## Курс: «Технология доступа к базам данных ADO.NET»

Тема: Операторы LINQ

```
class Employee
{
  public int Id { get; set; }
  public string FirstName { get; set; }
  public string LastName { get; set; }
  public int Age { get; set; }
  public int DepId { get; set; }
}
class Department
{
  public int Id { get; set; }
  public string Country { get; set; }
  public string City { get; set; }
}
```

```
class Program
static void Main()
List<Department> departments = new List<Department>()
new Department(){ Id = 1, Country = "Ukraine", City = "Donetsk" },
new Department(){ Id = 2, Country = "Ukraine", City = "Kyiv" },
new Department(){ Id = 3, Country = "France", City = "Paris" },
new Department(){ Id = 4, Country = "Russia", City = "Moscow" }
List<Employee> employees = new List<Employee>()
{
new Employee()
Id = 1, FirstName = "Tamara", LastName = "Ivanova", Age = 22, DepId = 2
new Employee()
Id = 2, FirstName = "Nikita", LastName = "Larin", Age = 33, DepId = 1
new Employee()
Id = 3, FirstName = "Alica", LastName = "Ivanova", Age = 43, DepId = 3
},
new Employee()
Id = 4, FirstName = "Lida", LastName = "Marusyk", Age = 22, DepId = 2
},
new Employee()
Id = 5, FirstName = "Lida", LastName = "Voron", Age = 36, DepId = 4
new Employee()
Id = 6, FirstName = "Ivan", LastName = "Kalyta", Age = 22, DepId = 2
},
new Employee()
Id = 7, FirstName = "Nikita", LastName = "Krotov", Age = 27, DepId = 4
}
};
```

1) Упорядочить имена и фамилии сотрудников по алфавиту, которые проживают в Украине. Выполнить запрос немедленно.

- 2) Отсортировать сотрудников по возрастам, по убыванию. Вывести Id, FirstName, LastName, Age. Выполнить запрос немедленно.
- 3) Сгруппировать студентов по возрасту. Вывести возраст и сколько раз он встречается в списке.