Assignment 5 – Due Tuesday, 10/10/2023 at 11:59 PM.

Read Ch. 13

When reading this chapter, carefully review the videos and all 8 detailed tutorials, this chapter is incredibly well written and detailed. Some of you may already know about Databases, please do the steps anyway to be sure your familiar with the nuances of connecting C#.

For your submissions create and utilize databases local to the project (as described in 13.3) . This will make submission much simpler, and will avoid the need to export the databases you create as part of this homework.

Please make sure your able to perform the actions in each tutorial.

Complete 1-23 multiple choice, 1-11 T/F

Complete Programming Problems 13.1, 13.4, 14.5

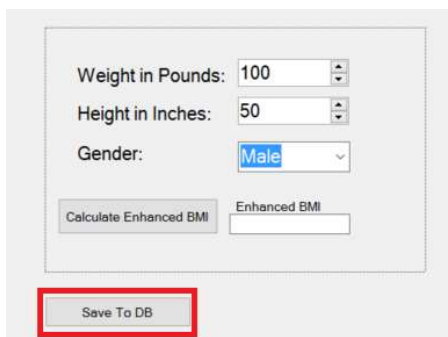**Suplemental Programming Challenge(s)**

Simple Dataware BMI (no search)

1. Update your GUI program for a BMI Calculator from before. You may reuse your original code, start over, or use a template from the instructor. Be sure your design includes a button for executing the BMI Calculation, textboxes for data entry and a Label for displaying the results.

   In addition to the original code, add a button that stores these values, as well as a date time stamp that indicates when the calculation occurred.

$$Enhanced\ BMI = \frac{(Weight\ in\ Pounds)}{(Height\ in\ Inches)^2} \times K \times G$$

Constants:
K=240
G= 1.4 (if female)
G= 1.6 (if male)


```
CREATE TABLE [dbo].[EnhancedBMI]
(
    [Id] INT IDENTITY NOT NULL PRIMARY
    [NAME] VARCHAR(50) NULL,
    [Gender] VARCHAR(20) NULL,
    [Weight] INT NULL,
    [Height] INT NULL,
    [EnhancedBMI] FLOAT NULL,
    [DateTimeStamp] DATETIME2 NULL
)
```

Suggested Form Layout   *Suggested Table Structure*

Submission:

Please submit via Blackboard.

For multiple choice problems, submit answers in a text file.

For Programming Problems, create one solution that contains 1 separate project for each problem. Zip up the solution and submit.

So, for example,

- **Solution Name: Assignment5**
- **Project Names: Prob13.1.csproj, Prob13.4.csproj, Supplemental1.csproj**