```
mcs -out:HelloWorld.exe HelloWorld.cs
```

The resulting `HelloWorld.exe` can then be executed with:

```
mono HelloWorld.exe
```

which will produce the output:

```
Hello, world!
Press any key to exit..
```

Creating a new program using .NET Core

First install the **.NET Core SDK** by going through the installation instructions for the platform of your choice:

- Windows
- OSX
- Linux
- Docker

After the installation has completed, open a command prompt, or terminal window.

1. Create a new directory with `mkdir hello_world` and change into the newly created directory with `cd hello_world`.

2. Create a new console application with `dotnet new console`.
   This will produce two files:

   - **hello_world.csproj**

     ```
     <Project Sdk="Microsoft.NET.Sdk">

       <PropertyGroup>
         <OutputType>Exe</OutputType>
         <TargetFramework>netcoreapp1.1</TargetFramework>
       </PropertyGroup>

     </Project>
     ```

   - **Program.cs**

     ```
     using System;

     namespace hello_world
     {
         class Program
         {
             static void Main(string[] args)
             {
                 Console.WriteLine("Hello World!");
     ```

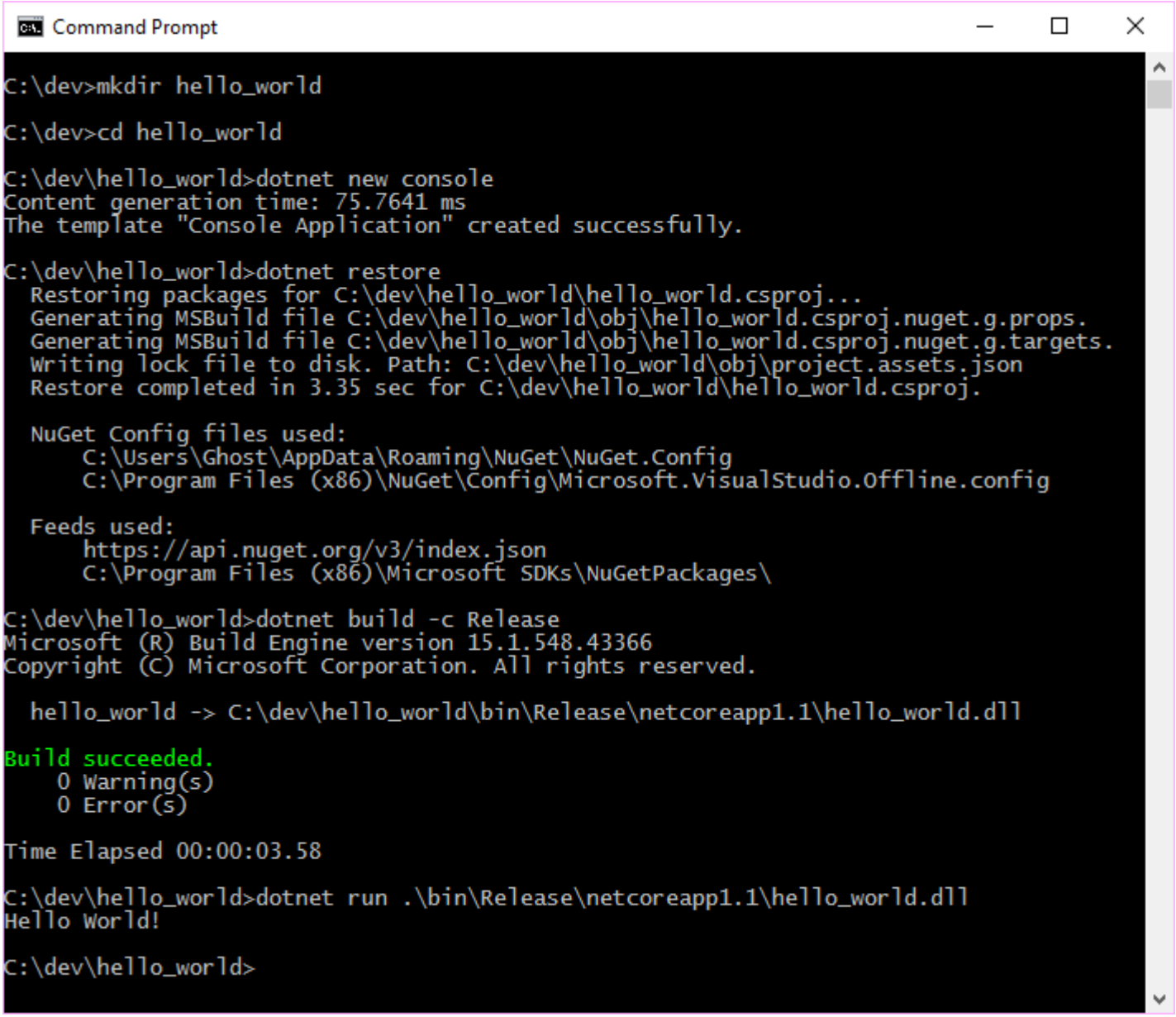
```
        }
    }
}
```

3. Restore the needed packages with `dotnet restore`.

4. *Optional* Build the application with `dotnet build` for Debug or `dotnet build -c Release` for Release. `dotnet run` will also run the compiler and throw build errors, if any are found.

5. Run the application with `dotnet run` for Debug or `dotnet run .\bin\Release\netcoreapp1.1\hello_world.dll` for Release.

