

COSC 117 Lab 4

Jade Pearl

Example 1: Day of the week

1. Source Code

```
DayOfWeek.java
1 import java.util.Scanner;
2
3 public class DayOfWeek {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         System.out.print("Input a number between 1 and 7.");
8         Scanner keyboard = new Scanner (System.in);
9         int num = keyboard.nextInt();
10        keyboard.close();
11
12        if (num == 1) {
13            System.out.println ("The day is Monday.");
14        }
15        else if (num == 2) {
16            System.out.println("The day is Tuesday.");
17        }
18        else if (num == 3) {
19            System.out.println("The day is Wednesday.");
20        }
21        else if (num == 4) {
22            System.out.println("The day is Thursday.");
23        }
24        else if (num == 5) {
25            System.out.println("The day is Friday.");
26        }
27        else if (num == 6) {
28            System.out.println("The day is Saturday.");
29        }
30        else if (num == 7) {
31            System.out.print("The day is Sunday.");
32        }
33        else {
34            System.out.println("INVALID DAY NUMBER");
35        }
36    }
37 }
38
39 }
```

2. Output

Problems	@ Javadoc	Declaration	Console
<terminated> DayOfWeek [Java Application] C:\Users\jpmc			
Input a number between 1 and 7.			
2			The day is Tuesday.

Problems	@ Javadoc	Declaration	Console
<terminated> DayOfWeek [Java Application] C:\Users\jpn			
Input a number between 1 and 7.			
9			INVALID DAY NUMBER

Example 2: Age Classifier

1. Source Code

```
AgeClassifier.java
1 import java.util.Scanner;
2
3 public class AgeClassifier {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         System.out.println("Please enter an age.");
8         Scanner keyboard = new Scanner (System.in);
9         int age = keyboard.nextInt();
10        keyboard.close();
11
12        if (age <= 1) {
13            System.out.println("He or she is an infant");
14        }
15        else if (age < 13) {
16            System.out.println("He or she is a child");
17        }
18        else if (age < 20) {
19            System.out.println("He or she is a teenager");
20        }
21        else {
22            System.out.println("He or she is an adult");
23        }
24    }
25 }
```

2. Output

```
Problems @ Javadoc Declaration Console
<terminated> AgeClassifier [Java Application] C:\User
Please enter an age.
20
He or she is an adult
```

Example 3: Magic Dates

1. Source Code

```
MagicDates.java
1 import java.util.Scanner;
2
3 public class MagicDates {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         Scanner keyboard = new Scanner (System.in);
8         System.out.println("Enter the numeric form of a month.");
9         int month = keyboard.nextInt();
10        System.out.println("Enter a day.");
11        int day = keyboard.nextInt();
12        System.out.println("Enter the last two digits of the year");
13        int year = keyboard.nextInt();
14        keyboard.close();
15
16        if (year == day * month) {
17            System.out.println("This date is magic!!");
18        }
19        else {
20            System.out.println("This date is not magic.");
21        }
22    }
23 }
```

2. Output

Problems @ Javadoc Declaration Console	Problems @ Javadoc Declaration Console
<terminated> MagicDates [Java Application] C:\Users\jpm	<terminated> MagicDates [Java Application] C:\Users\jpr
Enter the numeric form of a month.	Enter the numeric form of a month.
1	3
Enter a day.	Enter a day.
27	7
Enter the last two digits of the year	Enter the last two digits of the year
27	20
This date is magic!!	This date is not magic.

Example 4: Color Mixer

1. Source Code

```
ColorMixer.java
1 import java.util.Scanner;
2
3 public class ColorMixer {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         Scanner keyboard = new Scanner (System.in);
8         System.out.println("Please enter the first letter of two colors (in CAPS).");
9         char color1 = keyboard.next().charAt(0);
10        char color2 = keyboard.next().charAt(0);
11        keyboard.close();
12
13        if ((color1 == 'R') && (color2 == 'B') || (color1 == 'B') && (color2 == 'R')) {
14            System.out.println("The color is Purple");
15        }
16        else if ((color1 == 'R') && (color2 == 'Y') || (color1 == 'Y') && (color2 == 'R')) {
17            System.out.println("The color is Orange");
18        }
19        else if ((color1 == 'B') && (color2 == 'Y') || (color1 == 'Y') && (color2 == 'B')) {
20            System.out.println("The color is Green");
21        }
22        else {
23            System.out.println("ERROR. Invalid color character.");
24        }
25    }
26
27 }
```

2. Output

```
Problems @ Javadoc Declaration Console
<terminated> ColorMixer [Java Application] C:\Users\jpmd1\Desktop\Prog
Please enter the first letter of two colors (in CAPS).
Y
B
The color is Green
```