

```

// Problem 1 Starts Here

package test;

import java.util.Scanner;

// Class which inputs and outputs some ints
public class Original
{
    public static void main(String[] args)
    {
        // Define and initialize variables for values to be input
        int v1 = 0; // First value to be input
        int v2 = 0; // Second value to be input
        int v3 = 0; // Third value to be input
        int v4 = 0; // Fourth value to be input
        int v5 = 0; // Fifth value to be input
        int v6 = 0; // Sixth value to be input

        // Use a Scanner to input integer values
        Scanner input = new Scanner(System.in);
        System.out.println("\n\n");
        System.out.print("Enter 6 integers separated by a blank
space:");
        v1 = input.nextInt(); // Input first value
        v2 = input.nextInt(); // Input second value
        v3 = input.nextInt(); // Input third value
        v4 = input.nextInt(); // Input fourth value
        v5 = input.nextInt(); // Input fifth value
        v6 = input.nextInt(); // Input sixth value

        // Output using System.out.println()
        System.out.println("\n");
        System.out.println("\t" + "Value" + "\t" + "Value" + "\t" +
"Total");
        System.out.println("\t" + v1 + "\t" + v2 + "\t" + (v1 + v2));
        System.out.println("\t" + v3 + "\t" + v4 + "\t" + (v3 + v4));
        System.out.println("\t" + v5 + "\t" + v6 + "\t" + (v5 + v6));

        // Calculate and display the totals for each column
        int totalColumn1 = v1 + v3 + v5;
        int totalColumn2 = v2 + v4 + v6;
        int totalColumn3 = totalColumn1 + totalColumn2;
        System.out.println("      ----      ----      ----");
        System.out.println("Total" + "\t" + totalColumn1 + "\t" +
totalColumn2 + "\t" + totalColumn3);
        System.out.println("\n");
    } // end main()
} // end class Original

//output from command line against requested output

```

```
C:\Users\rdcx\Documents\JAVA>javac Original.java
C:\Users\rdcx\Documents\JAVA>java Original.java

Enter 6 integers separated by a blank space:5 10 15 20 25 30

      Value  Value  Total
      5      10     15
      15     20     35
      25     30     55
      ----  ----  ----
Total  45     60    105

C:\Users\rdcx\Documents\JAVA>
```

```
C:\605.201>java Assignment1_Solution

Enter 6 integers separated by a blank space: 10 20 30 40 50 60

      Value  Value  Total
      10     20     30
      30     40     70
      50     60    110
      ----  ----  ----
Total  90    120    210

C:\605.201>
```

```
// Problem 2 Starts Here

package BMICalculator;

import java.util.Scanner;

// Class which calculates BMI based on user inputs

public class BMICalculator
{
    public static void main(String[] args)
    {
```

```

Scanner input = new Scanner(System.in);

// Prompt the user to enter weight in pounds
System.out.print("Enter your weight in pounds: ");
double weightInPounds = input.nextDouble();

// Prompt the user to enter height in inches
System.out.print("Enter your height in inches: ");
double heightInInches = input.nextDouble();

// Convert weight from pounds to kilograms
double weightInKilograms = weightInPounds * 0.45359237;

// Convert height from inches to meters
double heightInMeters = heightInInches * 0.0254;

// Calculate BMI
double bmi = weightInKilograms / (heightInMeters *
heightInMeters);

// Display BMI
System.out.printf("Your BMI is: %.2f\n", bmi);

// Determine and display the BMI category
if (bmi < 18.5) {
    System.out.println("BMI Category: Underweight");
} else if (bmi >= 18.5 && bmi <= 24.9) {
    System.out.println("BMI Category: Normal");
} else if (bmi >= 25 && bmi <= 29.9) {
    System.out.println("BMI Category: Overweight");
} else {
    System.out.println("BMI Category: Obese");
}

    } //end main()
} // end class BMICalculator

//output in IDE

```

```

1 package BMICalculator;
2
3 import java.util.Scanner;
4
5 // Class which calculates BMI based on user inputs
6
7 public class BMICalculator
8 {
9     public static void main(String[] args)
10    {
11        Scanner input = new Scanner(System.in);
12
13        // Prompt the user to enter weight in pounds
14        System.out.print("Enter your weight in pounds: ");
15        double weightInPounds = input.nextDouble();
16
17        // Prompt the user to enter height in inches
18        System.out.print("Enter your height in inches: ");
19        double heightInInches = input.nextDouble();
20
21        // Convert weight from pounds to kilograms
22        double weightInKilograms = weightInPounds * 0.45359237;
23
24        // Convert height from inches to meters
25        double heightInMeters = heightInInches * 0.0254;
26
27        // Calculate BMI
28        double bmi = weightInKilograms / (heightInMeters * heightInMeters);
29
30        // Display BMI
31        System.out.printf("Your BMI is: %.2f\n", bmi);
32
33        // Determine and display the BMI category
34        if (bmi < 18.5) {
35            System.out.println("BMI Category: Underweight");
36        } else if (bmi >= 18.5 && bmi <= 24.9) {
37            System.out.println("BMI Category: Normal");
38        } else if (bmi >= 25 && bmi <= 29.9) {
39            System.out.println("BMI Category: Overweight");
40        } else {
41            System.out.println("BMI Category: Obese");
42        }
43    }
44    //end main()
45 } // end class BMICalculator
46

```

Problems @ Javadoc Declaration Console X

<terminated> BMICalculator [Java Application] C:\Users\rdcox\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.
Enter your weight in pounds: 200
Enter your height in inches: 72
Your BMI is: 27.12
BMI Category: Overweight

