

Order By and Where Lab

Lab 1: Order Songs by Name

Continue using the **Program.cs** file from your last lab.

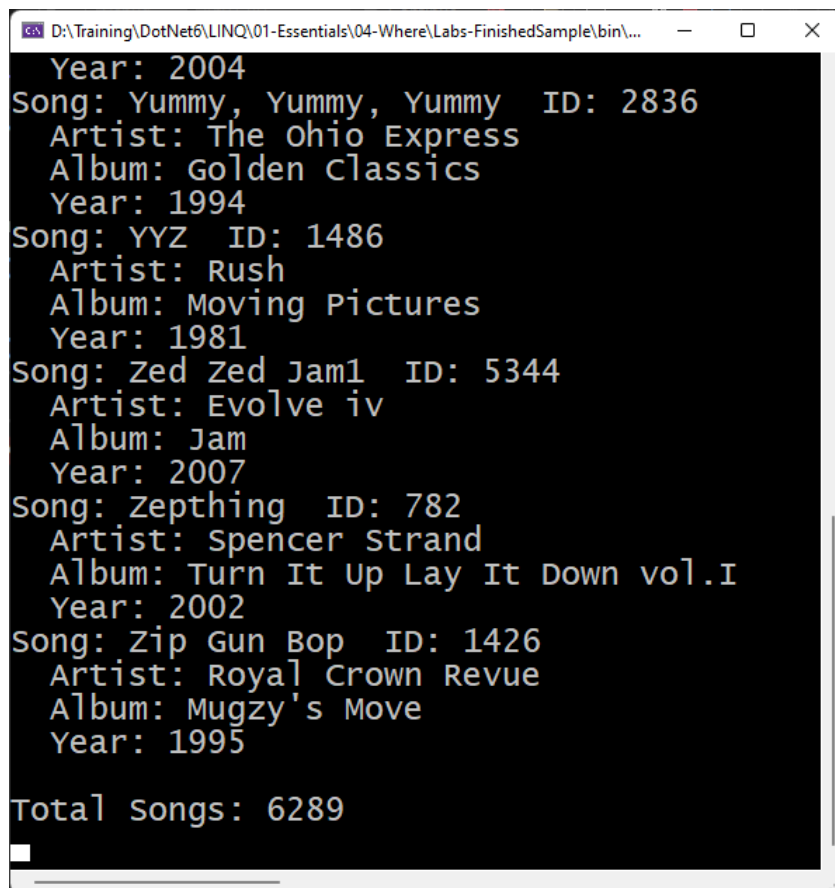
Write a query to select all rows from the **songs** variable and put the results into the **list** variable.

Add an order by clause to order the songs by the **SongName** property.

You may use **either** the query or the method syntax for all labs from here on out.

Try it Out

Run the application and you should see results that look like the following:

