```
// 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
```

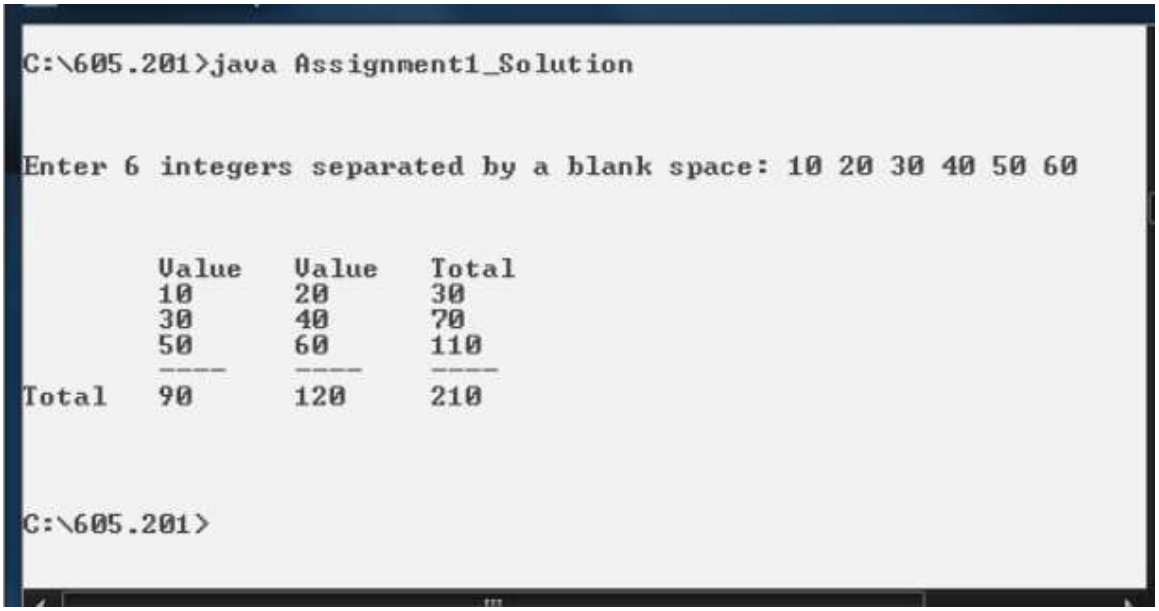
```
C:\Users\rdcox\Documents\JAVA>javac Original.java

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




```
// 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
```

```java
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

```

Problems @ Javadoc Declaration Console

<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
```