

LAB EXERCISE 10: EXCEPTION HANDLING

INSTRUCTION:

1. Do the Tutorial and view the output. Answer the given Question for each tutorial given.
-

TUTORIAL

- A. Write a program that gets a person's age and replies with the year in which the person was born. Notice the program takes into consideration whether the person already had a birthday this year.

First, create a class name AgeInputVer1. And write this coding.

```
import javax.swing.*;
public class AgeInputVer1 {
    private static final String DEFAULT_MESSAGE = "Your Age: ";
    public AgeInputVer1 () {

    }
    public int getAge () {
        return getAge (DEFAULT_MESSAGE);
    }
    public int getAge(String prompt) {
        String inputStr = JOptionPane.showInputDialog (null, prompt);
        int age = Integer.parseInt (inputStr);
        return age;
    }
}
```

On the main class, write the coding shows below:

```

public class Ch8AgeInputMain {

    public static void main(String[] args) {
        GregorianCalendar today;
        int age, thisYear, bornYr, answer;

        AgeInputVer1 input = new AgeInputVer1();
        age = input.getAge("How old are you?");

        today = new GregorianCalendar();
        thisYear = today.get(Calendar.YEAR);

        bornYr = thisYear - age;

        answer = JOptionPane.showConfirmDialog(null,
            "Already had your birthday this year?", "",
            JOptionPane.YES_NO_OPTION);

        if (answer == JOptionPane.NO_OPTION) {
            bornYr --;
        }
        JOptionPane.showMessageDialog(null, "You are born in " + bornYr);
    }
}

```

Compile and Run.

- a. Input the value of your age. What happened?
 - b. Now, input the value by spells out your age. Instead of 9, write nine. What will happened? Do you get any error message on the output pane?
- B. Using the same code program, now let insert `int age = Integer.parseInt(inputStr)` statement inside the try block and the statements we want to be executed in response to the thrown exception in the matching catch block.

```
public int getAge(String prompt){
    String inputStr ;
    int age;

    while (true){
        inputStr = JOptionPane.showInputDialog (null, prompt);
        try {
            age = Integer.parseInt(inputStr);
            return age;
        } catch (NumberFormatException e){
            JOptionPane.showMessageDialog(null, "" + inputStr
                + " is invalid\n"
                + "Please enter digits only");
        }
    }
}
```

Compile and run the coding.

- a. Input the value for your age. What happened?
- b. And again, run the coding and spells out your age into the input pane. What will happen?