Introduction to Computer Programming (java A)
Lab 2

[Experimental Objective]

1. Learn how to use an **Integrated Development Environment (IDE)** in writing JAVA programs

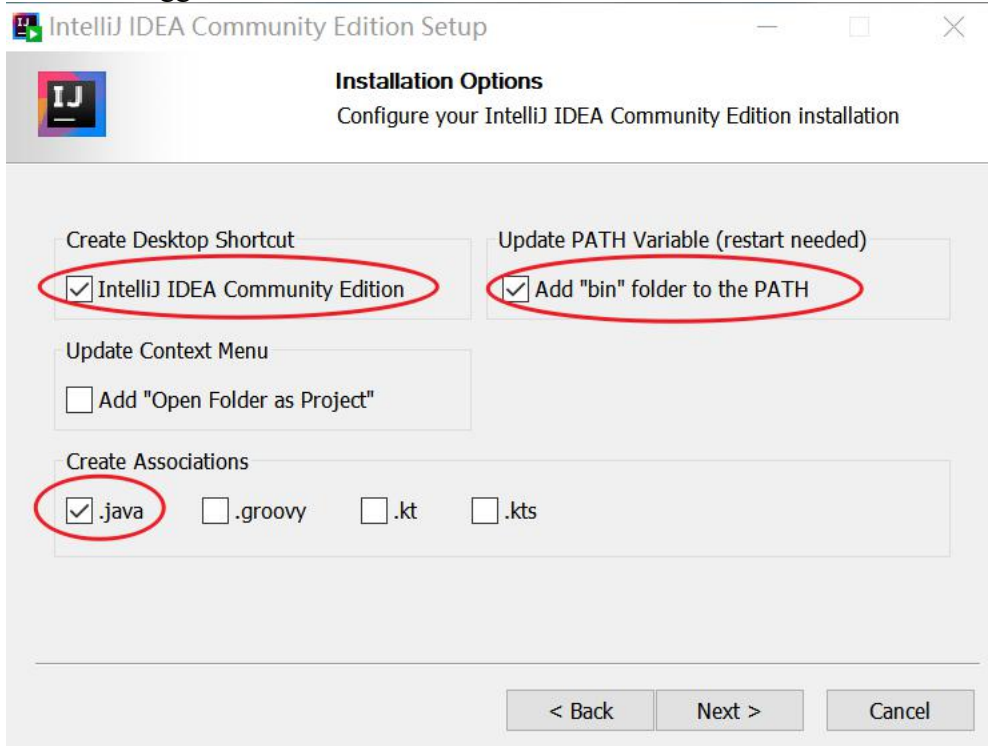2. Practice using input and output statements.

[Software Installation]

1. In this course, we will use IDEA as our reference IDE.

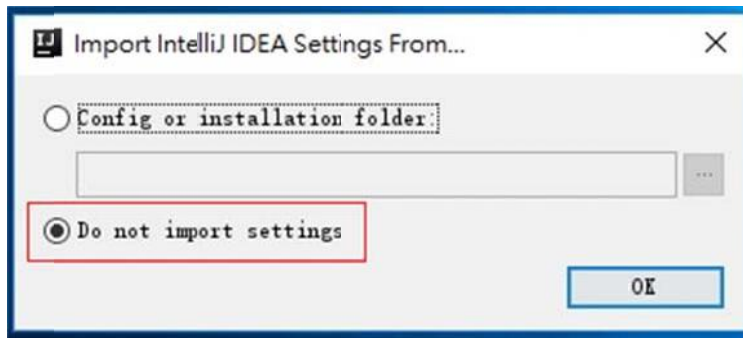You can download IDEA (community version) at the following link:

