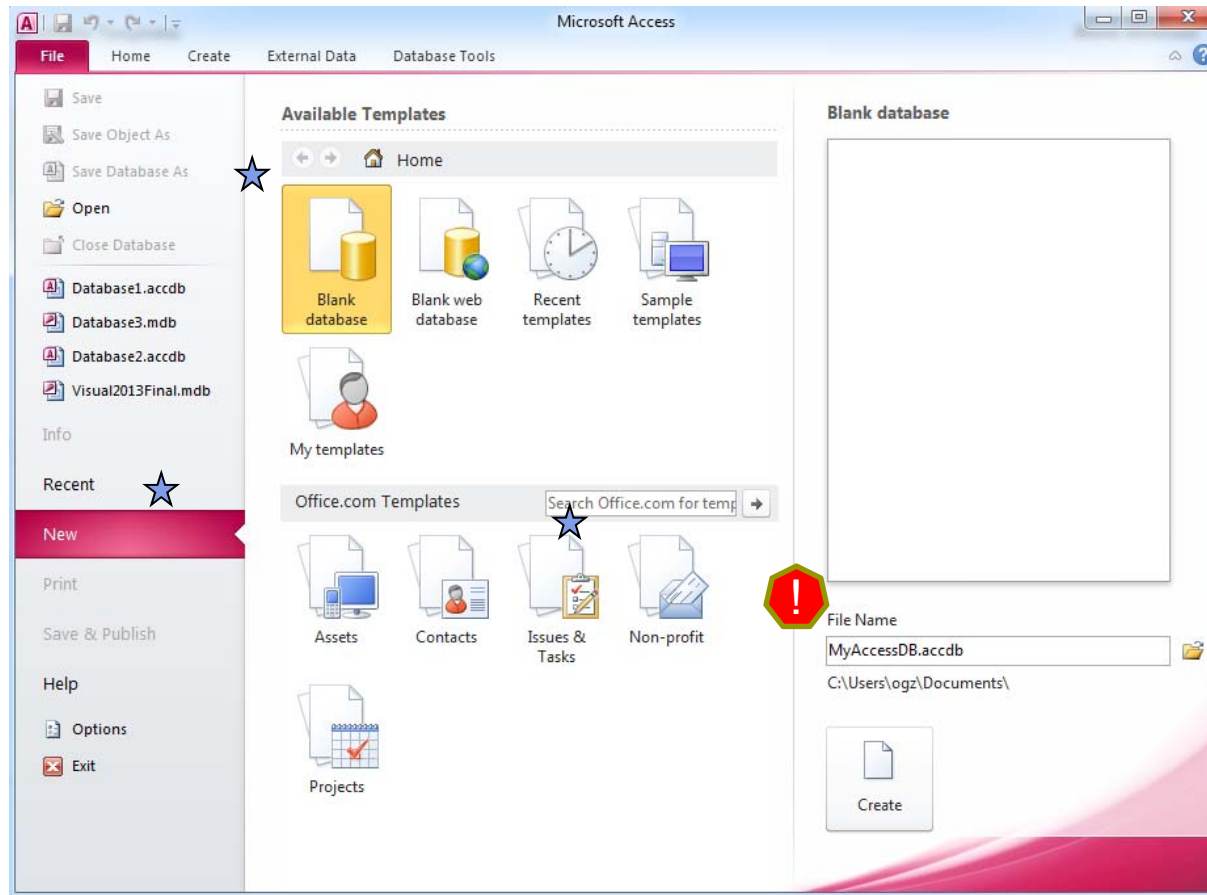
# Database?

- A database is a program that stores data and records in a structured and queryable format.
- The tools that are used for managing, maintaining and querying database are called Database Management Systems.
- The language that is used for querying and managing databases is called Structured Query Language (SQL).