Command Prompt output

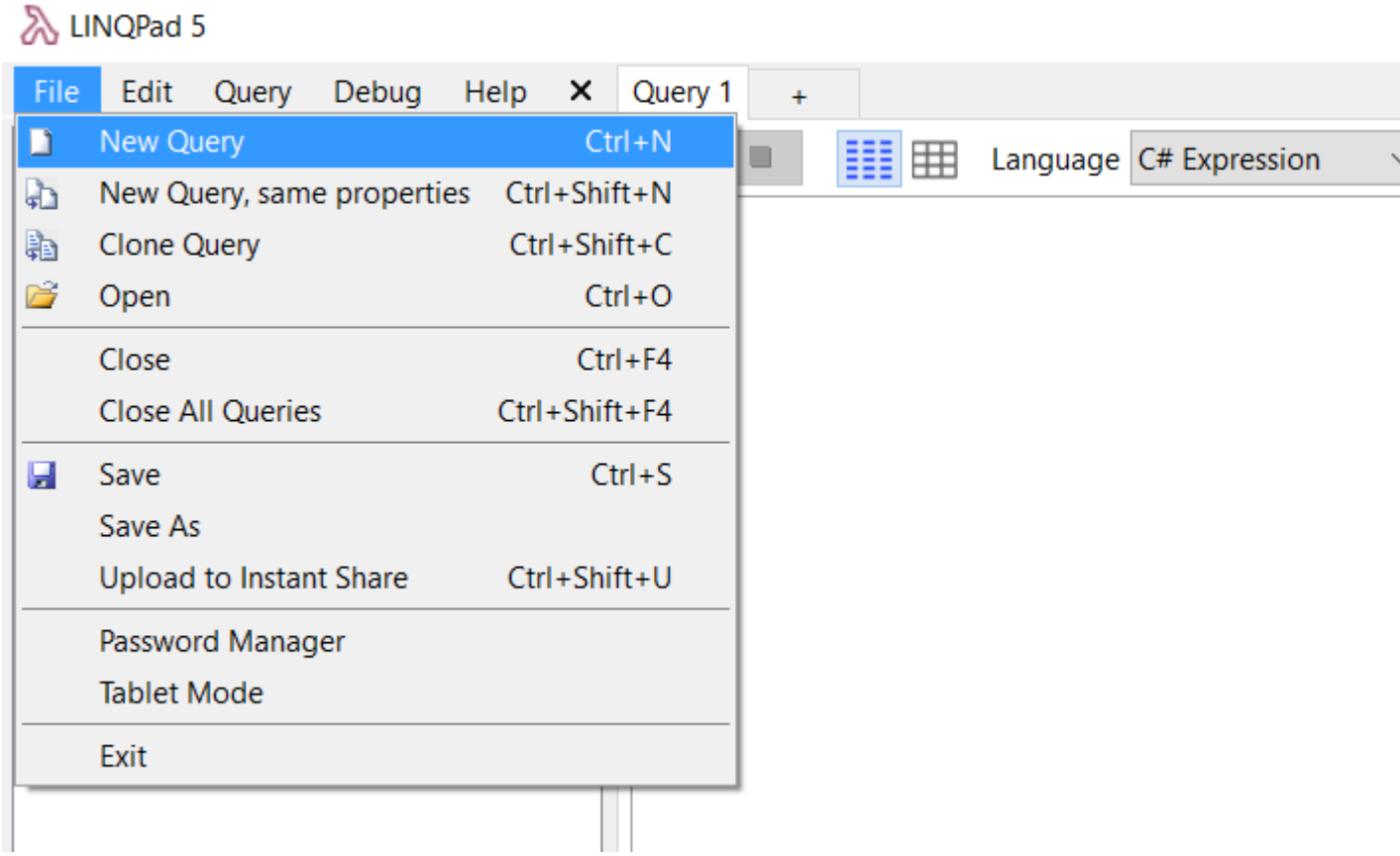


Creating a new query using LinqPad

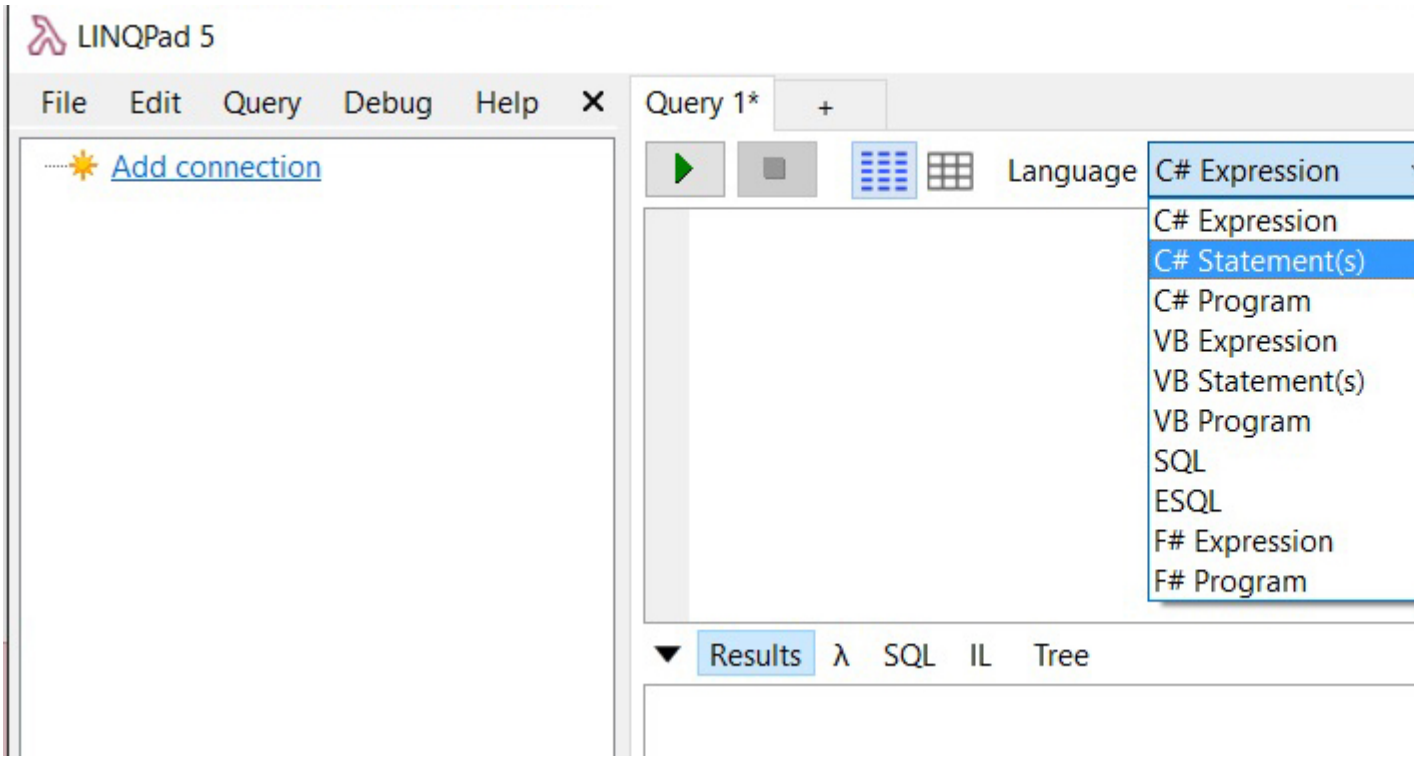
LinqPad is a great tool that allows you to learn and test features of .Net languages (C#, F# and VB.Net.)

