C# BASICS

Training Assignments

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RECORD OF CHANGES

No	Effective Date	Change Description	Reason	Reviewer	Approver
1.	01/Oct/2018	Create new	Draft		
2.	01/Jun/2019	Update template	Fsoft template	DieuNT1	

Contents

CODE:	NPL.M.A008
TYPE:	MEDIUM
LOC:	190
DURATION:	180 MINUTES

Assignment 8: Named and Optional Arguments

Objectives:

- Understand and practice Optional Arguments and Named Arguments.
- Understand and practice with Extension Method.
- Practice code in Visual Studio.
- Follow coding convention.

Business needs:

- TBD

Prerequisites:

- Working environment: Visual Studio 2013 or higher.Practice code in Visual Studio
- Each exercise is one project inside 1 solution.

Technologies:

The product implements one or more technology:

- Optional Arguments
- Named Arguments
- Extension method
- C# basic

IO:

- Console windows

Technical Requirements:

- Write on console application, comply with Fsoft coding conventions
- Solution name must be **NPL.M.A008.**
- Must create a project called **NPL.M.A008.Exercise** to complete the following exercises.

1. Exercise 1:

Build Student class with the following properties:

- Name: string
- Class: string.
- Gender: string.
- Relationship: string.
- EntryDate: Date.
- Age: int.
- Address: string.
- Mark: decimal.
- Grade: string.

2. Exercise 2:

Build the constructor using the Optional Arguments as follows:

- Relationship: Default value is “Single”
- Mark: Default value is 0.
- Grade: Default value is F

3. Exercise 3:

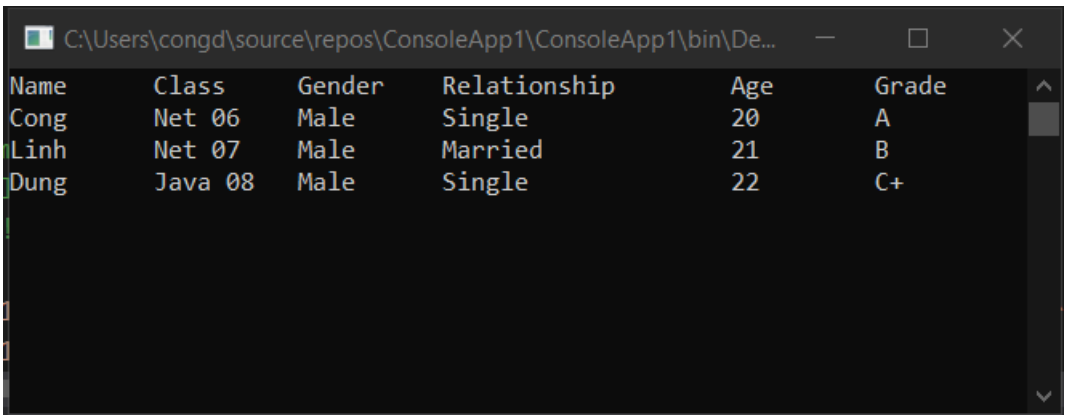
The build method uses the Optional Arguments as follows:

Graduate method construction has parameter of gradePoint, default value is 0.
Set value for Grade according to the table below:

Grades	Grade Points	Numerical Scale of Grades
A	4.0	85 – 100%
A-	3.7	80 – 84%
B+	3.3	75 – 79%
B	3.0	70 – 74%
B-	2.7	65 – 69%
C+	2.3	60 – 64%
C	2.0	55 – 59%
D	1.0	50 – 54%
F (Fail)	0	0 – 49%

4. Exercise 4:

Implement a ToString(name, class, gender, relationship, age, grade) method. Returns the formatted string of information based on the passed parameter.



5. Exercise 5:

Perform Student object initialization, using Optional Arguments, Named Arguments.

Implement the Graduate method call in both cases: there is transmission parameter, no parameter transmission.

The implementation calls the ToString method in both cases: there is a transmission parameter, no parameter transmission.

Commenting on the benefits of using Optional Arguments, Named Arguments.

Note the rules when using Optional Arguments, Named Arguments.