A screenshot of a Windows console application window. The title bar shows the file path: D:\Training\DotNet6\LINQ\01-Essentials\04-Where\Labs-FinishedSample\bin\... The console output displays a list of songs, each with its year, name, ID, artist, and album. The songs are ordered by name. The output is as follows:

```
Year: 2004
Song: Yummy, Yummy, Yummy ID: 2836
Artist: The Ohio Express
Album: Golden Classics
Year: 1994
Song: YYZ ID: 1486
Artist: Rush
Album: Moving Pictures
Year: 1981
Song: Zed Zed Jam1 ID: 5344
Artist: Evolve iv
Album: Jam
Year: 2007
Song: Zepthing ID: 782
Artist: Spencer Strand
Album: Turn It Up Lay It Down vol.1
Year: 2002
Song: Zip Gun Bop ID: 1426
Artist: Royal Crown Revue
Album: Mugzy's Move
Year: 1995

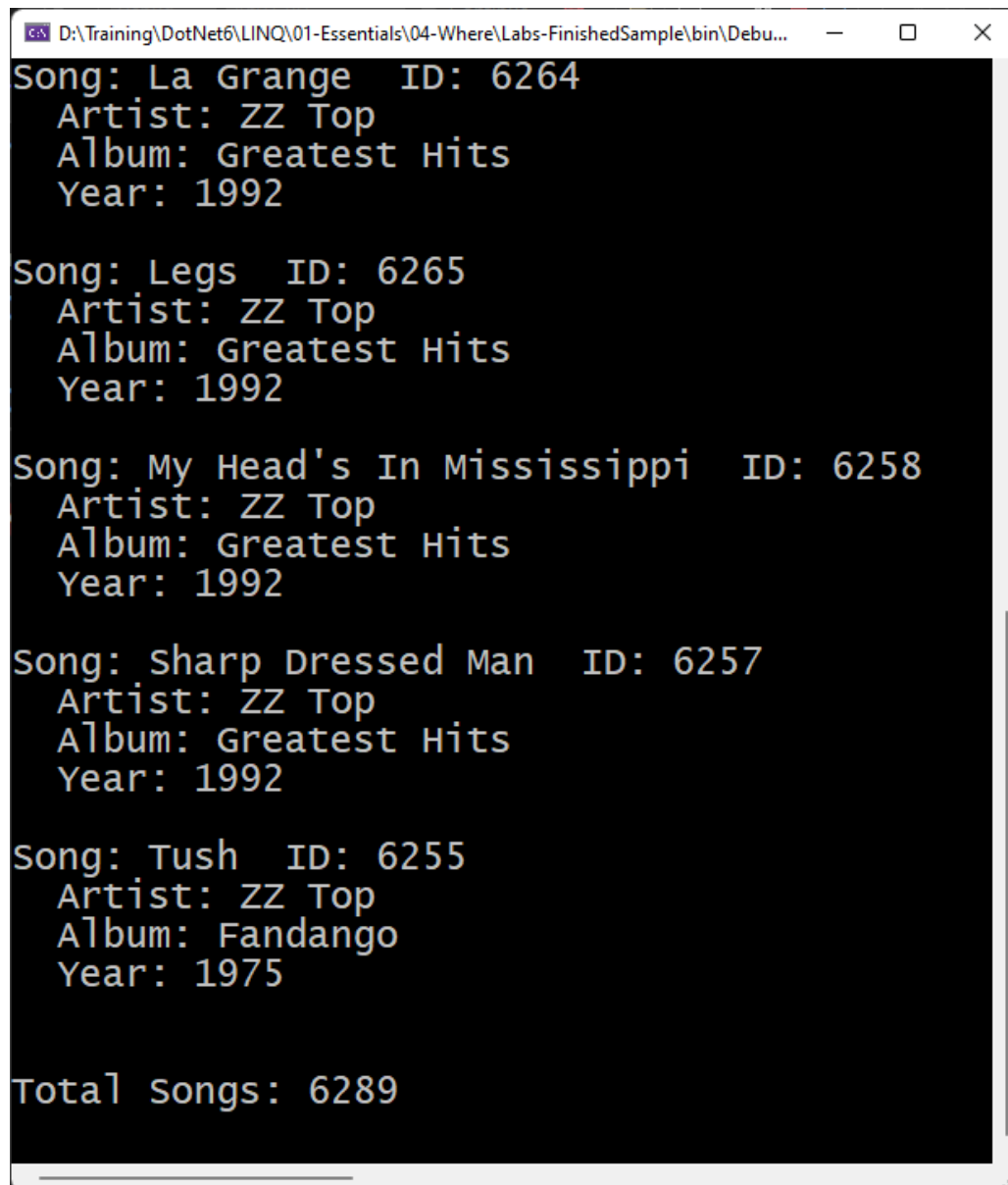
Total Songs: 6289
```

Lab 2: Order Songs by Artist, Name

Add an additional **order by** to the last query to order the songs first by the **Artist** property, then by the **SongName** property.

