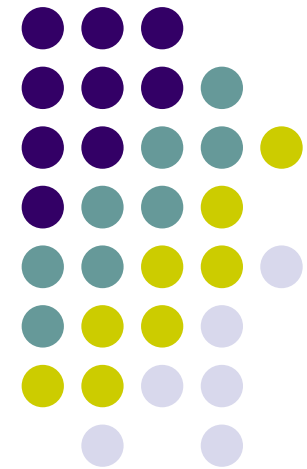


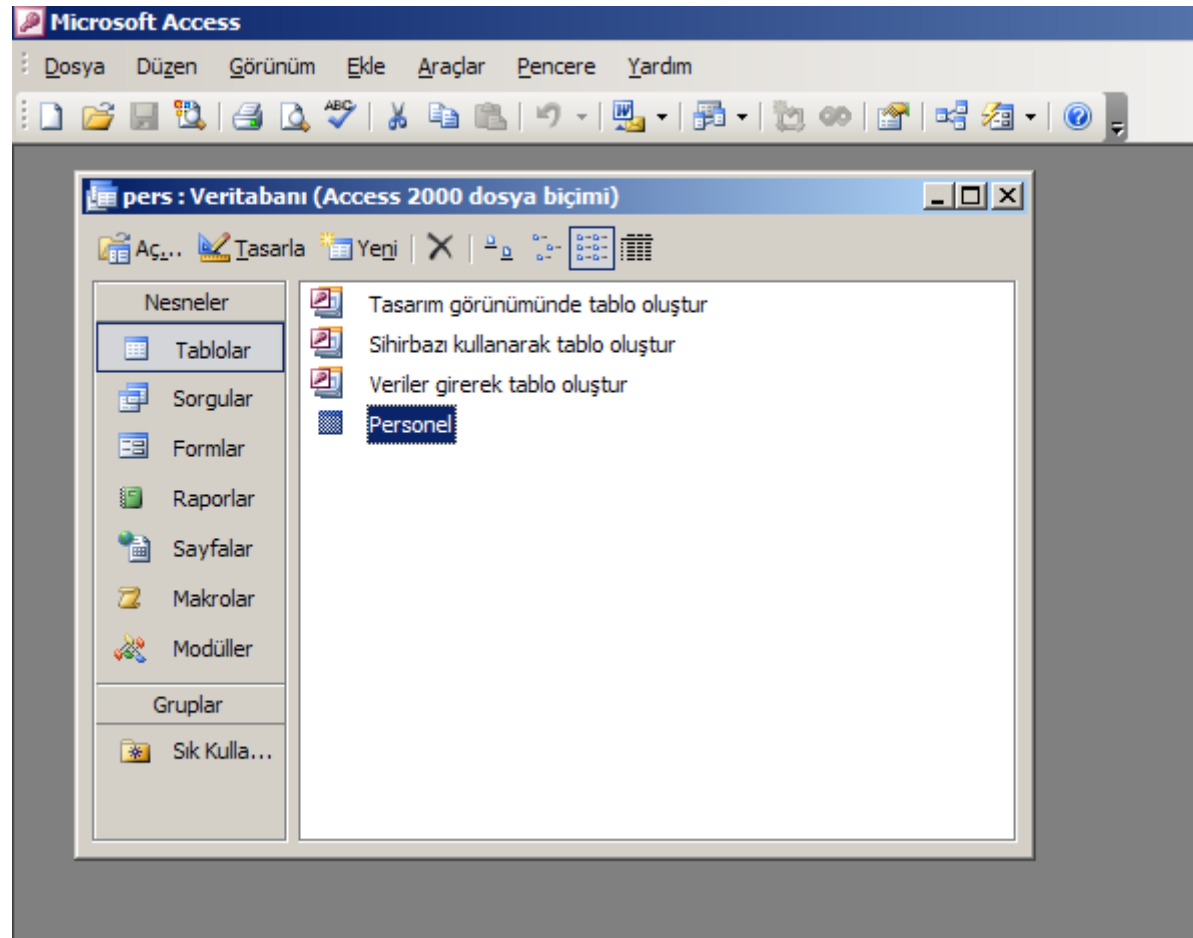
MS Access and Database Connections





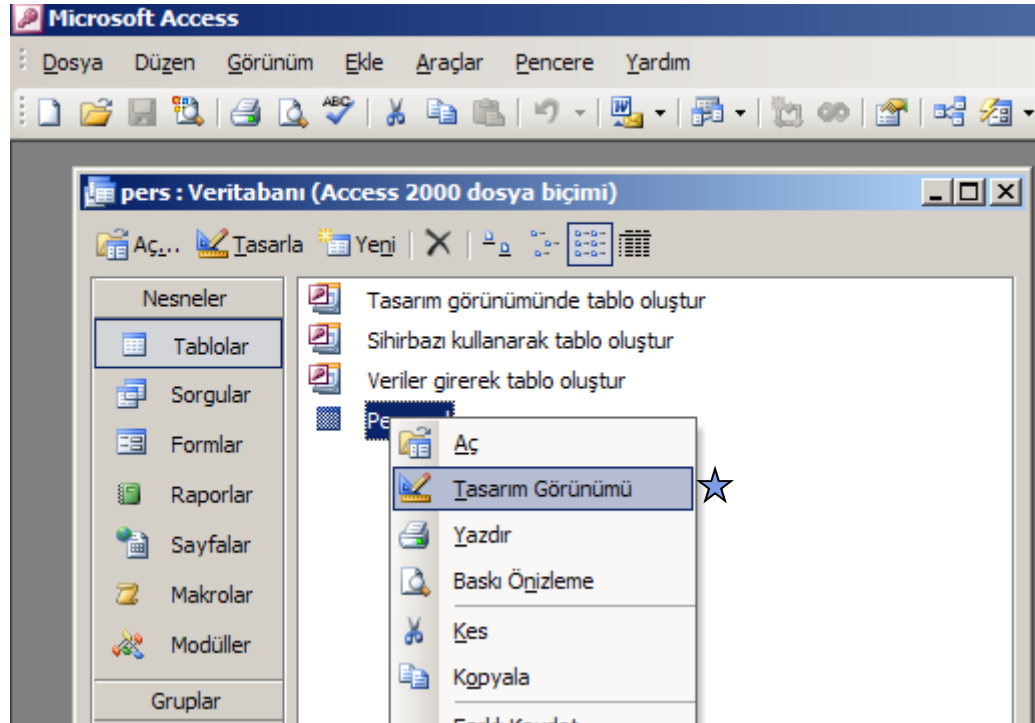
Pre-work

To make our program work seamlessly, first we have to make a small change on the database table.



