

Problem 1:

```
24      /*
25      * Ryan Martinez
26      * 9/4/2018
27      * Lab 1 Part 1
28      * Description: This program reads in a calendar year
29      * and then displays if it is a leap year or not
30      */
31      int year;
32      Scanner input = new Scanner(System.in);
33
34      System.out.print("Enter a year: ");
35      year = input.nextInt();
36
37      if((year % 4) == 0) {
38          if((year % 100) == 0) {
39              if((year % 400) == 0) {
40                  System.out.print(year + " is a leap year.");
41              }
42              else {
43                  System.out.print(year + " is not a leap year.");
44              }
45          }
46          else {
47              System.out.print(year + " is a leap year.");
48          }
49      }
50      else {
51          System.out.print(year + " is not a leap year.");
52      }
```

Enter a year: 2048  
2048 is a leap year.

Problem 2:

```
48      /*
49      * Ryan Martinez
50      * 9/4/2018
51      * Lab 1 Part 2
52      * Description: This program reads in name and age and then
53      * prints out the person's age group
54      */
55      String name;
56      int age;
57      Scanner input = new Scanner(System.in);
58
59      System.out.println("Please enter a person's name:");
60      name = input.nextLine();
61
62      System.out.println("Please enter the person's age:");
63      age = input.nextInt();
64
65      if(age < 1) {
66          System.out.println(name + " is an infant");
67      }
68      else if(age >= 1 && age <= 3) {
69          System.out.println(name + " is a toddler");
70      }
71      else if(age >= 4 && age <= 5) {
72          System.out.println(name + " is a preschooler");
73      }
74      else if(age >= 6 && age <= 12) {
75          System.out.println(name + " is a grade schooler");
76      }
77      else if (age >= 13 && age <= 18) {
78          System.out.println(name + " is a teenager");
79      }
80      else if(age >= 19 && age <= 21) {
81          System.out.println(name + " is a young adult");
82      }
83      else {
84          System.out.println(name + " is an adult");
85      }
```

Please enter a person's name:

Timmy

Please enter the person's age:

8

Timmy is a grade schooler

```
Please enter a person's name:
Little Timmy
Please enter the person's age:
3
Little Timmy is a toddler

Please enter a person's name:
Little Johnny
Please enter the person's age:
13
Little Johnny is a teenager

Please enter a person's name:
Tammy
Please enter the person's age:
22
Tammy is an adult
```

Problem 3:

```
82      /*
83      * Ryan Martinez
84      * 9/4/2018
85      * Lab 1 Part 3
86      * Description: This program reads in different variables
87      * from input and then outputs them in a formatted line
88      */
89      Scanner input = new Scanner(System.in);
90      String street;
91      int houseNum;
92      String city;
93      int zipCode;
94      String state;
95
96      System.out.print("Enter your street: ");
97      street = input.nextLine();
98      System.out.print("Enter the house or apartment number: ");
99      houseNum = input.nextInt();
100     input.nextLine();
101     System.out.print("Enter the city: ");
102     city = input.nextLine();
103     System.out.print("Enter the zip code: ");
104     zipCode = input.nextInt();
105     input.nextLine();
106     System.out.print("Enter the State: ");
107     state = input.nextLine();
108
109     System.out.println("\n" + houseNum + " " + street + ", "
110                       + " " + city + ", " + state + " " + zipCode);
```

Enter your street: State College Blvd  
Enter the house or apartment number: 800  
Enter the city: Fullerton  
Enter the zip code: 92831  
Enter the State: CA

800 State College Blvd, Fullerton, CA 92831

Enter your street: Sesame Street  
Enter the house or apartment number: 123  
Enter the city: New York  
Enter the zip code: 10128  
Enter the State: NY

123 Sesame Street, New York, NY 10128