Try it Out

Run the application and you should see the results that look like the following:

A screenshot of a Windows command prompt window. The title bar shows the file path: D:\Training\DotNet6\LINQ\01-Essentials\04-Where\Labs-FinishedSample\bin\Debu... The window contains the following text:

```
Song: La Grange ID: 6264
Artist: ZZ Top
Album: Greatest Hits
Year: 1992

Song: Legs ID: 6265
Artist: ZZ Top
Album: Greatest Hits
Year: 1992

Song: My Head's In Mississippi ID: 6258
Artist: ZZ Top
Album: Greatest Hits
Year: 1992

Song: Sharp Dressed Man ID: 6257
Artist: ZZ Top
Album: Greatest Hits
Year: 1992

Song: Tush ID: 6255
Artist: ZZ Top
Album: Fandango
Year: 1975

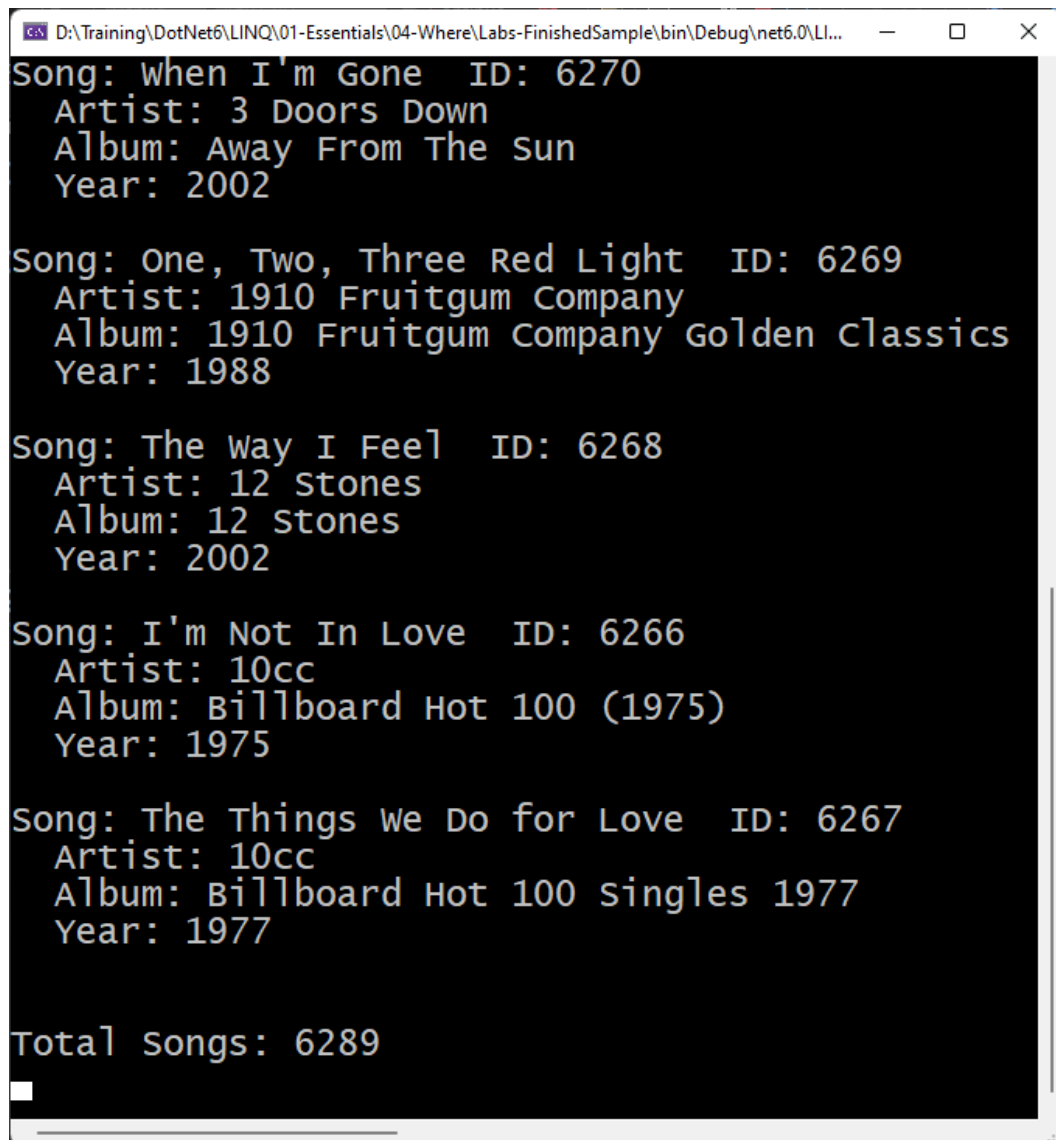
Total Songs: 6289
```

