

.NET Framework: New Features

Create a console application.

Create a Person Class with the following attributes:

- Name
- Sex
- Birthdate (optional field)

LINQ

Create a List of Person, it must contain at least 15 persons with different Name, Sex and Birthdate (some elements with null birthdate).

With LINQ do the following queries:

- Report female persons
- Report persons greater than 18 years old
- Report the number of persons greater than 21 years old
- Report the oldest person
- Report the age difference between oldest and youngest person
- Report the average age
- Report the average age by sex
- Report male persons sorted from youngest to oldest
- Check if all persons have birth date filled

Parallel computation

Create an array of 10 integers, each position contains its index.

Display the values using the foreach statement.

Display the values using Parallel foreach.

Check sorting in parallel is randomly

Dynamic Properties (ExpandoObject)

Create a list of four ExpandoObjects with Name and Surname

Using LINQ get and display objects that its name contains "a"