1. Install LinqPad

2. Create a new Query (`Ctrl` + `N`)

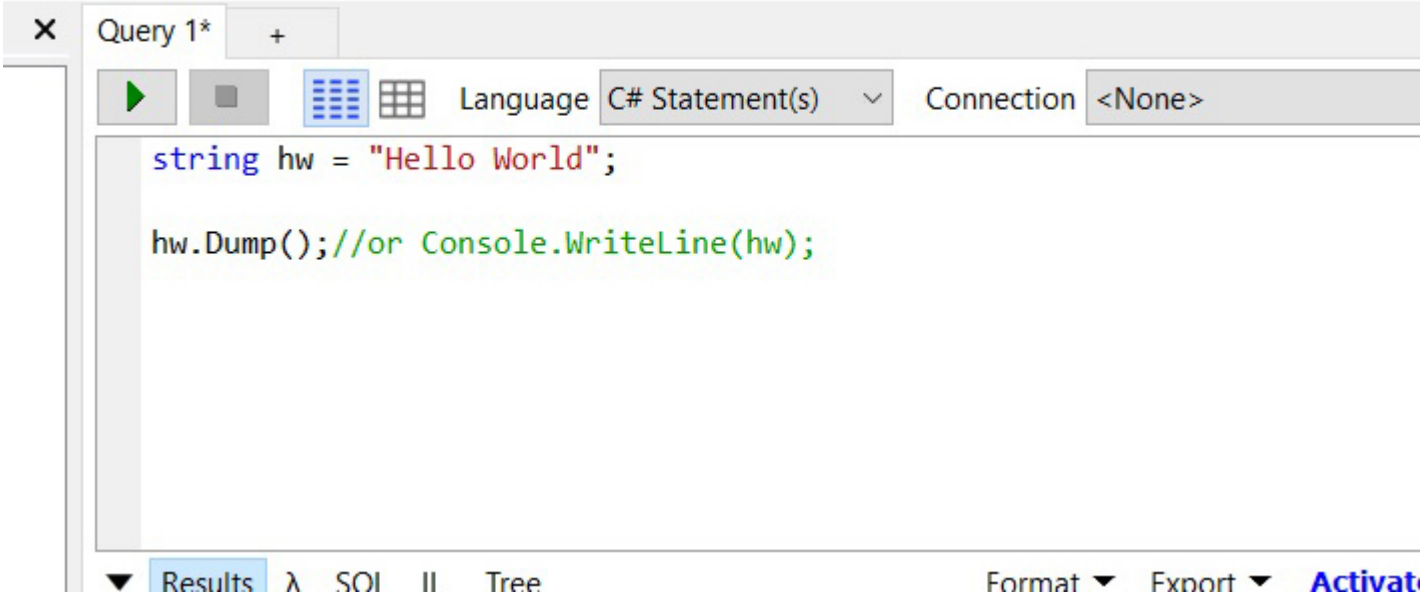


3. Under language, select "C# statements"

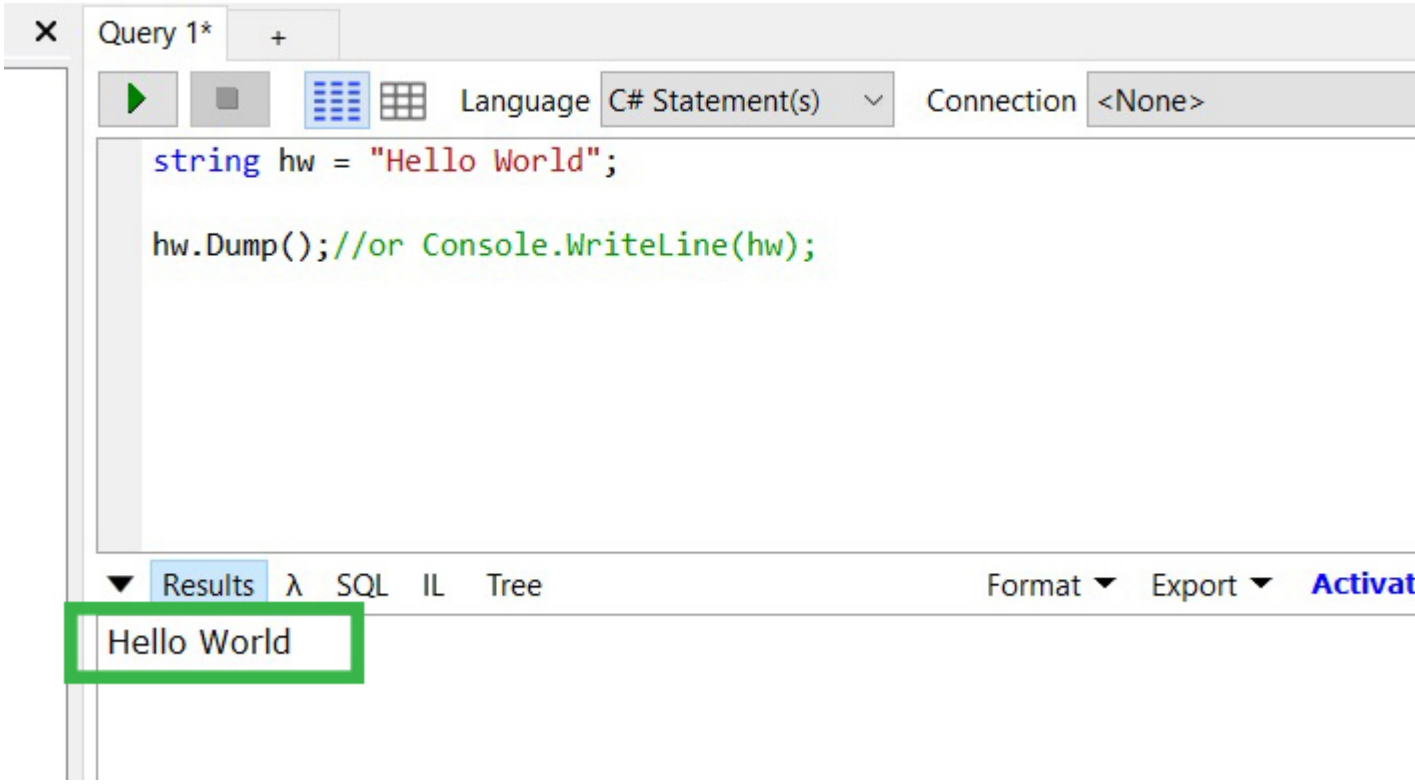


4. Type the following code and hit run (`F5`)

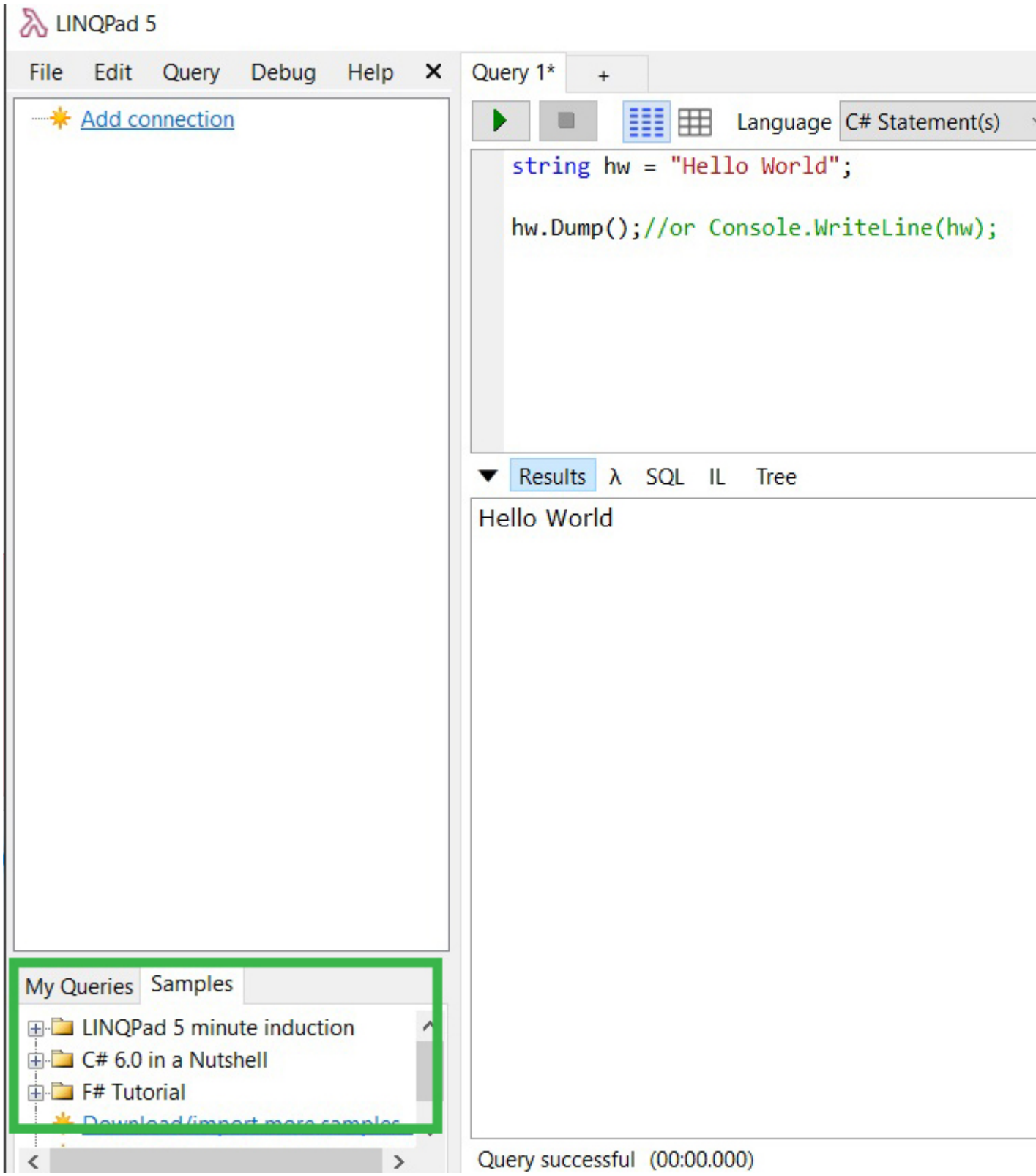
```
string hw = "Hello World";

hw.Dump(); //or Console.WriteLine(hw);
```



5. You should see "Hello World" printed out in the results screen.



6. Now that you have created your first .Net program, go and check out the samples included in LinqPad via the "Samples" browser. There are many great examples that will show you many different features of the .Net languages.



Notes:

1. If you click on "IL", you can inspect the IL code that your .net code generates. This is a great learning tool.