https://www.jetbrains.com/idea/download/

2. Run the installation after the download is completed.

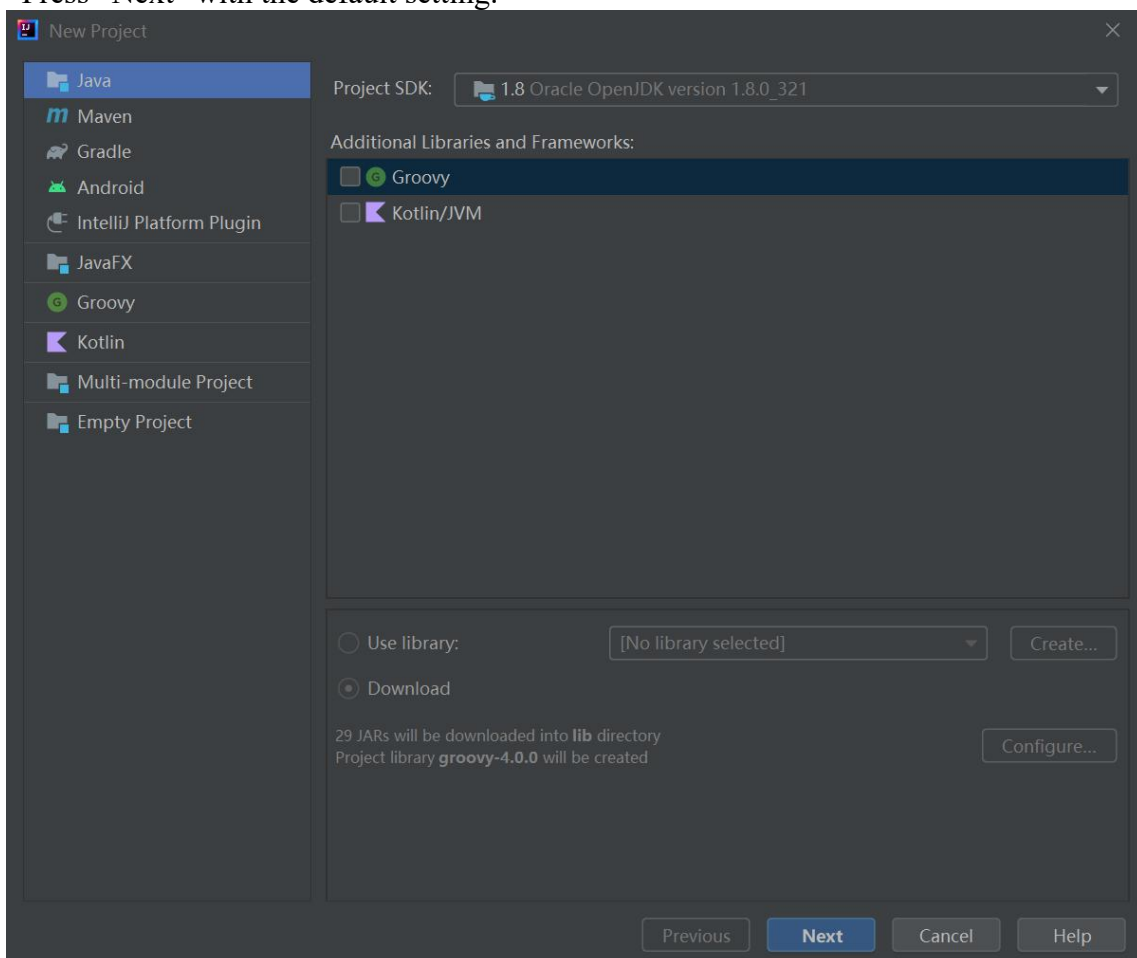You are suggested to tick the box as follows before the installation:
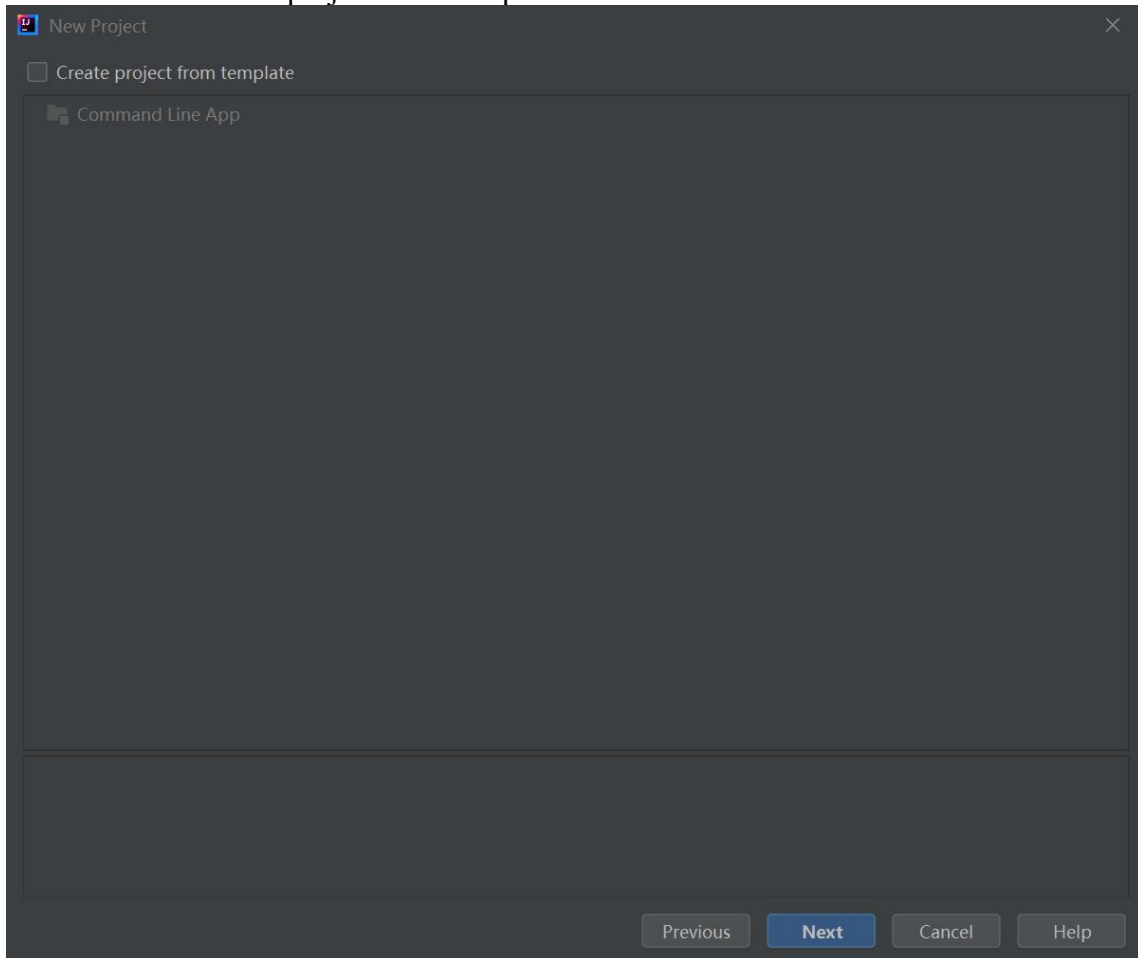