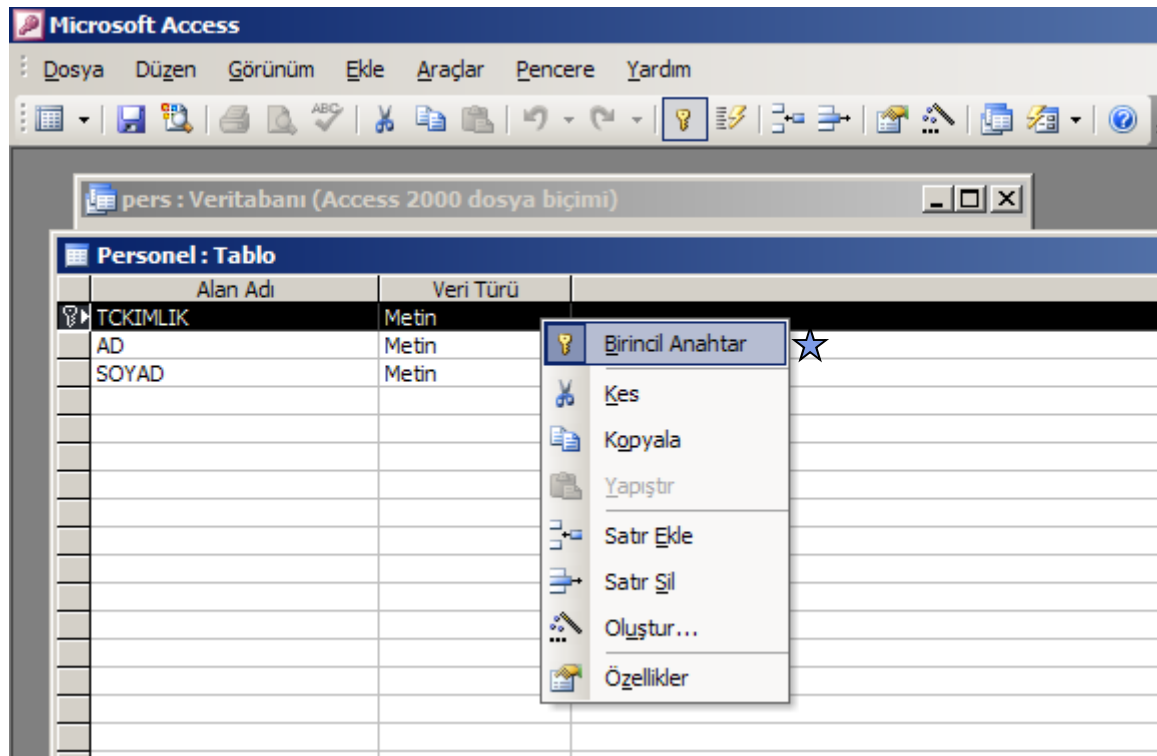
Pre-work

Open table in design view



Pre-work

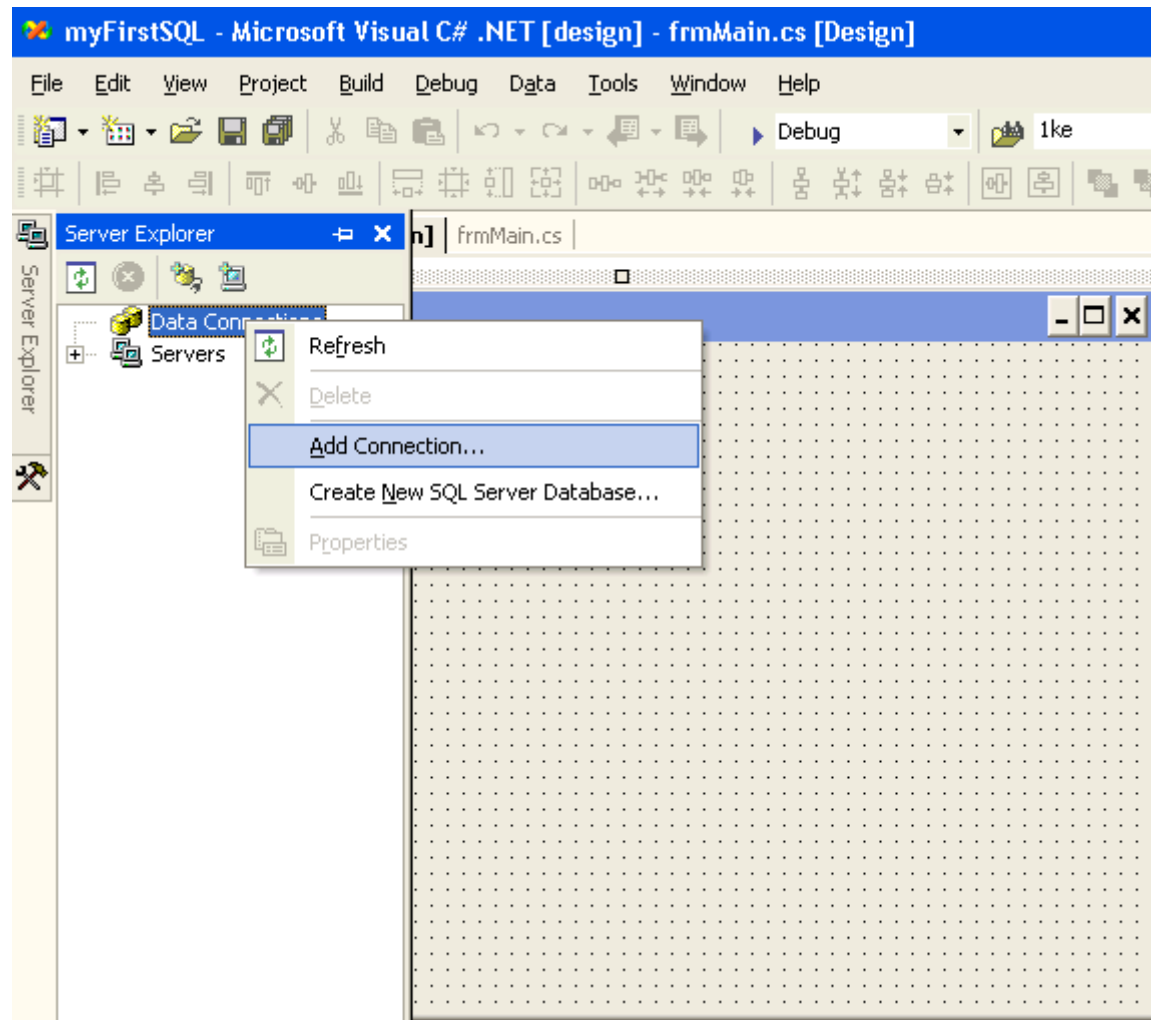
Set TCKIMLIK as primary key.