# Where and How?



# Creating a file



! To connect accdb access file from a C# application you should download **2007 Office System Driver: Data Connectivity Components** from the link below

<http://www.microsoft.com/en-us/download/details.aspx?id=23734>



# Creating a table

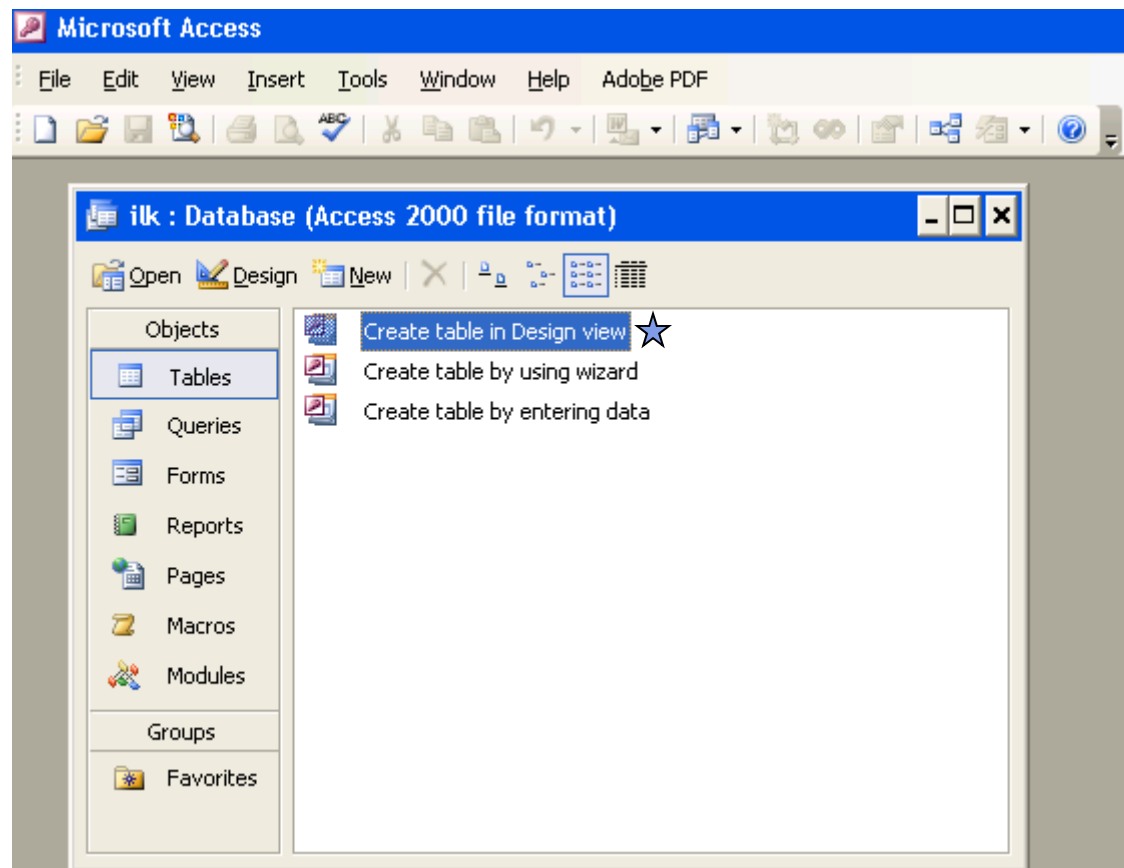
- Table?
  - A table is a structure that holds relational data in rows and columns.
  - Rows hold data and columns hold types.
  - Column count is constant but row count is variable.
  - Every table stands for an entity. So for each entity we will need another table.



# Tree rules in table design

- Divide data into smallest pieces.
- Don't try to store two different data in one place.
- Make sure that you will be able to separate data from another.

