

```
import java.util.Scanner;

public class Lab6_1 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub
        Scanner scan = new Scanner(System.in);
        System.out.println("Enter your word: ");
        String word = scan.nextLine();
        int length = word.length();
        if (length % 2 == 0) {
            System.out.println("The length of the word ie even.");
        }
        else {
            System.out.println("The length of the word is odd.");
        }

    }

}
```

```
import java.util.Scanner;

public class Lab6_2 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub
        Scanner scan = new Scanner(System.in);
        System.out.println("Side A is: ");
        double A = scan.nextDouble();

    }

}
```

```

        System.out.println("Side B is: ");
        double B = scan.nextDouble();
        System.out.println("Side C is: ");
        double C = scan.nextDouble();
        double D = (Math.pow(A, 2)+Math.pow(B, 2));
        if (C == D) {
            System.out.println("This is a pythagorean triple.");
        }
        else {
            System.out.println("This is not a pythagorean triple.");
        }
    }

}

```

```

import java.util.Scanner;

public class Lab6_3 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scan = new Scanner(System.in);
        System.out.println("Your length is: ");
        double A = scan.nextDouble();
        System.out.println("Your width is: ");
        double B = scan.nextDouble();
        if (A==B) {
            System.out.println("This is a square.");
        }
    }
}

```

```

        else {
            System.out.println("This is a rectangle.");
        }
    }
}

```

```

import java.util.Scanner;

public class Lab6_4 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner scan = new Scanner(System.in);
        System.out.println("Number of classes held: ");
        double Classes = scan.nextDouble();
        System.out.println("Number of classes attended: ");
        double Attendance = scan.nextDouble();
        double A = Attendance / Classes;

        if (A >= .75) {
            System.out.println("You are allowed to sit in your exam.");
        }
        else {
            System.out.println("You are not allowed to sit in your exam.");
        }
    }
}