Important: What is primary key?

Next!

Our very first database program



Database Connection



Add Connection [?] [X]

Enter information to connect to the selected data source or click "Change" to choose a different data source and/or provider.

Data source:
Microsoft Access Database File (OLE DB) [Change...]

Database file name:
[Browse...]

Log on to the database

User name: Admin

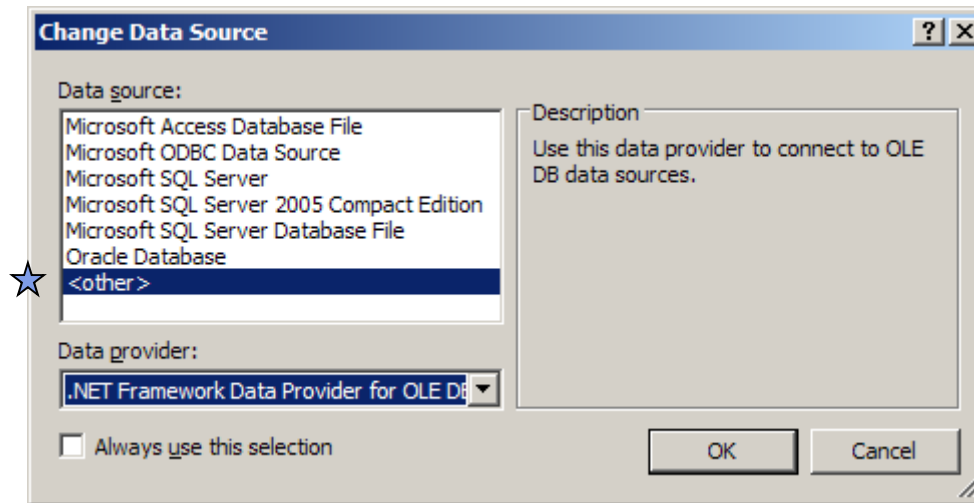
Password: []

Save my password

[Advanced...]

[Test Connection] [OK] [Cancel]

Database Connection



Database Connection



Add Connection [?] [X]

Enter information to connect to the selected data source or click "Change" to choose a different data source and/or provider.

Data source:
[.NET Framework Data Provider for OLE DB] [Change...]

OLE DB Provider:
[Microsoft Jet 4.0 OLE DB Provider] [Data Links...]

- MediaCatalogDB OLE DB Provider
- MediaCatalogMergedDB OLE DB Provider
- MediaCatalogWebDB OLE DB Provider
- ★ Microsoft Jet 4.0 OLE DB Provider
- Microsoft OLE DB Provider for Analysis Services 9.0
- Microsoft OLE DB Provider For Data Mining Services
- Microsoft OLE DB Provider for DTS Packages
- Microsoft OLE DB Provider for Indexing Service

Use Windows NT Integrated Security

Use a specific user name and password:

User name: []

Password: []

Blank password Allow saving password

Initial catalog: []

[Advanced...]

[Test Connection] [OK] [Cancel]

Database Connection



Add Connection [?] [X]

Enter information to connect to the selected data source or click "Change" to choose a different data source and/or provider.

Data source:
[.NET Framework Data Provider for OLE DB] [Change...]

OLE DB Provider:
[Microsoft Jet 4.0 OLE DB Provider] [Data Links...]

Enter a server or file name

Server or file name: []
Location: []

Log on to the server

Use Windows NT Integrated Security
 Use a specific user name and password:

User name: []
Password: []

Blank password Allow saving password

Initial catalog: []

[Advanced...]

[Test Connection] [OK] [Cancel]

Database Connection



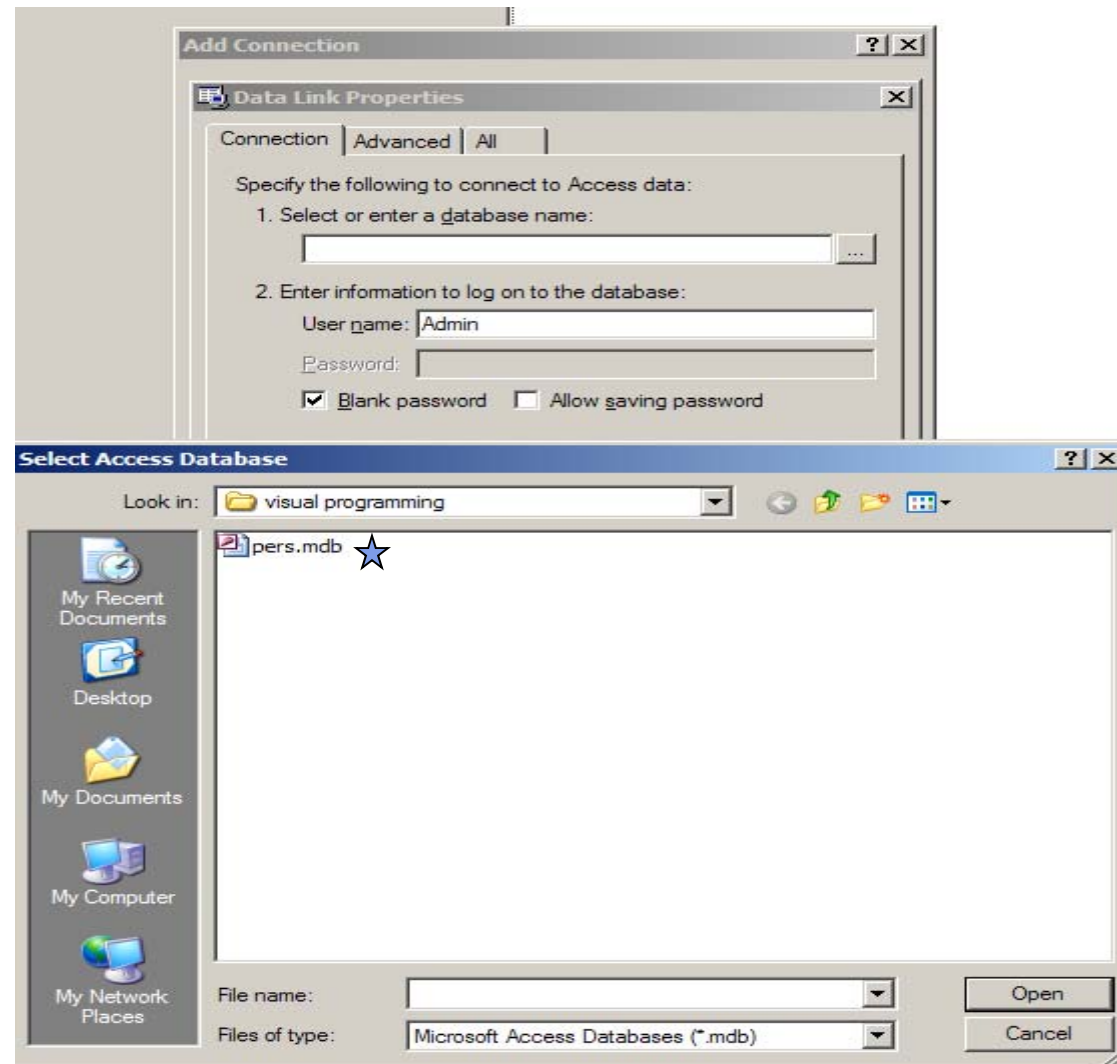
The screenshot shows the 'Data Link Properties' dialog box with the 'Advanced' tab selected. The dialog is titled 'Data Link Properties' and has three tabs: 'Connection', 'Advanced', and 'All'. The 'Advanced' tab is active. The main area contains the following text and controls:

