



## ***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  |          |
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| CODE:   | NPL.M.A001  |       |            |       |        |      |  |           |             |
| TYPE:   | MEDIUM  |       |            |       |        |      |  |           |             |
| LOC:  |   |       |            |       |        |      |  |           |             |
| DURATION:   | 120 MINUTES   |       |            |       |        |      |  |           |             |

## Assignment 1: Basic Project

### Objectives:

- » Understand and practice basic of C#.
- » Practice code in Visual Studio
- » Follow coding convention.

### Business needs:

- » TBD

### Working requirements:

- » Working environment: Visual Studio 2013 or higher.
- » Practice code in Visual Studio
- » Each exercise is one project inside 1 solution.
- » Delivery: Source code, deployment and testing, reviewing evident packaged in a compress archive.

### Product architecture:

- » N/A

### Technologies:

The product implements one or more technology:

- » C# basic
- » Control of Flows

### IO:

- » Console windows

### Technical Requirements:

- Solution name must be **NPL.M.A001**.
- Must create projects corresponding to each exercise:  
**NPL.M.A001.Exercise1.**  
**NPL.M.A001.Exercise2.**  
**NPL.M.A001.Exercise3.**  
**NPL.M.A001.Exercise4.**

**1. Exercise 1**

Write code to evaluate of a polynomial:

$$y = 2x^3 - 6x^2 + 2x - 1$$

Example: at  $x = 1$ ,  $y = -3$

Complete your code inside **NPL.M.A001.Exercise1**.

Run and check the result

**Estimated time:** 30 mins

**2. Exercise 2**

Write code to convert number from base 10 to base 2 (natural number to binary number).

Example: 13 -> 1101

Complete your code in **ConvertToBinary()** method inside **NPL.M.A001.Exercise2**.

Run and check the result

**Estimated time:** 30 mins

**3. Exercise 3**

Write code to print list n number of Fibonacci. Each number is printed in 1 line.

Example: input number 5

1

1

2

3

5

Complete your code in **PrintFibonacci()** method inside **NPL.M.A001.Exercise3**.

Update all comments in the project

Run and check the result

**Estimated time:** 30 mins

**4. Exercise 4**

Write code to check a positive integer is prime number or not.

Example:

5 is prime number

6 is NOT prime number

7 is prime number

Complete your code in **CheckPrimeNumber()** method inside **NPL.M.A001.Exercise4**.

Update all comments in the project

Run and check the result

**Estimated time:** 30 mins