Introduction to Programming and Application Design

Mandatory Assignment # 1

Create a console application using Visual Studio and C# that performs following activity:

The application has following input/output

*****Welcome to Product Life Calculator*****

Please provide details about product:
Name: Product X
Produced in country: Italia
Production Date: 23-12-2019

******** Here is the Product Life Output ********
Your product named Product X which is produced in Italia is:
X days Old
X hours Old
X minutes Old
X seconds Old

Please note that user is prompted to provide following details:

Product Name:
Production country:
Production Date: in strict format of (dd-MM-yyyy) i.e. 31-01-1996

Once user has provided details the app presents user information nicely and also presents product's age in days, hours, minutes and seconds.
Note:because you are only taking date input and not time input as well hence hours, minutes and seconds calculations will have an error of maximum 24 hours.

To do:

Make a class named ***LifeCounter*** and create following methods/functions:

a) public string GetProductInformation(string productName, string country, DateTime productionDate)
b) public int DaysPassedSinceProduction(DateTime productionDate)
c) public Double HoursPassedSinceProduction(DateTime productionDate)
d) public Double MinutesPassedSinceProduction(DateTime productionDate)
e) public Double SecondsPassedSinceProduction(DateTime productionDate)

Hints:

- You can convert string to date with your choice of date format with following function
  DateTime.ParseExact(Console.ReadLine(), "dd-MM-yyyy", null);
  for example DateTime.ParseExact("20-09-2020", "dd-MM-yyyy", null);
- DateTime.Now is a dotnet library property that returns current datetime
- TimeSpan function can be used to find Days/Hours/Minutes/Seconds in following way
  TimeSpan timeSpan = tilDate - fromDate;
  int totalDays = timeSpan.TotalDays

Note: Please write the application code and submit on exam portal.