Specify the following to connect to Access data:

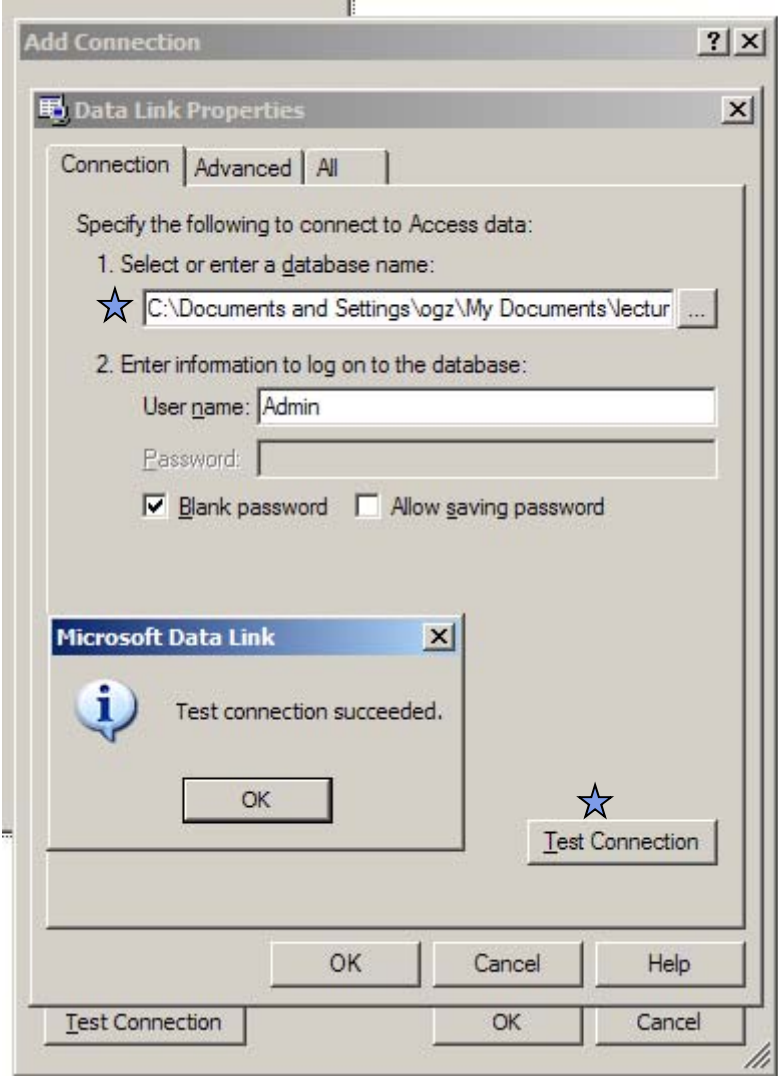
1. Select or enter a database name:
A text box with a blue star icon and an ellipsis button to its right.
2. Enter information to log on to the database:
User name: Admin
Password: [empty text box]
 Blank password Allow saving password

At the bottom right of the main area is a 'Test Connection' button. At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.

