CS410 INTRODUCTION TO COMPUTER SCIENCE PROGRAMMING LAB

Programming Assignment 1

1. Create a folder called **CS410Assign1**
2. Start up NotePad++ and choose *Language-Java*
3. Key in the program below

```java
// Author: Your name here
// Filename: ComputeArea.java
// Date: Today's date and classtime
// Program to calculate area of a circle given the radius

import java.util.Scanner;

public class ComputeArea
{
    public static void main(String[] args)
    {
        Scanner input = new Scanner(System.in);
        double radius;        // Declare radius
        double area;          // Declare area

        // Prompt user to enter a radius
        System.out.print("Enter a number for radius: ");
        radius = input.nextDouble();

        // Compute area
        area = radius * radius * 3.14159;

        // Display results
        System.out.println("The area for the circle of radius "
                + radius + " is " + area);
    }
}
```

4. Save the program as **ComputeArea.java** in the **CS410Assign1** folder.

5. In Windows, search for **cmd** and start up the Command prompt.

6. Navigate to the **CS410Assign1** folder using **cd** commands or copy and pasting the path from File Explorer. Type in the 2 commands from the table below:

Command	What command does
`javac ComputeArea.java`	Compiles the program
`java ComputeArea`	Runs the program

7. Use 2.5 as the input. You should see the output below. If not, you need to check your program is keyed in correctly. Repeat steps 3 – 7 until the output is correct as shown below:

```
Enter a number for radius: 2.5
The area for the circle of radius 2.5 is 19.6349375
```

8. Use **Alt-PrtScr** to take a screen shot of the window and then paste it into a Word document.

9. Upload 3 files to Canvas: the screenshot, **ComputeArea.java** and **ComputeArea.class** by the start of the next class.