



**NMK20703 OBJECT ORIENTED PROGRAMMING
LAB MODULE 8**

EXCEPTION HANDLING

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TASK 1

Question

- A. In Netbeans, type the following program.
[dalam Netbeans, taip program berikut]

```
package exception_handling;

import javax.swing.*;

public class NumberException {

    public static void main(String[] args) {
        int number;

        try {
            number = Integer.parseInt(
                JOptionPane.showInputDialog(null, "input"));
            if (number < 0) {
                throw new Exception("Negative Number");//input -ve
            }
        } catch (NumberFormatException e) { //input non integer
            System.out.println("Cannot convert to int");
        } catch (Exception e) {
            System.out.println("Error: " + e.getMessage());
        }
    }
}
```

Exercise: Based on what you have done, answer the following questions

1. Run the project and determine the display output when you provide these inputs (you need to run the project and key in ONE input only. For the next input, run the project again).
***For practice purposes, you should GUESS the answer first based on the code given, and then you run the program and see whether your answer is the same or not. If it is not the same, try to improve how you read the code.*

No.	Input	Output
1.	30	Nothing
2.	0	Nothing
3.	12.9	Nothing
4.	- 6	Error : Negative Number
5.	5601322	Nothing
6.	0.00	Nothing
7.	**	Cannot convert to int
8.	Selamat hari raya	Cannot convert to int
9.	-30	Error : Negative Number
10.	6906	Nothing

2. In one sentence, explain what the program is expecting (what kind of input is valid, what happens if the input is not valid, etc).
Negative number, symbol and alphabets is not valid. So error will be printed.

3. Add the clause (in the circle below) after the last catch statement of your program:

```
    } catch (Exception e) {  
        System.out.println("Error: " + e.getMessage());  
    } finally {  
        System.out.println("That's all folks!");  
    }
```

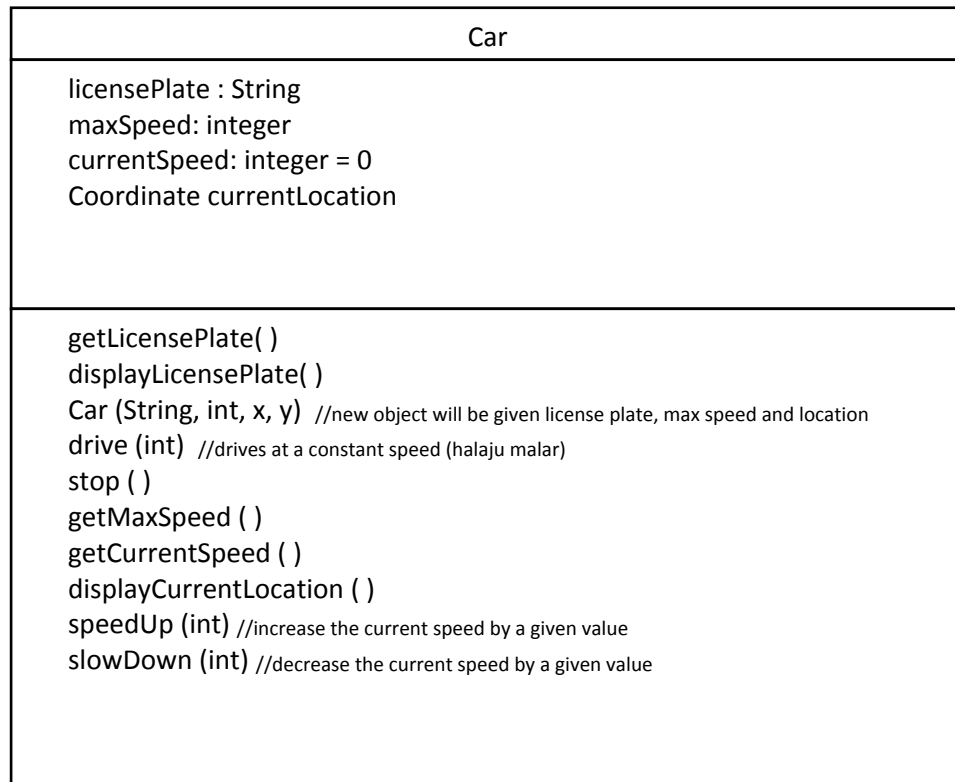
- a. Run the program using the inputs in question 1. What can you say about the changes in the program?

The message from finally will be displayed with the error.

Error: negative number

That's all folks!

4. What is the difference in the output for System.out.println() and System.out.print() ?
5. Add another java class in myPackage project (yang awak buat tadi) based on the class diagram below:
(You may need to refer to your textbook or the online Java Tutorial for some of the syntax)



6. Modify the pilot program so that it tests the Car class.

```

package coordinate;
import javax.swing.JOptionPane;

public class CarTester {

    public static void main(String args[])
    {
        Car kereta1 = new Car();
        int number = 0;
        try {
            number = Integer.parseInt(
                JOptionPane.showInputDialog(null, "Input max speed:"));
            if (number < 0) {
                throw new Exception("negative number");
            }
        } catch (NumberFormatException e) {
            System.out.println("Cannot convert to int");
        } catch (Exception e) {
            System.out.println("Error: " + e.getMessage());
        } finally {
            System.out.println("That's all folks!");
        }
        kereta1.setMaxSpeed(number);
        System.out.println("the maximum speed is ==> " + kereta1.getMaxSpeed());
    }
}

```