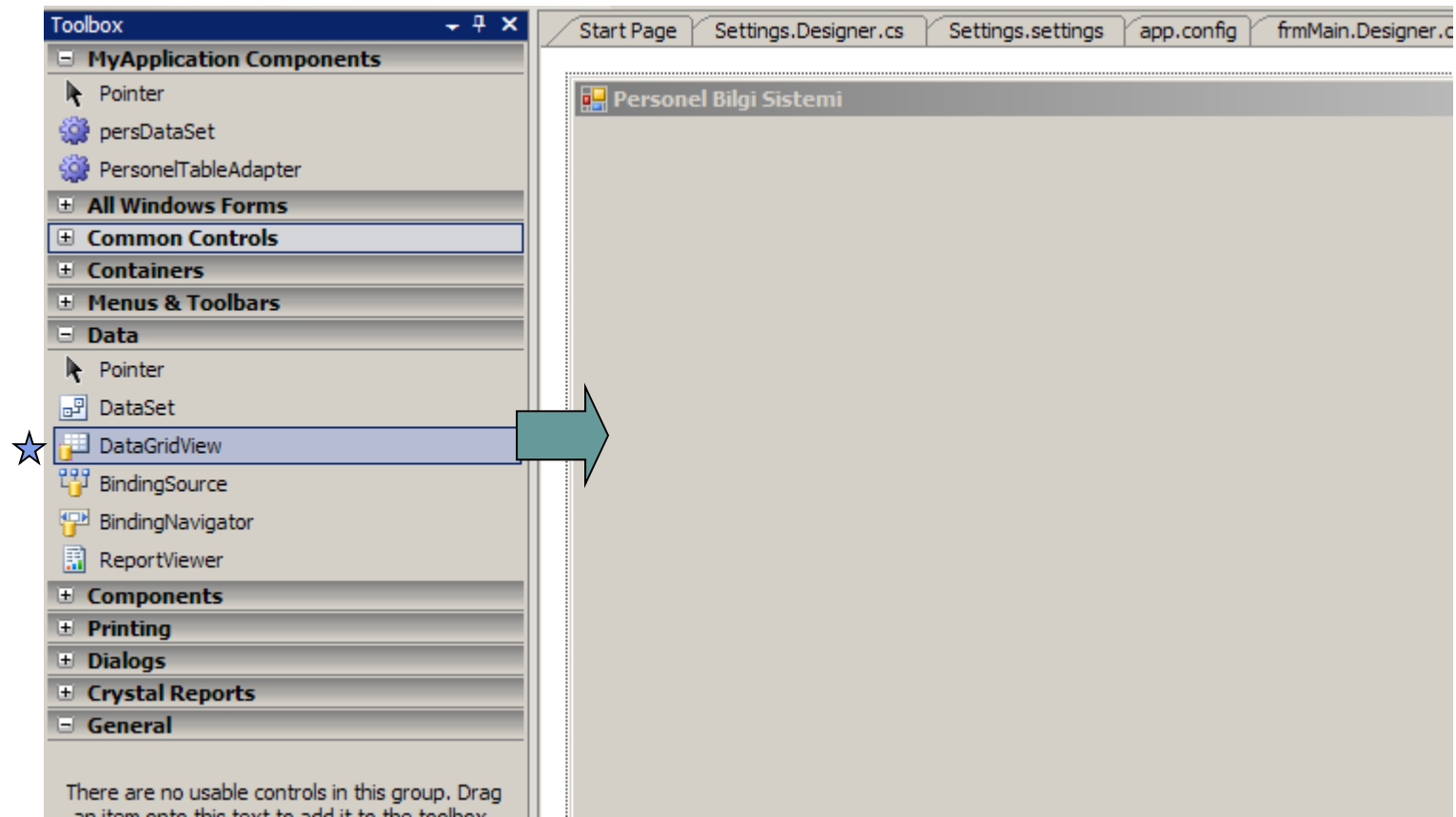
Database Connection



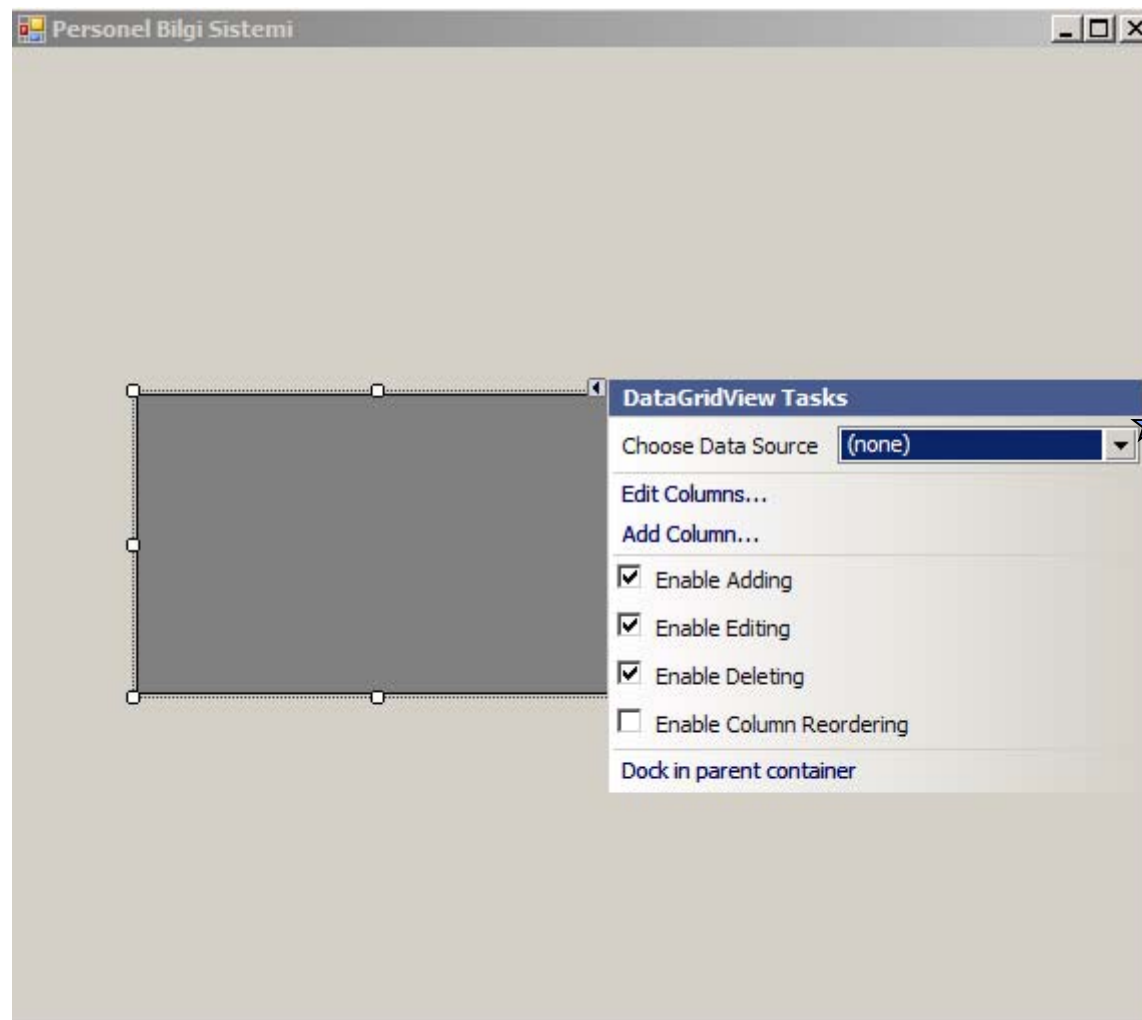
Database Connection



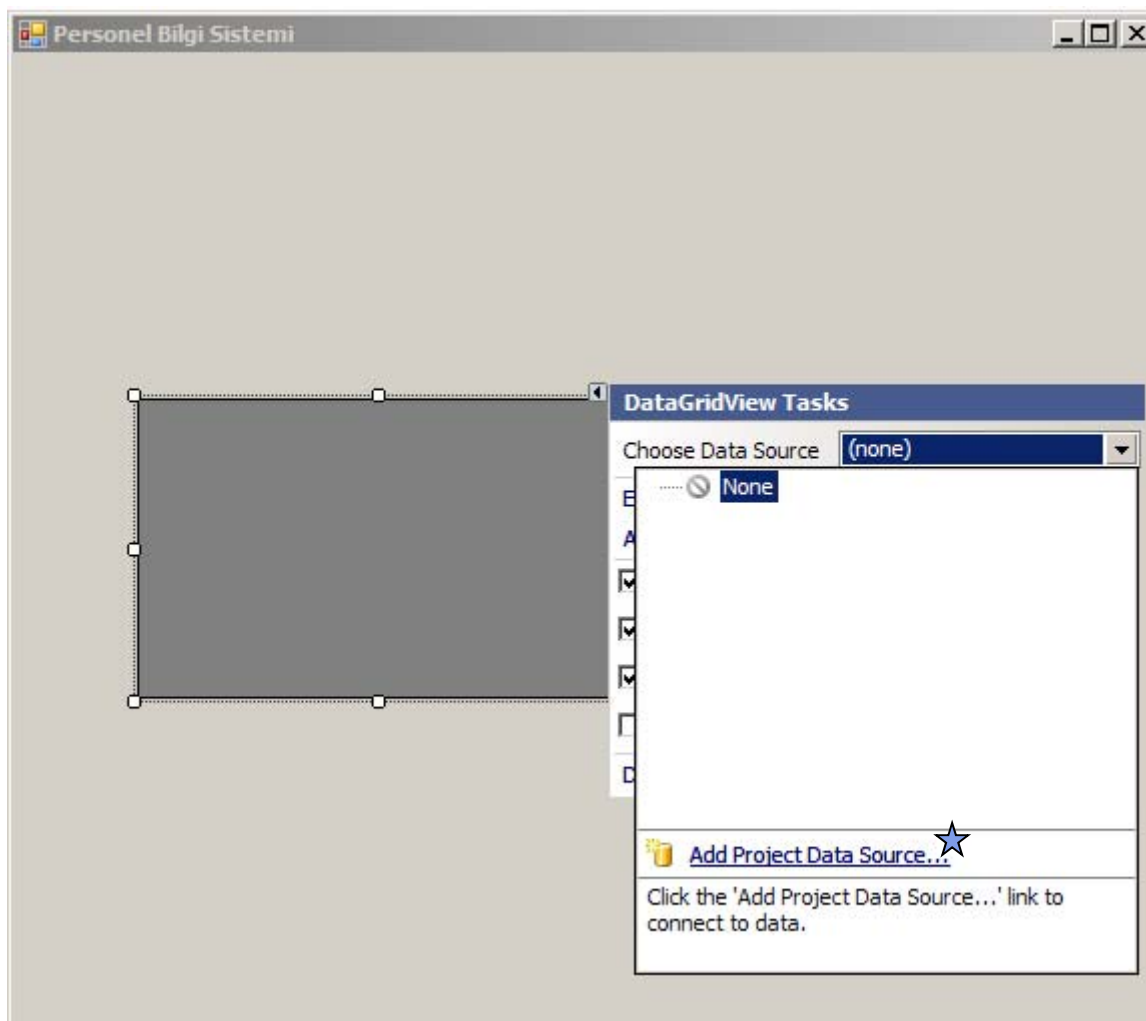
Adding DataGridView



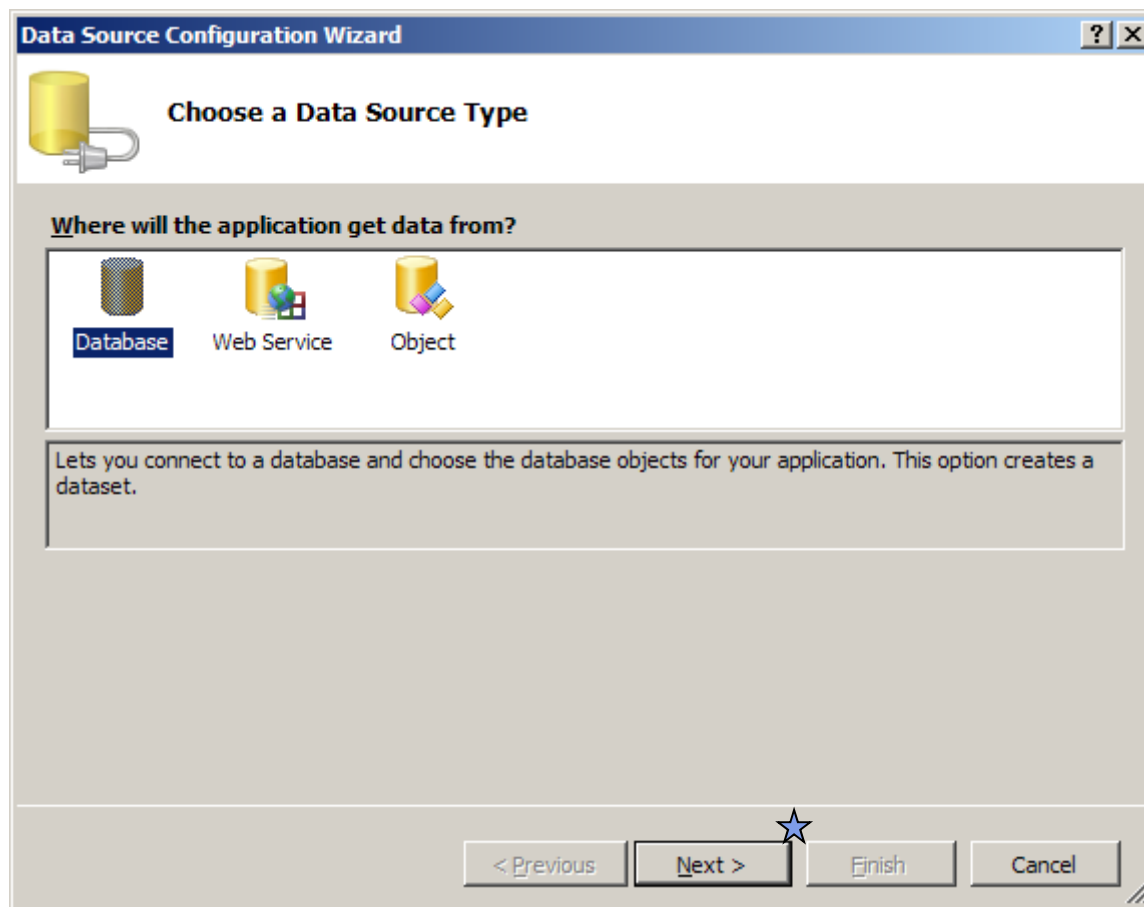
DataGridView connection



DataGridView connection




DataGridView connection



DataGridView connection



Data Source Configuration Wizard [?] [X]

 **Choose Your Data Connection**

Which data connection should your application use to connect to the database?