Choose "Do not import settings".

3. After the installation, you are suggested to restart your computer. Please restart your computer.

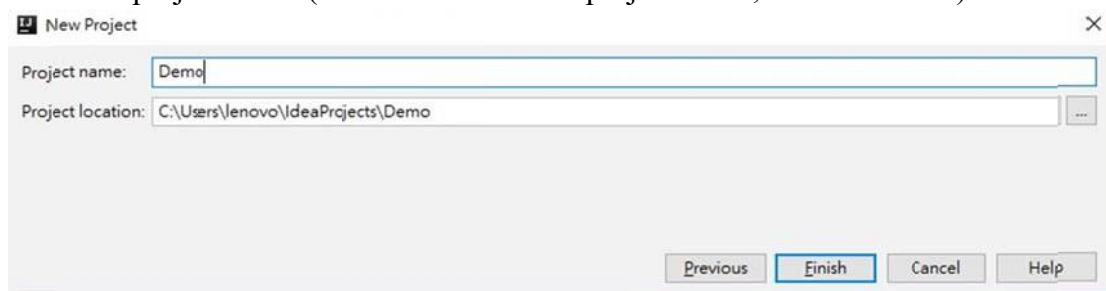Click the IDEA icon on your desktop to start IDEA, then choose "create new project"
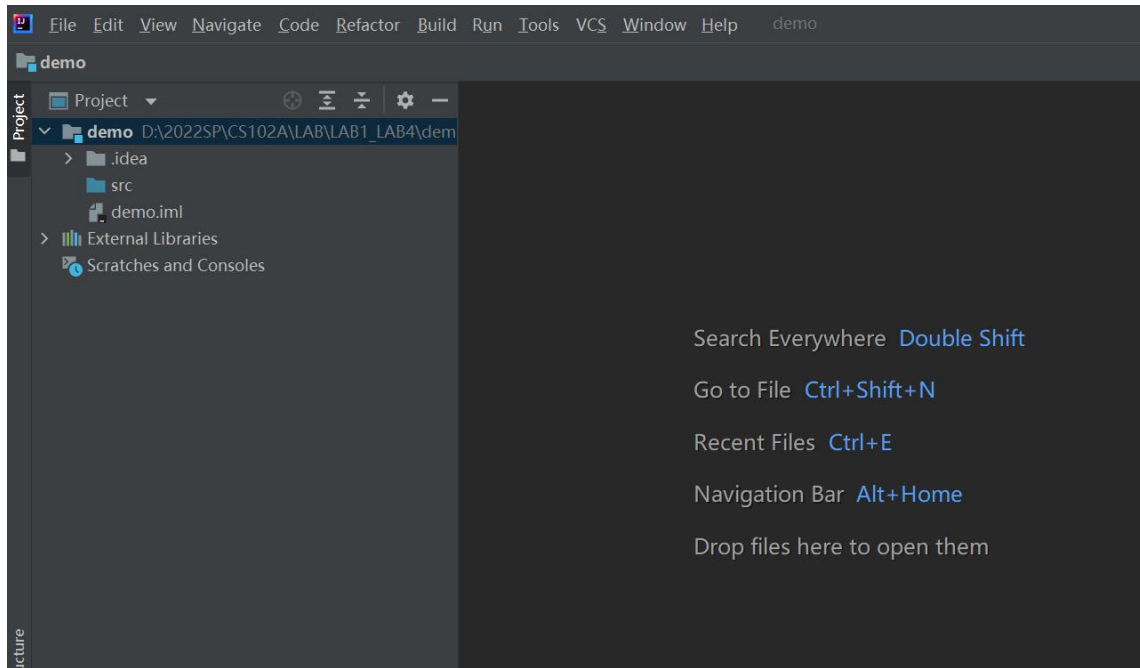
Press "Next" with the default setting:
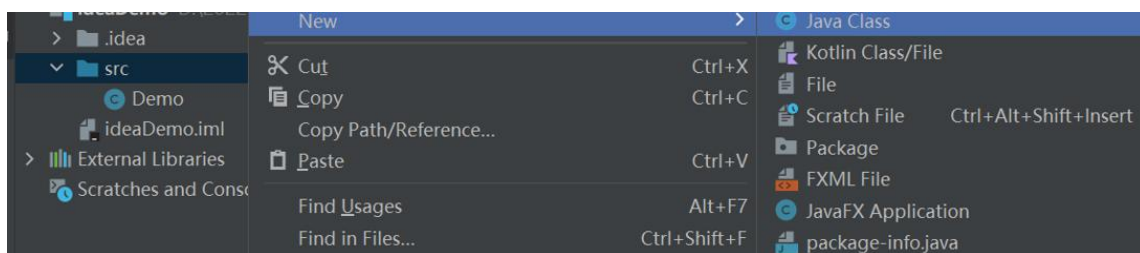
Don't Click "Create project from template"

