**Example 1: Address**

```java
public class Address {
    public static void main(String[] args) //method header
    {
        System.out.println(" Jaeki Song");
        System.out.println(" 1234 89th Street");
        System.out.println(" Lubbock, TX, 79413");
    }
}
```

**Example 2: Swing components**

```java
import javax.swing.JOptionPane; //import class JOptionPane

public class Address4
{
    public static void main(String[] args) //method header
    {
        JOptionPane.showMessageDialog(null,"Jaeki Song
1234 89th Street
Lubbock, TX, 79413");
        System.exit( 0 ); //terminate program
    }
}
```
**Example 3: Add Integer**

```java
import javax.swing.JOptionPane;

public class AddInt
{
    public static void main (String args[])
    {
        String number1, number2; //first and second string entered by user
        int numInt1,
            numInt2,
            sum;
        number1 = JOptionPane.showInputDialog("Enter first number");
        number2 = JOptionPane.showInputDialog("Enter second number");
        numInt1 = Integer.parseInt(number1);
        numInt2 = Integer.parseInt(number2);
        sum = numInt1 + numInt2;
        JOptionPane.showMessageDialog(null, "The sum is " + sum, "Results",
                                    JOptionPane.PLAIN_MESSAGE);
        System.exit(0);
    }
}
```

**Example 4: Conversion**

**Problem analysis and algorithm design**

The lengths are given in feet and inches, and you need to find the equivalent length in centimeters. One inch is equal to 2.54 centimeters. Things you need to do are following:

- Get the length in feet and inches using GUI
- Convert the length into total inches (1 foot is equal to 12 inches)
  
  totalInches = (12 * feet) + inches
- Convert total inches into centimeters
  
  centimeters = totalInches * 2.54
- Generate output displaying the length with centimeters

**Variables**

The input for the program is two numbers: one for feet and one for inches. You need to have two variables to store feet and inches. Because the program will first convert the given length into inches, you need a third variable to store the total inches. Also, you need a fourth variable to store the equivalent length in centimeters as follows:
int feet;
int inches;
int totalInches;
int centimeters;

In addition, to get the input from a user, you need to declare additional string variables that associated with feet and inches.

String strFeet, strInches;

Furthermore, to calculate the equivalent length in centimeters, you ned to multiply the total inches by 2.54. Instead of using the value 2.54 directly, you will declare the is value as a named constant. Because the named constants will be placed before the main method, those constants need to be static.

**Main algorithm**

1. Generate the GUI for the user’s inputs
2. Get the data
3. Find the length in inches
4. Covert the length to centimeters
5. Generate the GUI for the output

**Source code:**

```java
import javax.swing.*;

public class Conversion {
    static final double CONVERSION = 2.54;
    static final double INCHES_PER_FOOT = 12;

    public static void main (String args[]){
        //declare variables
        int feet;
        int inches;
        double totalInches;
        double centimeters;
        String strFeet, strInches;

        strFeet = JOptionPane.showInputDialog("Enter feet: ");
        feet = Integer.parseInt(strFeet);
        strInches = JOptionPane.showInputDialog("Enter inches: ");
        inches = Integer.parseInt(strInches);
```
```java
    totalInches = INCHES_PER_FOOT * feet * inches;
    centimeters = totalInches * CONVERSION;

    JOptionPane.showMessageDialog(null, "The total number of inches = " +
            totalInches +"\n" + "Total number of centimeters = " + centimeters,
            "Results", JOptionPane.PLAIN_MESSAGE);

    System.exit(0);
}