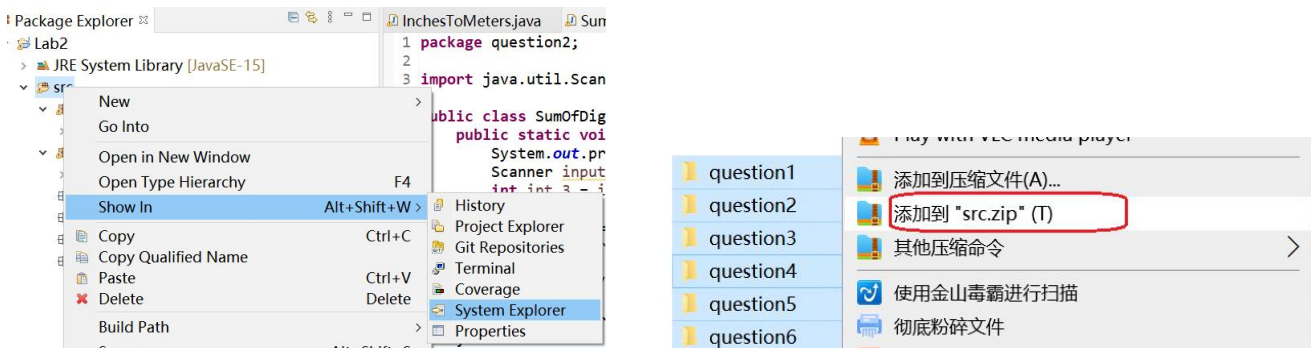


Lab 2 Requirements

Create a new Eclipse workspace named "OOP" on the desktop of your computer. Then, create a Java Project named "Lab2". For each question below, create a new package in the Lab2 project (right click the src -> New -> Package). Call each package by its question number: "question1", "question2", etc. Then, create your class under the corresponding package (right click question1 -> New -> Class). At the end of the lab, create a ZIP archive of the src. Right click src -> Show In -> System Explorer, you'll see the src folder. Click the src folder, you'll see all your packages (questions1, question2...), zip up all folders inside as below.



Rename your src.zip to "Lab2_1234567890.zip" (replace 1234567890 with your student ID number). Upload the ZIP file on iSpace.

Coding style: Follow the Java Naming Conventions for variables, methods, and class STRICTLY. See lecture notes if you don't remember. **Program documentation:** Comment! Comment! and more Comment!

question 1 (Reviewed)

Write a Java program called **InchesToMeters** which reads a number in inches and converts it to meters.

Note: 1 inch = 0.0254 meter.

Test Data: Input a value for inches: 1000.0

Expected Output: 1000.0 inches is 25.4 meters

Hint:

```
import java.util.Scanner;

public class InchesToMeters {
    public static void main(String[] args) {
        System.out.print("Input a value for inches: "); // hint for input
        Scanner input = new Scanner(System.in); // create a Scanner
        double inch = input.nextDouble(); // obtain the input value
        .....
    }
}
```

question 2 (Mandatory)

Write a Java program called **SumOfDigits** which reads an integer between 0 and 1000 and adds all the digits in the integer.

Test Data:

Input an integer between 0 and 1000: 565

Expected Output:

The sum of all digits in 565 is 16

question 3 (Mandatory)

Write a program called **CheckPassFail** which prints **"PASS"** if the integer variable **"mark"** is more than or equal to **50**; or prints **"FAIL"** otherwise. The program must always print **"DONE"** before exiting.

question 4 (Mandatory)

Write a program called **CheckOddEven** which prints **"Odd Number"** if the integer variable **"number"** is odd, or **"Even Number"** otherwise. The program must always print **"BYE!"** before exiting.

question 5 (Mandatory)

Write a program called **PrintNumberInWord** which prints **"ONE"**, **"TWO"**,... , **"NINE"**, or **"OTHER"** if the integer variable **"number"** is **1, 2,... , 9**, or some other value, respectively.

The result must be printed twice:

once using a "nested-if" statement; and once using a "switch-case" statement.

question 6 (Optional)

Write a program called **TimeTable** that prints the multiplication table of **1** to **9** as shown below, using two nested **"for"** loops. The first two lines can be printed directly, there is no need to compute them using a loop.

*	 	1	2	3	4	5	6	7	8	9

1	 	1	2	3	4	5	6	7	8	9
2	 	2	4	6	8	10	12	14	16	18
3	 	3	6	9	12	15	18	21	24	27
4	 	4	8	12	16	20	24	28	32	36
5	 	5	10	15	20	25	30	35	40	45
6	 	6	12	18	24	30	36	42	48	54
7	 	7	14	21	28	35	42	49	56	63
8	 	8	16	24	32	40	48	56	64	72
9	 	9	18	27	36	45	54	63	72	81