

LINQ to XML Lab Answers

Lab 1: Get All Songs (Query Syntax)

```
list = (from row in elem.Elements("Song")
        select row).ToList();
```

Lab 1: Get All Songs (Method Syntax)

```
list = elem.Elements("Song").ToList();
```

Lab 2: Add a Where Clause (Query Syntax)

```
list = (from row in elem.Elements("Song")
        where row.Element("GenreId").Value == "30"
        select row).ToList();
```

Lab 2: Add a Where Clause (Method Syntax)

```
list = elem.Elements("Song")
        .Where(row => row.Element("GenreId").Value == "30").ToList();
```

Lab 3: Add an Order By (Query Syntax)

```
list = (from row in elem.Elements("Song")
        where row.Element("GenreId").Value == "30"
        orderby row.Element("SongName").Value
        select row).ToList();
```

Lab 3: Add an Order By (Method Syntax)

```
list = elem.Elements("Song")
        .Where(row => row.Element("GenreId").Value == "30")
        .OrderBy(row => row.Element("SongName").Value).ToList();
```

Lab 4: Create a Class (Query Syntax)

```
list = (from row in elem.Elements("Song")
        orderby row.GetAs<string>("SongName")
        select new Song {
            SongId = row.GetAs<int>("SongId"),
            SongName = row.GetAs<string>("SongName", "n/a"),
            Artist = row.GetAs<string>("Artist"),
            Album = row.GetAs<string>("Album", "n/a"),
            GenreId = row.GetAs<int>("GenreId"),
            KindId = row.GetAs<int>("KindId"),
            TrackNumber = row.GetAs<string>("TrackNumber", "n/a"),
            Rating = row.GetAs<int>("Rating"),
            Year = row.GetAs<int>("Year"),
            ReleaseDate = row.GetAs<DateTime>("ReleaseDate"),
            Plays = row.GetAs<int>("Plays"),
            DateAdded = row.GetAs<DateTime>("DateAdded")
        }).ToList();
```

Lab 4: Create a Class (Method Syntax)

```
list = elem.Elements("Song")
    .OrderBy(row => row.Element("SongName").Value)
    .Select(row => new Song {
        SongId = row.GetAs<int>("SongId"),
        SongName = row.GetAs<string>("SongName", "n/a"),
        Artist = row.GetAs<string>("Artist"),
        Album = row.GetAs<string>("Album", "n/a"),
        GenreId = row.GetAs<int>("GenreId"),
        KindId = row.GetAs<int>("KindId"),
        TrackNumber = row.GetAs<string>("TrackNumber", "n/a"),
        Rating = row.GetAs<int>("Rating"),
        Year = row.GetAs<int>("Year"),
        ReleaseDate = row.GetAs<DateTime>("ReleaseDate"),
        Plays = row.GetAs<int>("Plays"),
        DateAdded = row.GetAs<DateTime>("DateAdded")
    }).ToList();
```