Introduction in .Net Core -> Lab 4 (Florin Olariu && Dan Nastasa)

Prerequisites:
   a) Create a Blank solution
   b) Add a Class Library (.NET Core)
   c) Add a Unit Test Project (.NET Core)
   d) Add dependency between Test Project and Class Library
   e) Use the Product class (and encapsulation).
      Product
      Id
      ProductName (max 50)
      ProductDescription(max 200)
      StartDate
      EndDate
      Price (double)

Note: The exercise can be used to learn:
   - LINQ
   - Collections
   - How Repository Pattern works
   - Query syntax
   - Method syntax

Exercise:

1. Using the Product class.
      a. Create Class ProductRepository.
      b. Expose and test the following behaviour using query syntax
            i. RetriveActiveProducts
            ii. RetriveInactiveProducts
            iii. RetriveAllOrderByPriceDescending
            iv. RetriveAllOrderByPriceAscending
            v. RetriveAll -> criteria contains by name
            vi. RetriveAll -> criteria by start date and end date

      c. Expose and test the following behaviour using method syntax
            i. RetriveActiveProducts
            ii. RetriveInactiveProducts
            iii. RetriveAllOrderByPriceDescending
            iv. RetriveAllOrderByPriceAscending
            v. RetriveAll -> criteria contains by name
            vi. RetriveAll -> criteria by start date and end date
      d. For testing Populate an IEnumerable of products using SUT approach(minimum 10 products)

Note:

1. All exercises are mandatory.
2. You will receive your points at the end of the lab.