This connection string appears to contain sensitive data (for example, a password), which is required to connect to the database. However, storing sensitive data in the connection string can be a security risk. Do you want to include this sensitive data in the connection string?

No, exclude sensitive data from the connection string, I will set this information in my application code.

Yes, include sensitive data in the connection string.

Connection string _____

[< Previous] [Next >] [Finish] [Cancel]

★

DataGridView connection



Choose Your Data Connection

Which data connection should your application use to connect to the database?

persConnectionString1 (Settings)

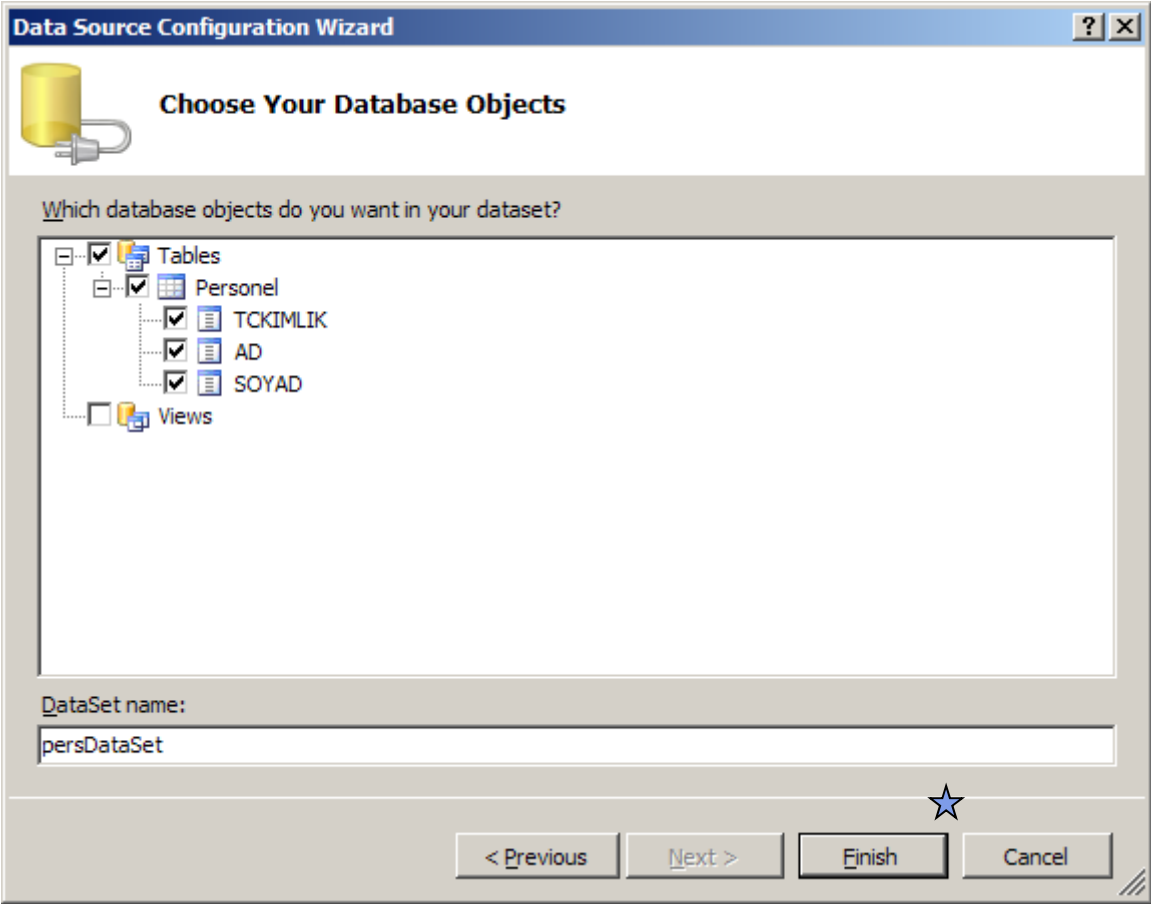
This connection string appears to contain sensitive data (for example, a password), which is required to connect to the database. However, storing sensitive data in the connection string can be problematic. Do you want to copy the data file to your project and modify the connection?

Microsoft Visual Studio

The connection you selected uses a local data file that is not in the current project. Would you like to copy the file to your project and modify the connection?

If you copy the data file to your project, it will be copied to the project's output directory each time you run the application. Press F1 for information on controlling this behavior.

DataGridView connection



DataGridView connection



	TCKIMLIK	AD	SOYAD
*			

persDataSet personelBindingSource personelTableAdapter

Resides at the bottom

Loading data automatically



```
private void frmMain_Load(object sender, EventArgs e)
{
    // TODO: This line of code loads data into the 'persDataSet.Personel' table. You can move, or remove :
    this.personelTableAdapter.Fill(this.persDataSet.Personel);
}
```

Saving (Persisting) Data



The screenshot displays the Visual Studio IDE with a Windows Forms application titled "Personel Bilgi Sistemi". The "Toolbox" on the left is open to the "Common Controls" section, where the "Button" control is selected, indicated by a blue star icon. The main design surface shows a form with a table at the top. The table has three columns: "TCKIMLIK", "AD", and "SOYAD". The first row of the table contains an asterisk (*) in the first column and empty cells in the others. Below the table, a "Kaydet" button is visible, also marked with a blue star icon. The "Program.cs" file is open in the background, showing the following code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Windows.Forms;