# Table Creation



# Table Creation



The screenshot shows the Microsoft Access interface. The main window is titled 'Table1 : Table' and displays a design grid with three columns: 'Field Name', 'Data Type', and 'Description'. The grid is currently empty. Below the grid is the 'Field Properties' task pane, which has two tabs: 'General' and 'Lookup'. The 'General' tab is selected. A text box in the 'General' tab contains the following text:

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

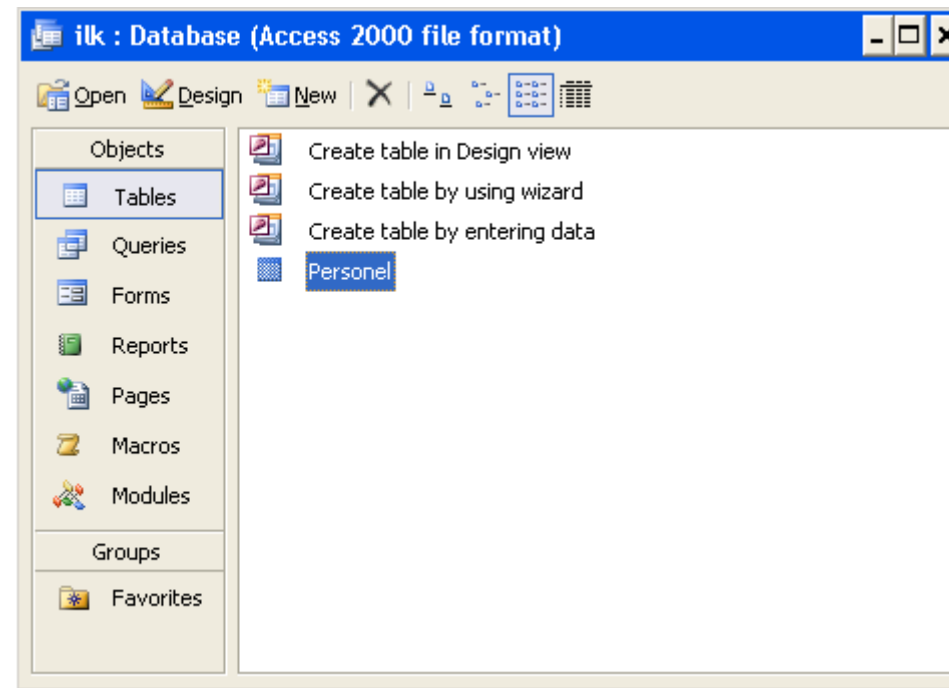








# Table Creation



# Manual data entry



Microsoft Access

File Edit View Insert Format Records Tools Window Help Adobe PDF

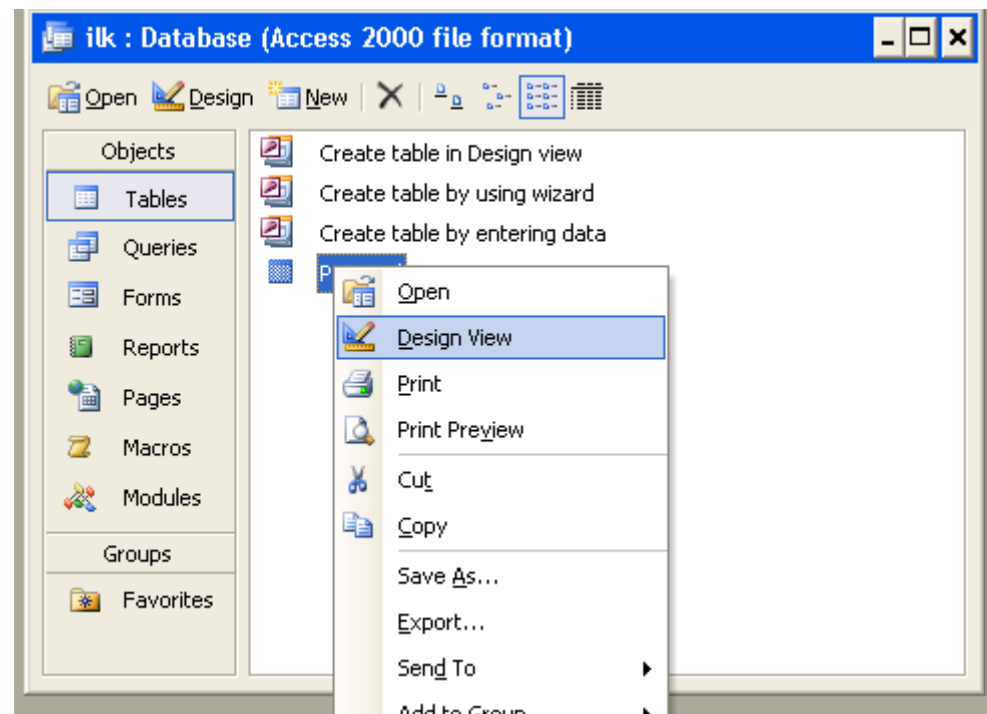
ilk : Database (Access 2000 file format)