```

```
import java.util.Scanner;

public class Lab6_5 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner scan = new Scanner(System.in);

        System.out.println("Enter your first variable: ");

        int A = scan.nextInt();

        System.out.println("Enter your second variable: ");

        int B = scan.nextInt();

        System.out.println("Before swapping: " + A + " " + B);

        int tmp = A;

        A = B;

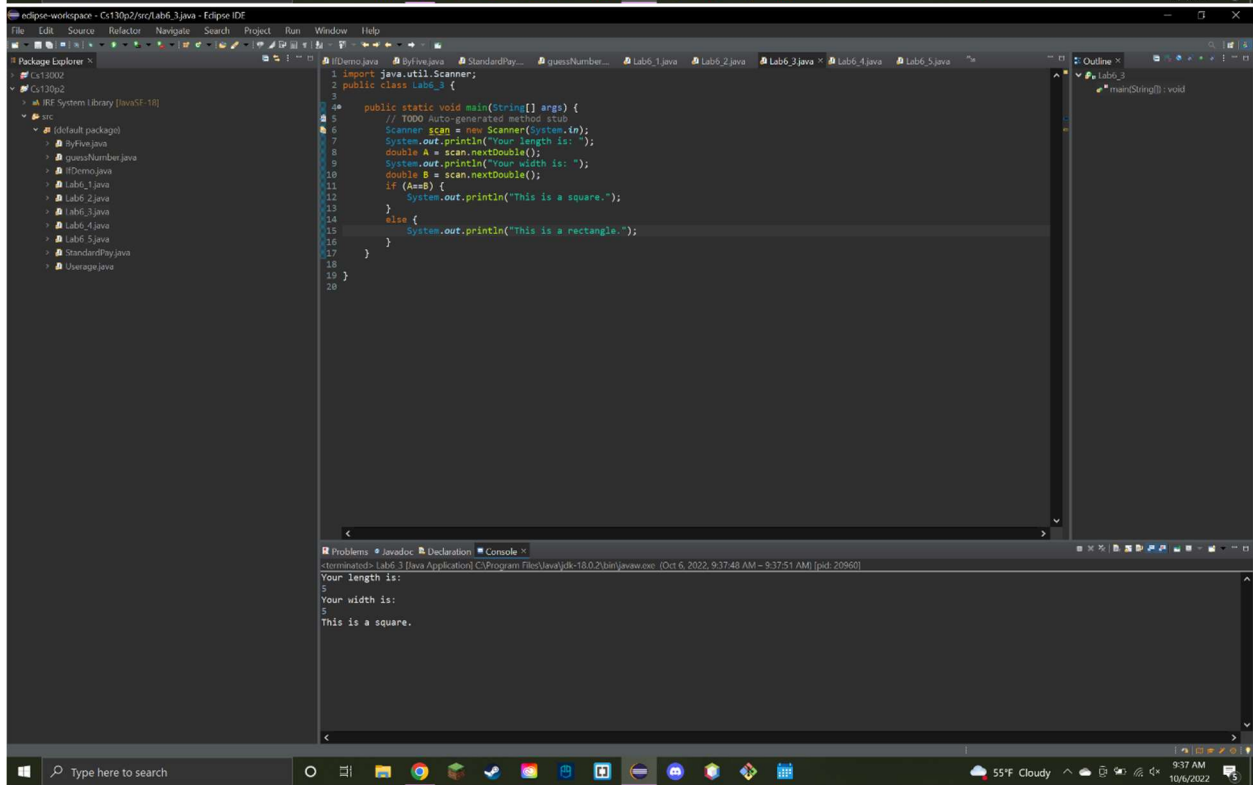
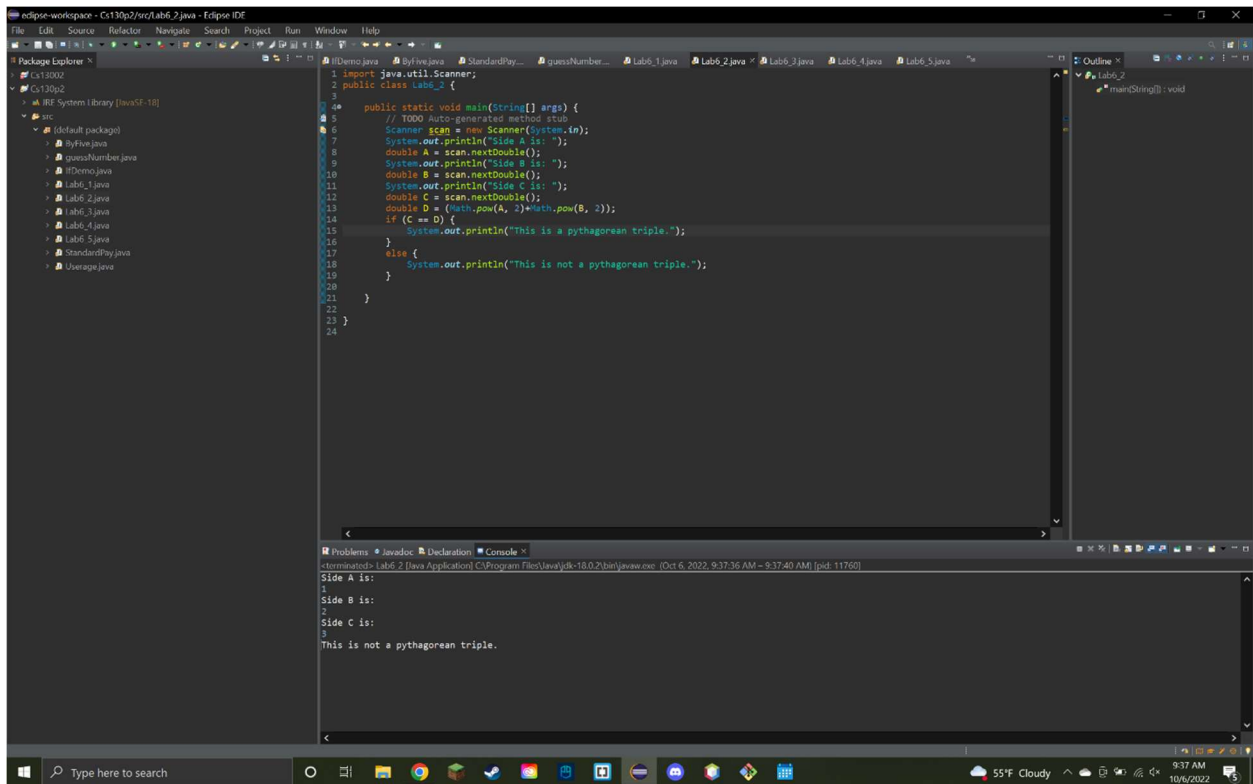
        B = tmp;

        System.out.println("After Swapping: " + A + " " + B);

    }

}
```

