**Lab: 01**

Advanced Object-Oriented Programming

PROG2200

Date: September 28, 2022

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# General

## Demonstrate that you have made multiple commits as you went through the Learning C# course: at least 5.

<https://github.com/Diana-W0420915/PROG2200>

Graphical user interface, text, application, email

Description automatically generated

Figure 1

## Show that you have the right README and .gitignore for Visual Studio. Update the Readme file to state your name and your student number. Also, arrange your project according to the structure outlined above.

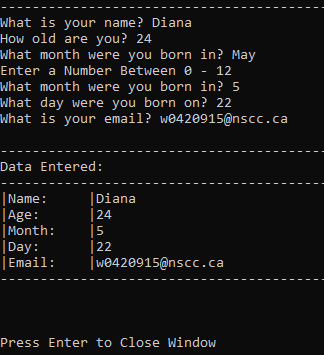
<https://github.com/Diana-W0420915/PROG2200>

|  |  |
| --- | --- |
| Figure 2 README.md with my name and student number written inside | Figure 3 .gitignore for Visual Studio |

# Module 1: Basics

## Take the Challenge 1 (Multiple Choice) and add two more questions of your choices to it.

### Output Example



### Code Main Function

Text

Description automatically generated

### Code Sample

Text

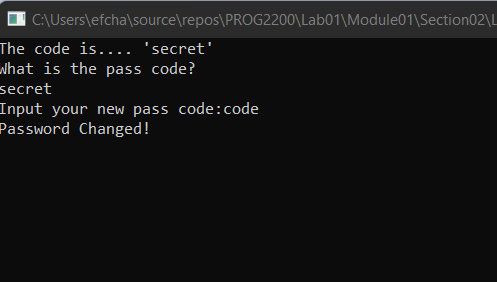
Description automatically generated

## Alter Challenge 2 (Passcode) so that the user can change the password after authenticating.

Question: Is an else...if the best option for checking the secret? Simplify the code to not use

else…if as described.

### Output Examples

Text

Description automatically generated

### Code Main Function

Graphical user interface, text, application

Description automatically generated

### Code Sample

Text

Description automatically generated

## Change Challenge 3 (Loop Counting) to be only 2 loops (instead of 3) with a conditional

### Output Examples

Shape, arrow

Description automatically generated

### Code Main Function

Text

Description automatically generated

### Code Sample

Text, application

Description automatically generated

## In Challenge 4 (Student Manager) there are two arrays: studentNames and studentGrades. How could you replace these with a single two-dimensional array?

### Output Examples

Text

Description automatically generated

### Code Main Function

Graphical user interface, text, application, email

Description automatically generated

### Code Sample

Graphical user interface, text, application

Description automatically generated

# Module 2: OOP in C#

## Challenge 5

Change the Survey console app to be a full Zodiac Calculator. Requirements: Also take the day of the month as an input. Use a switch statement to calculate what star sign matches the month and date. You should validate that the user entered a number for month and date.

Text

Description automatically generated

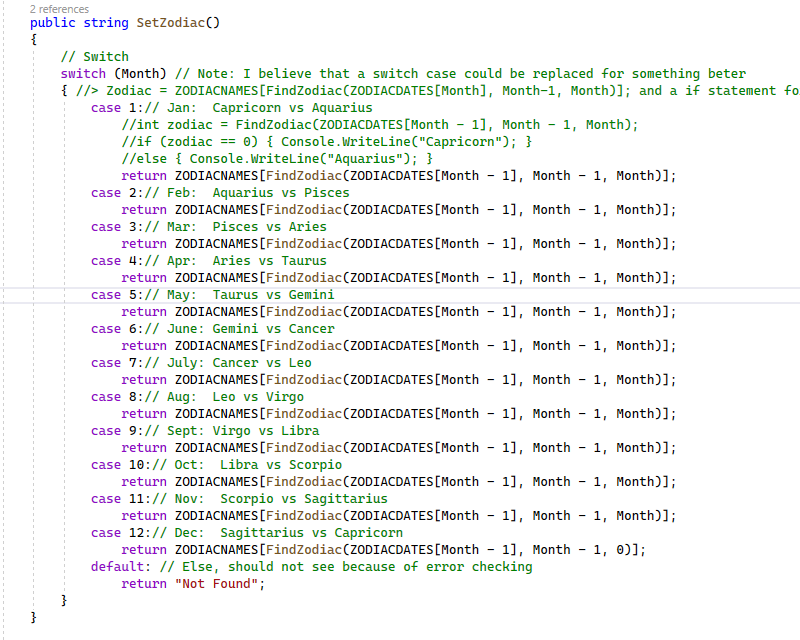
### Code Main Function

Text

Description automatically generated with low confidence

### Code Sample

Please read commented notes I mentioned that this could be done with one if statement rather than the switch and case here. Under case 1 was the scheme I did originally.



# Module 3: Exception Handling & Debugging

## Section 1

### Output Example

Text

Description automatically generated

### Code Main Function

Text

Description automatically generated

### Code Sample

A picture containing timeline

Description automatically generated

# Module 4

## Section 1 - Enums

### Output Example

Text

Description automatically generated

### Code Samples

**Text

Description automatically generated**

**Table

Description automatically generated with low confidence**

## Section 2 - out vs ref

### Output Example

Text

Description automatically generated

### Code

**Text, application

Description automatically generated**

## Section 3 - Interfaces

### Output Example

Text

Description automatically generated

### Code Main Function

Graphical user interface, text, application, email

Description automatically generated

### Code Samples

Graphical user interface, text

Description automatically generated

**Graphical user interface, text, application

Description automatically generated**

## Section 4 - Events

### Output Example

Text

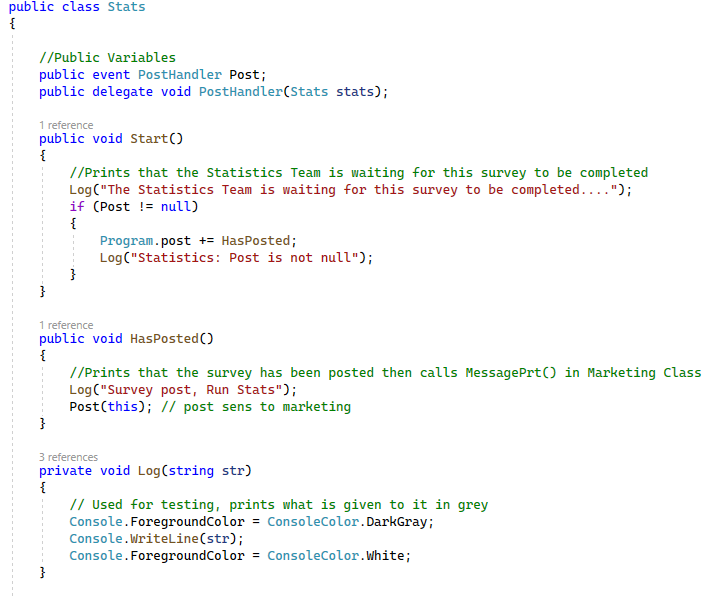
Description automatically generated

### Code Main Function

Graphical user interface, text, application

Description automatically generated

### Code Sample



**Graphical user interface, text, application, email

Description automatically generated**