Lab 3: Order Songs by Artist Descending, SongName Ascending

Modify the last query to **order by** to first by the **Artist** property in **descending** order, then by the **SongName** property in **ascending** order.

Try it Out

Run the application and you should see the following results:



```
D:\Training\DotNet6\LINQ\01-Essentials\04-Where\Labs-FinishedSample\bin\Debug\net6.0\LI...
Song: When I'm Gone ID: 6270
Artist: 3 Doors Down
Album: Away From The Sun
Year: 2002

Song: One, Two, Three Red Light ID: 6269
Artist: 1910 Fruitgum Company
Album: 1910 Fruitgum Company Golden Classics
Year: 1988

Song: The way I Feel ID: 6268
Artist: 12 Stones
Album: 12 Stones
Year: 2002

Song: I'm Not In Love ID: 6266
Artist: 10cc
Album: Billboard Hot 100 (1975)
Year: 1975

Song: The Things We Do for Love ID: 6267
Artist: 10cc
Album: Billboard Hot 100 singles 1977
Year: 1977

Total songs: 6289
```

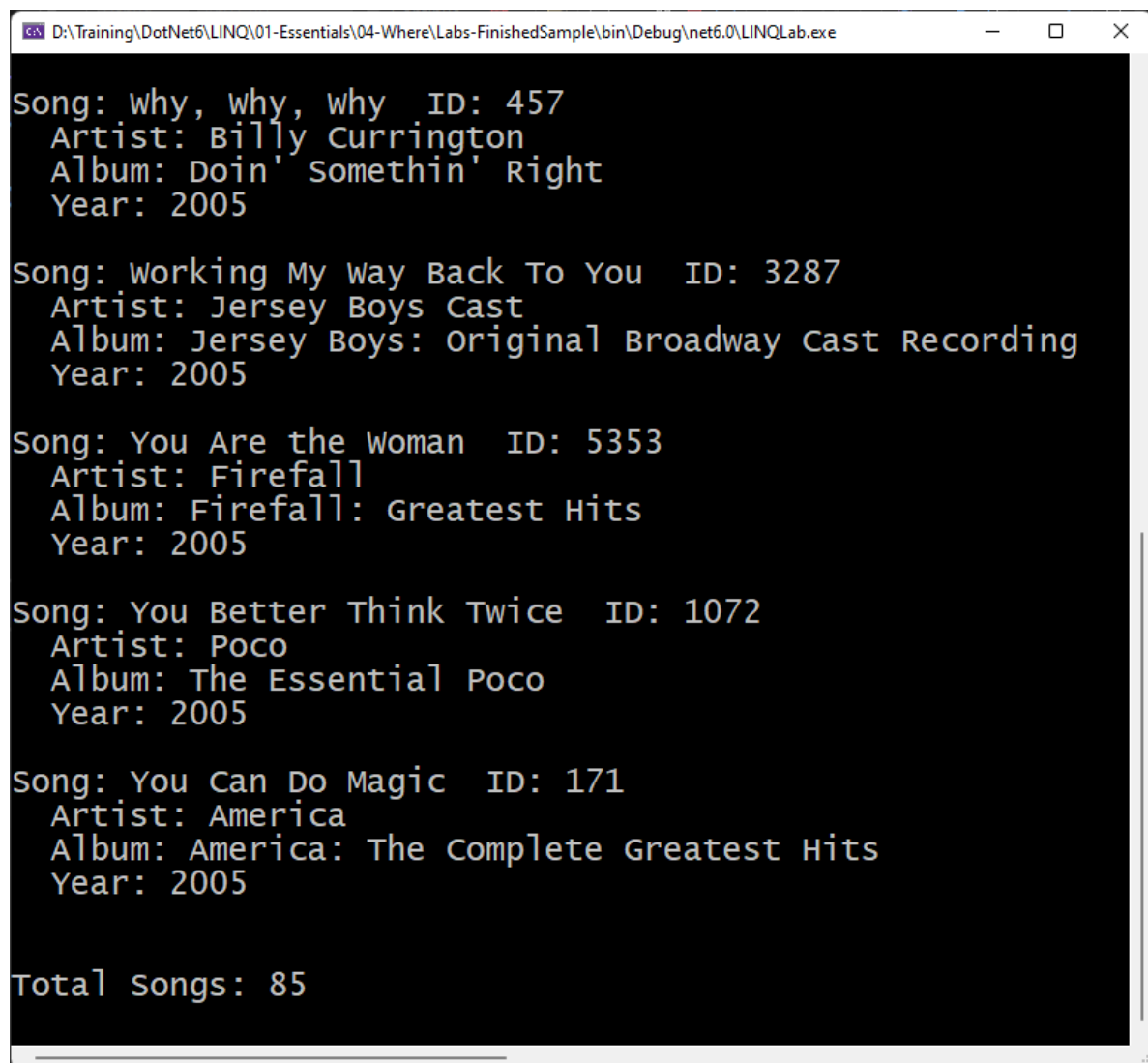
Lab 4: All Songs in Year 2005

Add a **where** clause to select only those songs that have a **Year** property equal to the value 2005.

Modify the order by to just order the results by the **SongName** property.