The way a program flows and goes through steps. Sequential would be going step by step and branching would mean it could result in different steps.



edipse-workspace - C:\30p2\src\Lab6\_4.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer

- cs13002
- cs13002
- lib System Library [javaSE-18]
- src
  - (default package)
  - ByFive.java
  - guessNumber.java
  - Demo.java
  - Lab6\_1.java
  - Lab6\_2.java
  - Lab6\_3.java
  - Lab6\_4.java
  - Lab6\_5.java
  - StandardPay.java
  - Usage.java

Editor

```
1 import java.util.Scanner;
2 public class Lab6_4 {
3
4     public static void main(String[] args) {
5         // TODO Auto-generated method stub
6         Scanner scan = new Scanner(System.in);
7         System.out.println("Number of classes held: ");
8         double Classes = scan.nextDouble();
9         System.out.println("Number of classes attended: ");
10        double Attendance = scan.nextDouble();
11        double A = Attendance / Classes;
12
13        if (A >= .75) {
14            System.out.println("you are allowed to sit in your exam.");
15        }
16        else {
17            System.out.println("you are not allowed to sit in your exam.");
18        }
19    }
20 }
21
22 }
```

Outline

- Lab6\_4
- main(String[]) : void

Problems JavaDoc Declaration Console

terminated: Lab6\_4 [Java Application] C:\Program Files\Java\jdk-18.0.2\bin\java.exe (Oct 6, 2022, 9:37:59 AM - 9:38:14 AM) [pid: 24104]

```
Number of classes held:
10
Number of classes attended:
8
You are allowed to sit in your exam.
```

edipse-workspace - C:\30p2\src\Lab6\_5.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer

- cs13002
- cs13002
- lib System Library [javaSE-18]
- src
  - (default package)
  - ByFive.java
  - guessNumber.java
  - Demo.java
  - Lab6\_1.java
  - Lab6\_2.java
  - Lab6\_3.java
  - Lab6\_4.java
  - Lab6\_5.java
  - StandardPay.java
  - Usage.java

Editor

```
1 import java.util.Scanner;
2 public class Lab6_5 {
3
4     public static void main(String[] args) {
5         // TODO Auto-generated method stub
6         Scanner scan = new Scanner(System.in);
7         System.out.println("Enter your first variable: ");
8         int A = scan.nextInt();
9         System.out.println("Enter your second variable: ");
10        int B = scan.nextInt();
11        System.out.println("Before swapping: " + A + " " + B);
12        int tmp = A;
13        A = B;
14        B = tmp;
15        System.out.println("After Swapping: " + A + " " + B);
16    }
17 }
18
19 }
```

Outline

- Lab6\_5
- main(String[]) : void

Problems JavaDoc Declaration Console

terminated: Lab6\_5 [Java Application] C:\Program Files\Java\jdk-18.0.2\bin\java.exe (Oct 6, 2022, 9:39:21 AM - 9:39:25 AM) [pid: 5536]

```
Enter your first variable:
4
Enter your second variable:
6
Before swapping: 4 6
After Swapping: 6 4
```