Personel : Table

|   | TCKIMLIK    | AD   | SOYAD |
|---|-------------|------|-------|
| ✎ | 29962598417 | Oğuz | Altuğ |
| * |             |      |       |

Record: 1 of 1

# Changing table structure



# Changing table structure



The screenshot shows the Microsoft Access interface. At the top, a window titled 'Table1 : Table' displays a table with three columns: 'Field Name', 'Data Type', and 'Description'. The table contains three rows of data:

| Field Name | Data Type | Description |
|------------|-----------|-------------|
| TCKIMLIK   | Text      |             |
| AD         | Text      |             |
| SOYAD      | Text      |             |

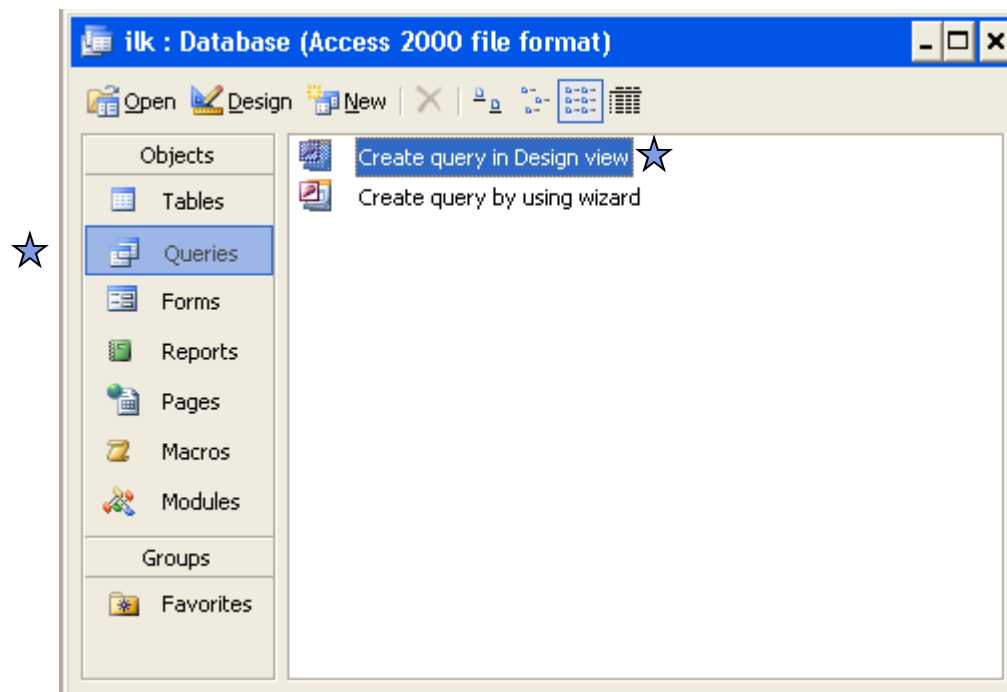
Below the table, the 'Field Properties' window is open for the 'SOYAD' field. It has two tabs: 'General' and 'Lookup'. The 'General' tab is active, showing the following properties:

| Property            | Value      |
|---------------------|------------|
| Field Size          | 30         |
| Format              |            |
| Input Mask          |            |
| Caption             |            |
| Default Value       |            |
| Validation Rule     |            |
| Validation Text     |            |
| Required            | No         |
| Allow Zero Length   | Yes        |
| Indexed             | No         |
| Unicode Compression | Yes        |
| IME Mode            | No Control |
| IME Sentence Mode   | None       |
| Smart Tags          |            |