Try it Out

Run the application and you should see the following results:



```
D:\Training\DotNet6\LINQ\01-Essentials\04-Where\Labs-FinishedSample\bin\Debug\net6.0\LINQLab.exe

Song: why, why, why ID: 457
Artist: Billy Currington
Album: Doin' Somethin' Right
Year: 2005

Song: Working My Way Back To You ID: 3287
Artist: Jersey Boys Cast
Album: Jersey Boys: Original Broadway Cast Recording
Year: 2005

Song: You Are the Woman ID: 5353
Artist: Firefall
Album: Firefall: Greatest Hits
Year: 2005

Song: You Better Think Twice ID: 1072
Artist: Poco
Album: The Essential Poco
Year: 2005

Song: You Can Do Magic ID: 171
Artist: America
Album: America: The Complete Greatest Hits
Year: 2005

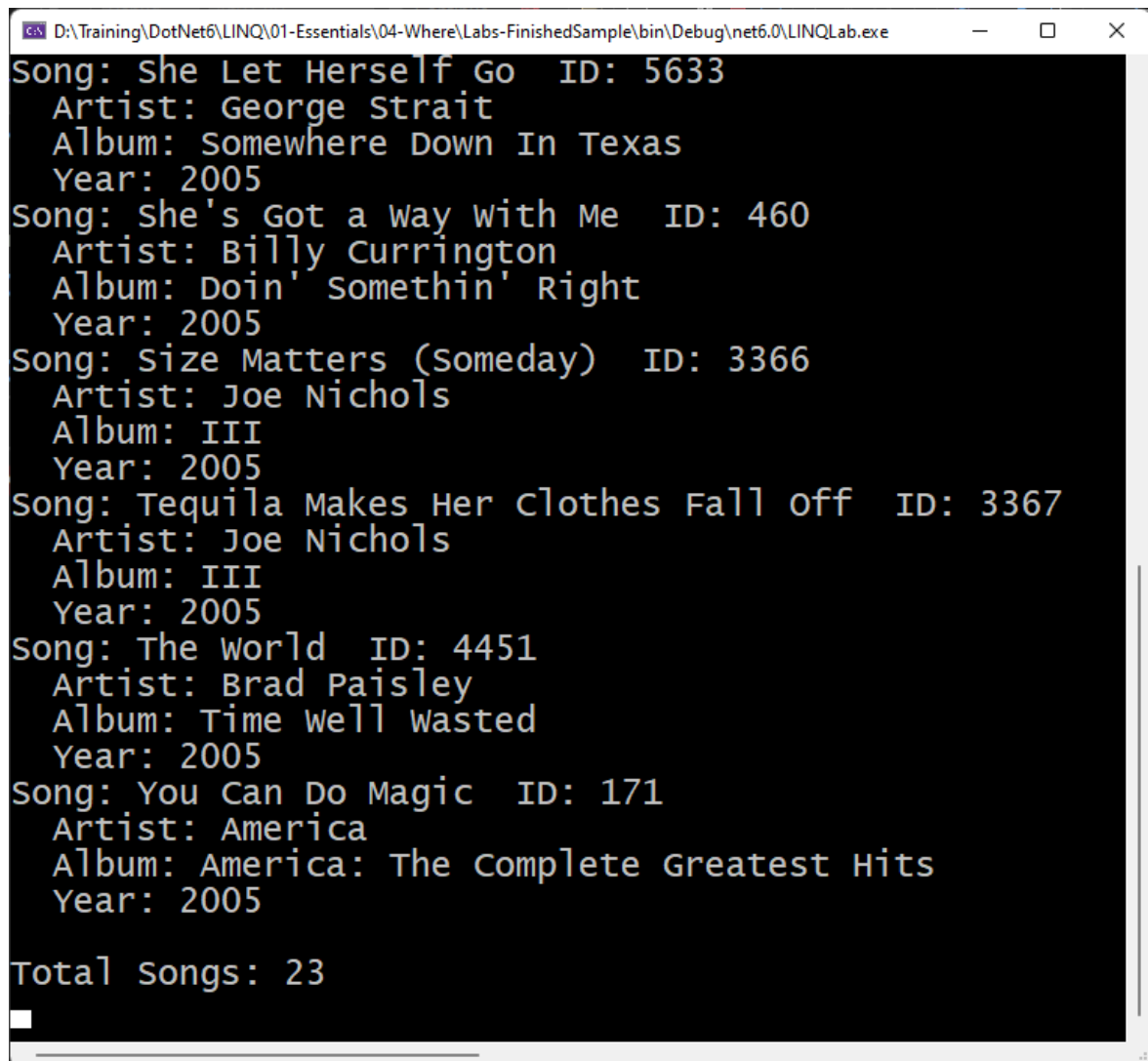
Total Songs: 85
```

Lab 5: All Songs in Year 2005 and Plays > 20 (Query Syntax)

Modify the **where** clause to select only those songs that have a **Year** property equal to the value 2005 and the **Plays** property is **greater than 20**.

Try it Out

Run the application and you should see the following results:



```
D:\Training\DotNet6\LINQ\01-Essentials\04-Where\Labs-FinishedSample\bin\Debug\net6.0\LINQLab.exe
Song: She Let Herself Go ID: 5633
Artist: George Strait
Album: Somewhere Down In Texas
Year: 2005
Song: She's Got a Way With Me ID: 460
Artist: Billy Currington
Album: Doin' Somethin' Right
Year: 2005
Song: Size Matters (Someday) ID: 3366
Artist: Joe Nichols
Album: III
Year: 2005
Song: Tequila Makes Her Clothes Fall off ID: 3367
Artist: Joe Nichols
Album: III
Year: 2005
Song: The world ID: 4451
Artist: Brad Paisley
Album: Time well wasted
Year: 2005
Song: You Can Do Magic ID: 171
Artist: America
Album: America: The Complete Greatest Hits
Year: 2005

Total Songs: 23
```