To incorporate an existing **.cs** file into a .NET application, create a solution file, and run the application successfully from the Windows CLI, follow these steps:

**Step 1: Create a New .NET Application**

1. **Navigate to your project folder** in the terminal (Command Prompt or PowerShell):
2. cd C:\path\to\your\folder
3. **Create a new .NET console application** (if you haven't already):
4. dotnet new console -n MyApp

This will create a new folder called MyApp with a basic console application. If you already have your .cs file in the folder, you can skip this step.

1. **Move your existing .cs file** into the MyApp folder (if it's not already inside the project folder).
2. Open the MyApp folder in the terminal, and move the existing .cs file into the MyApp project directory.

**Step 2: Add the Existing .cs File to the Project**

1. **Add the existing .cs file** (let’s assume the file is named ExistingFile.cs) into your project folder if not done already.
2. Open the .csproj file (e.g., MyApp/MyApp.csproj) and ensure your existing file is included by adding it under the <ItemGroup> section if it’s not automatically included:
3. <ItemGroup>
4. <Compile Include="ExistingFile.cs" />
5. </ItemGroup>

This step ensures the .cs file is compiled as part of your project.

**Step 3: Create a Solution File**

1. **Create a solution file** in the parent folder (if you don’t have one already):
2. dotnet new sln -n MySolution

This will create a MySolution.sln solution file in the current directory.

1. **Add the project to the solution**:
2. dotnet sln MySolution.sln add MyApp/MyApp.csproj

This step adds your project to the solution.

**Step 4: Restore Dependencies (Optional but Recommended)**

Make sure all dependencies are restored:

dotnet restore

This will ensure all necessary packages are downloaded.

**Step 5: Build and Run the Application**

1. **Build the application** to ensure everything compiles:
2. dotnet build MySolution.sln
3. **Run the application**:
4. dotnet run --project MyApp

This will run the application inside the MyApp project.

**Additional Tips**

* If you have multiple projects and want to run a specific one, use the --project flag with the dotnet run command (as shown above).
* If you want to manage specific SDK versions, you can add a global.json file to the solution directory to specify the SDK version.

**Summary of Steps:**

1. Create or ensure your .NET application project exists.
2. Add your existing .cs file to the project.
3. Create a solution file using dotnet new sln.
4. Add your project to the solution using dotnet sln add.
5. Restore dependencies with dotnet restore.
6. Build and run the project using dotnet build and dotnet run.

Let me know if you encounter any issues or need further clarification!