On the right side of the 'Field Properties' window, there is a text box with the following message:

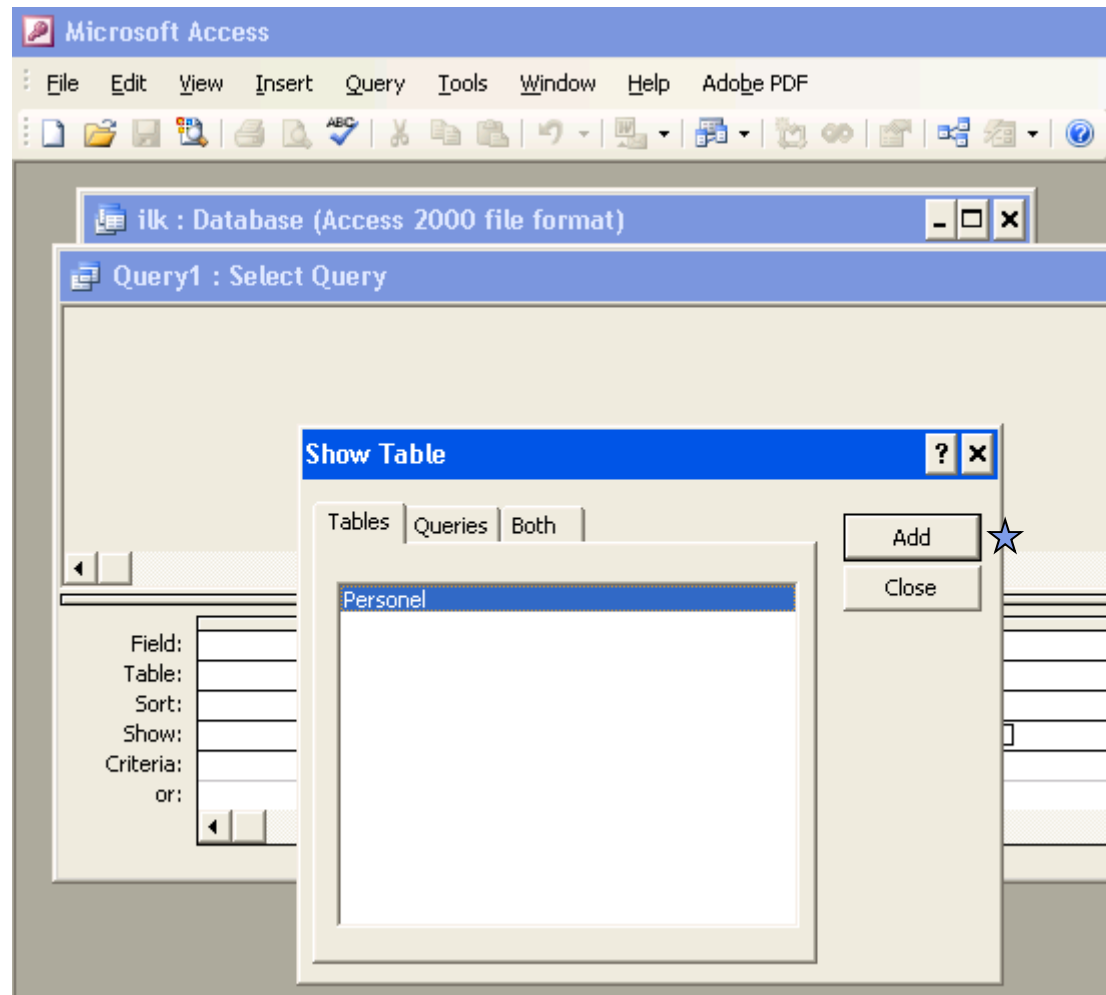
A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.

