

Case Code : CS-COMP6364-Var03

Learning Outcomes

- Describe the additional features of OOP
- Construct a program using additional features of OOP

Topic

- Session 05 – Wrapper Class and Method

Sub Topics

- Exception Handling
- Math Method
- Wrapper Class

Soal

Case

Zendy is a student that just got a subject in his college about OOP. He wants to create a program about Binary numbers. For your information, binary numbers let you represent any amount you want using just two digits: 0 and 1. Now, help him to make a program based on these rules:

- The program consists of 3 menus:
 1. **Binary Number**
 2. **Binary Number with step**
 3. **Exit**
- If user chooses “**Binary Number**”, then the program will:
 - Ask user to **input** a number. Validate the **number** must be between **1** and **100**.
 - Then show the binary number.
- If user chooses “**Binary Number with step**”, then the program will:
 - Ask user to **input** a number. Validate the **number** must be between **1** and **100**.
 - Then show the step of calculating the binary number.
- If user chooses “**Exit**”, then the program will end.
- Do not forget to use Exception Handling to handle any possible errors

Printscreen of main menu

```
Binary Number Calculation
=====
1. Binary Number
2. Binary Number with step
3. Exit
Choose :
```

Print screen of menu 1 “Binary Number”

```
Input the number [1-100] : 123
Input the number [1-100] : 0
Input the number [1-100] : 7

The Result of Binary Number 7: 111
```

Print screen of menu 2 “Binary Number with step”

```
Input the number [1-100] : 123
Input the number [1-100] : 0
Input the number [1-100] : 7

The Result of Binary Number
Step 1: 7/2, Remainder = 1, Quotient = 3
Step 2: 3/2, Remainder = 1, Quotient = 1
Step 3: 1/2, Remainder = 1, Quotient = 0

7 in decimal = 111 in binary
```

Print screen of menu 3 “Exit”

```
Thank you and have a nice day.. ^^
```

If anyone does not understand, ask your assistant!