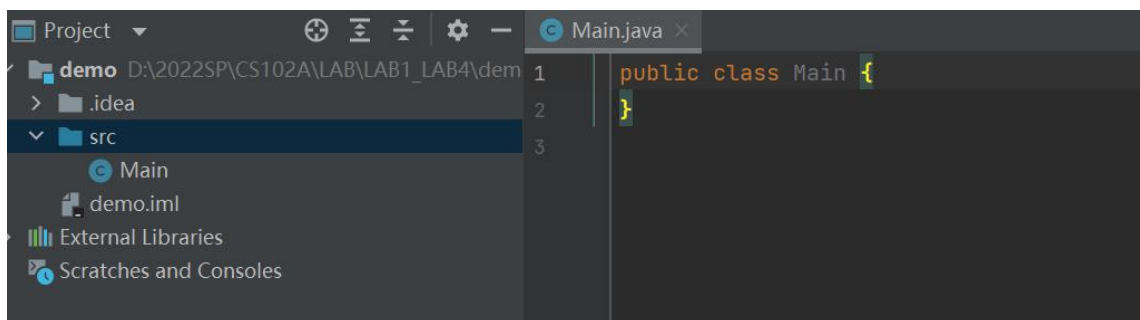Enter the project name (remember this is the project name, not class name)：

In the Project tool window, select the **src** folder, right-click on it, and select Java Class.
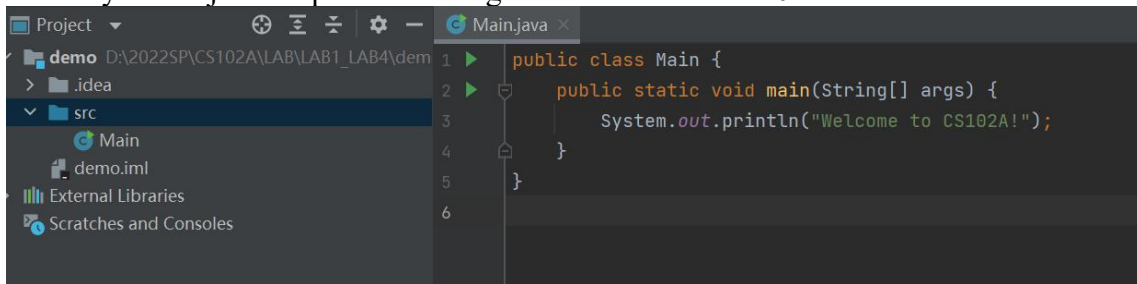