# SQL-Query

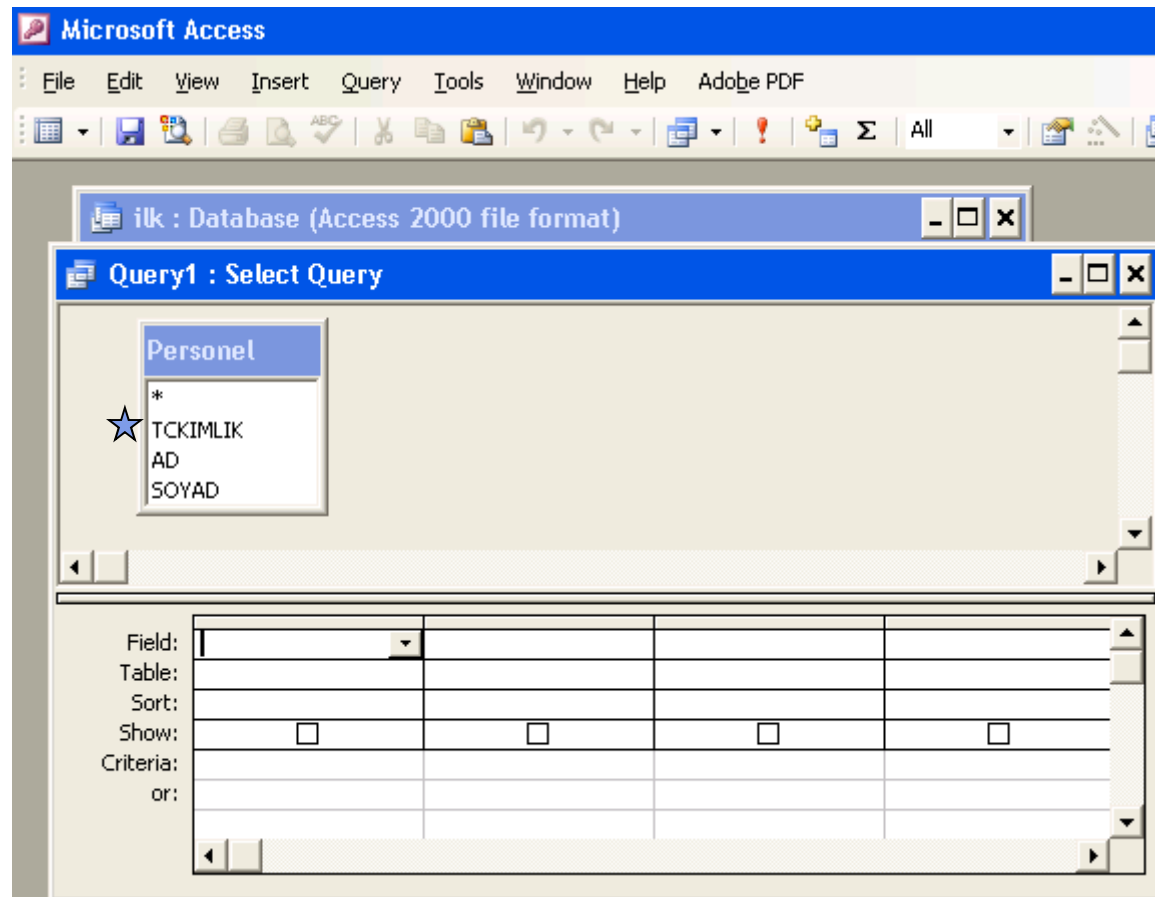




# SQL-Query



# SQL-Query



# SQL-Query



Microsoft Access

File Edit View Insert Query Tools Window Help Adobe PDF

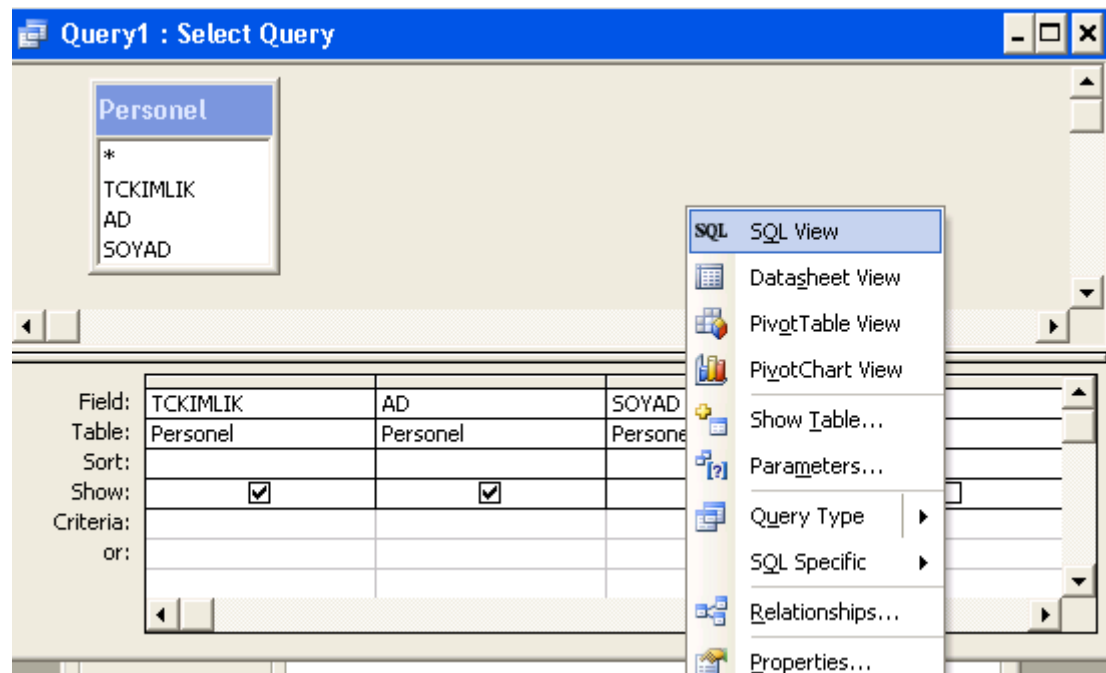
Query1 : Select Query

Personel

- \*
- TCKIMLIK
- AD
- SOYAD

|           |                                     |                                     |                                     |                          |
|-----------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Field:    | TCKIMLIK                            | AD                                  | SOYAD                               |                          |
| Table:    | Personel                            | Personel                            | Personel                            |                          |
| Sort:     |                                     |                                     |                                     |                          |
| Show:     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Criteria: |                                     |                                     |                                     |                          |
| or:       |                                     |                                     |                                     |                          |

# SQL Language



# SQL Language

A screenshot of the Microsoft Access application window. The title bar reads "Microsoft Access". The menu bar includes "File", "Edit", "View", "Insert", "Query", "Tools", "Window", "Help", and "Adobe PDF". The toolbar contains various icons for file operations and data manipulation. The main window displays a query design view titled "Query1 : Select Query". The SQL statement entered in the design grid is:

```
SELECT Personel.TCKIMLIK, Personel.AD, Personel.SOYAD  
FROM Personel;
```



# Select?

- It is one of the most used commands.
- Used for fetching data from one or more tables.
- Includes at least two keywords.
  - What will be selected?
  - From where it will be selected?

# Select?



- `SELECT column_names FROM table_names`

# Select?



Column names

Table name

- `SELECT TCKIMLIK, AD, SOYAD FROM Personel`
- We will write our very own SQL statements
- Select
- Insert
- Update
- Delete
- Where