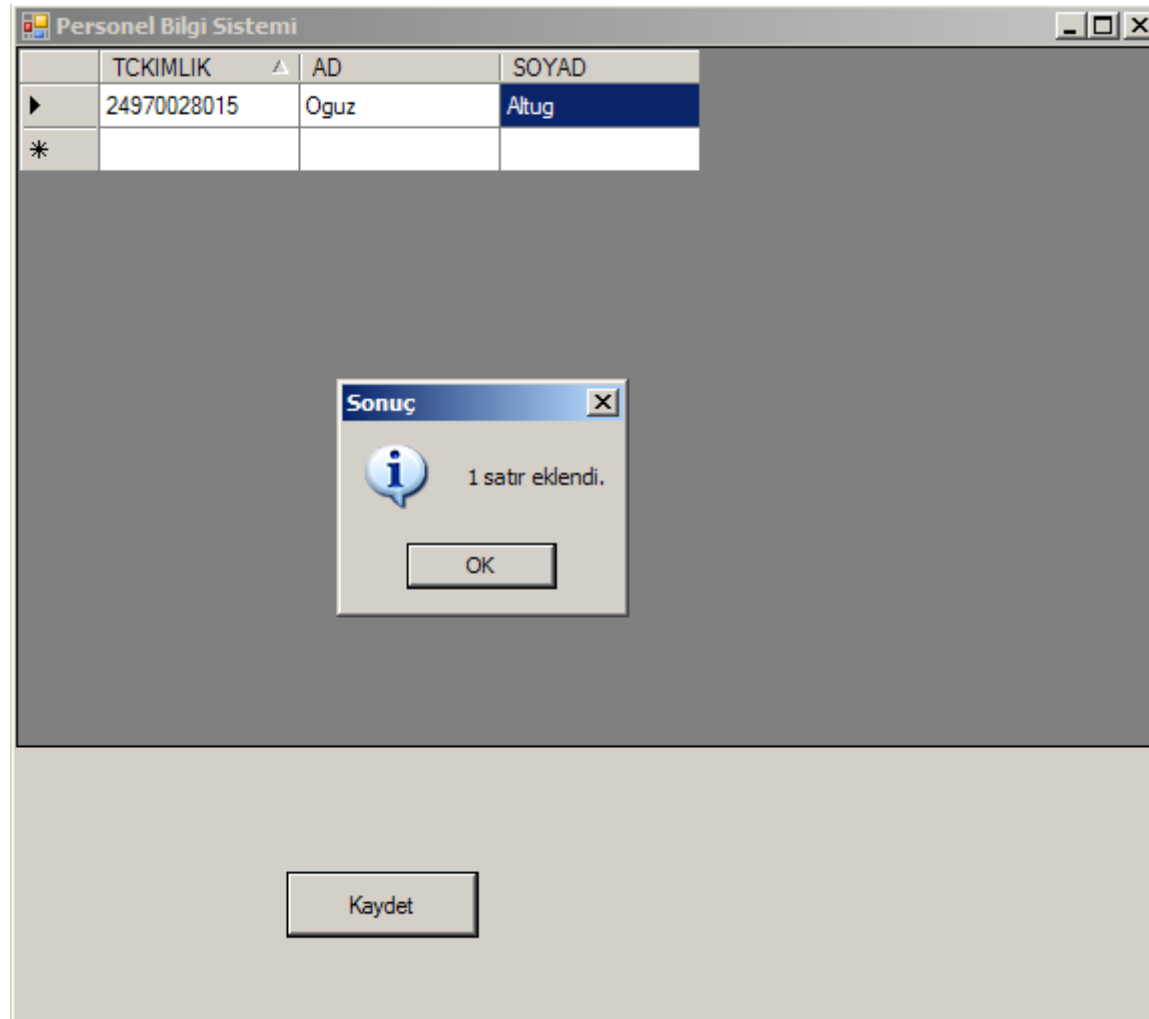
namespace PersonelBilgiSistemi
{
    static class Program
    {
        [STAThread]
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new frmMain());
        }
    }
}
```

Saving (Persisting) Data



```
private void btnKaydet_Click(object sender, EventArgs e)
{
    persDataSet dsChange = new persDataSet();
    if (persDataSet.HasChanges(DataRowState.Added))
    {
        dsChange = (persDataSet)persDataSet.GetChanges(DataRowState.Added);
        int addedRows = personelTableAdapter.Update(dsChange);
        MessageBox.Show(this, addedRows + " satır eklendi.", "Sonuç",
            MessageBoxButtons.OK, MessageBoxIcon.Information);
    }
}
```

Saving (Persisting) Data



Saving (Persisting) Data



Close the program, and reopen it.

The screenshot shows a window titled "Personel Bilgi Sistemi" with a table containing the following data:

	TCKIMLIK	AD	SOYAD
▶	24970028015	Oguz	Altug
*			

A "Kaydet" button is located at the bottom center of the window.

Updating Data



```
private void btnKaydet_Click(object sender, EventArgs e)
{
    persDataSet dsChange = new persDataSet();
    if (persDataSet.HasChanges(DataRowState.Added))
    {
        dsChange = (persDataSet)persDataSet.GetChanges(DataRowState.Added);
        int addedRows = personelTableAdapter.Update(dsChange);
        MessageBox.Show(this, addedRows + " satır eklendi.", "Sonuç",
            MessageBoxButtons.OK, MessageBoxIcon.Information);
    }

    if (persDataSet.HasChanges(DataRowState.Modified))
    {
        dsChange = (persDataSet)persDataSet.GetChanges(DataRowState.Modified);
        int addedRows = personelTableAdapter.Update(dsChange);
        MessageBox.Show(this, addedRows + " satır güncellendi.", "Sonuç",
            MessageBoxButtons.OK, MessageBoxIcon.Information);
    }
}
```

Update some data, close the program and reopen it.

Deleting Data



```
private void btnKaydet_Click(object sender, EventArgs e)
{
    persDataSet dsChange = new persDataSet();
    if (persDataSet.HasChanges(DataRowState.Added))
    {
        dsChange = (persDataSet)persDataSet.GetChanges(DataRowState.Added);
        int addedRows = personelTableAdapter.Update(dsChange);
        MessageBox.Show(this, addedRows + " satır eklendi.", "Sonuç",
            MessageBoxButtons.OK, MessageBoxIcon.Information);
    }

    if (persDataSet.HasChanges(DataRowState.Modified))
    {
        dsChange = (persDataSet)persDataSet.GetChanges(DataRowState.Modified);
        int addedRows = personelTableAdapter.Update(dsChange);
        MessageBox.Show(this, addedRows + " satır güncellendi.", "Sonuç",
            MessageBoxButtons.OK, MessageBoxIcon.Information);
    }

    if (persDataSet.HasChanges(DataRowState.Deleted))
    {
        dsChange = (persDataSet)persDataSet.GetChanges(DataRowState.Deleted);
        int addedRows = personelTableAdapter.Update(dsChange);
        MessageBox.Show(this, addedRows + " satır silindi.", "Sonuç",
            MessageBoxButtons.OK, MessageBoxIcon.Information);
    }
}
```

Delete one row and reopen the program.