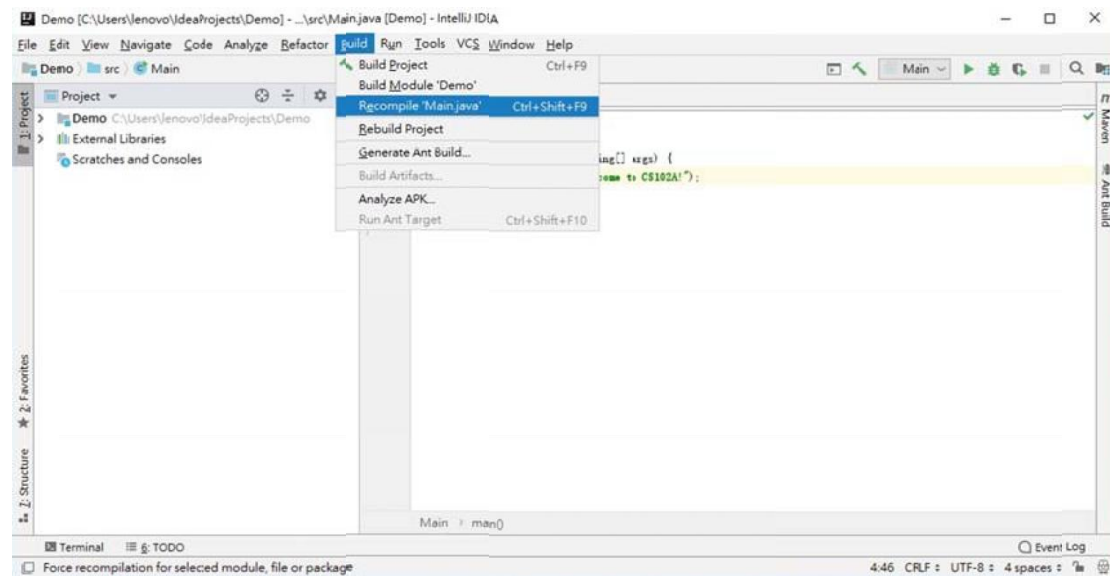
In the Name field, type **Main** and click OK.
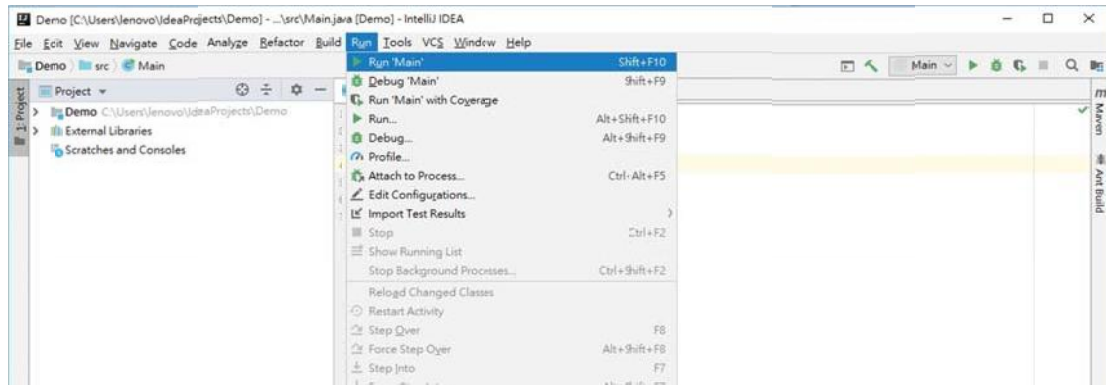

The template code is shown below:

Modify Main.java to print out string to "Welcome to CS102A!"

Then compile "Main.java"

Run the "Main" class after compilation.

The output should look like in the output box as follows:

[Exercises]

1. Write and test the following source code to see how Scanner class works.

```java
import java.util.Scanner;
public class Sum {
    public static void main(String[] args) {

        System.out.println("Welcome to S102A!");
        Scanner input = new Scanner(System.in);
        int number1, number2, sum;
        System.out.print("Enter the first integer: ");
        number1 = input.nextInt();
        System.out.print("Enter the second integer: ");
        number2 = input.nextInt();
        sum = number1 + number2;
        System.out.printf("Sum is %d\n", sum);
    }
}
```

2. Write an application that displays a box, an oval, an arrow and a diamond using asterisks (*), as follows:

```
*********          ***              *                  *
*        *        *   *            *                 *   *
*        *       *          *      ***              *       *
*        *       *          *      *****           *         *
*        *       *          *      *   *          *           *
*        *       *          *      *   *          *           *
*        *       *          *      *   *           *         *
*        *        *   *     *      *   *            *   *
*********          ***              *                  *
```