Lab Exercise 1

```
import java.util.Scanner;
public class PointsDistance {

	public static void main(String[] args) {
		Scanner input = new Scanner(System.in);
		System.out.print("Enter x1 and y1: ");
		double x1 = input.nextDouble();
		double y1 = input.nextDouble();
		System.out.print("Enter x2 and y2: ");
		double x2 = input.nextDouble();
		double y2 = input.nextDouble();

		double distance = Math.pow(Math.pow(x2 - x1, 2)
					+ Math.pow(y2 - y1, 2), 0.5);
		System.out.println("The distance between the two points is " +
								distance);
		input.close();
	}
}
```

Lab Exercise 2

```
import java.util.Scanner;
public class SumDigits {
	public static void main(String[] args) {
		Scanner input = new Scanner(System.in);
		System.out.print("EEnter an integer between 0 and 1000: ");
		int num = input.nextInt();
		// example num = 456

		// getting the units (left digit)
		// num = 456 -> units = 6
		int units = num % 10;

		// getting the tens (middle digit)
		// num = 456 -> tens = 5
		int tens = num / 10 % 10;

		// getting the hundreds (right digit)
		// num = 456 -> hundreds = 4
		int hundreds = num / 100 % 10;

		int sum = units + tens + hundreds;

		System.out.println("The sum of all digits in " + num + " is " + sum);
		input.close();
	}
}
```