

COSC 117 Lab 5

Jade Pearl

Example 1: Book Club Points

1. Source Code:

```
BookClubPoints1.java BookClubPoints2.java
1 import java.util.Scanner;
2
3 public class BookClubPoints1 {
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("How many books have you purchased this month?");
9         int book = keyboard.nextInt();
10        keyboard.close();
11
12        if (book == 0) {
13            System.out.println("Sorry, you have earned 0 points");
14        }
15        else if (book == 1) {
16            System.out.println("You have earned 5 points.");
17        }
18        else if (book == 2) {
19            System.out.println("You have earned 15 points");
20        }
21        else if (book == 3) {
22            System.out.println("You have earned 30 points");
23        }
24        else if (book >= 4) {
25            System.out.println("You have earned 60 points");
26        }
27        else {
28            System.out.println("Invalid number. please try again.");
29        }
30    }
31 }
32
```

2. Output:

```
Problems Javadoc Declaration Console
<terminated> BookClubPoints1 [Java Application] C:\Users\jpr
How many books have you purchased this month?
20
You have earned 60 points
```

Example 2: Book Club Points Part 2

1. Source Code:

```
BookClubPoints2.java
3 public class BookClubPoints2 {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         Scanner keyboard = new Scanner (System.in);
8         System.out.print("How many books did you buy this month?: ");
9         int book = keyboard.nextInt();
10        keyboard.close();
11        if (book < 0) {
12            System.out.print("Invalid number");
13        }
14        else {
15            switch(book) {
16                case 0:
17                    System.out.println("You get 0 points");
18                    break;
19                case 1:
20                    System.out.println("You get 5 points");
21                    break;
22                case 2:
23                    System.out.println("You get 15 points");
24                    break;
25                case 3:
26                    System.out.println("You get 30 points");
27                    break;
28                case 4:
29                    System.out.println("You get 60 points");
30                    break;
31                default:
32                    System.out.println("You get 60 points");
33                    break;
34            }
35        }
36    }
37 }
```

2. Output:

```
Problems @ Javadoc Declaration Console
<terminated> BookClubPoints2 [Java Application] C:\Users
How many books did you buy this month?: 30
You get 60 points
```

Example 3: Sum of Numbers

1. Source Code:

```
SumOfNumbers.java
1 import java.util.Scanner;
2
3 public class SumOfNumbers {
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("Input a positive integer");
9         int n = keyboard.nextInt();
10        int num = 1, sum = 0;
11        while (n < 0) {
12            System.out.println("Invalid number. Try again.");
13            n = keyboard.nextInt();
14        }
15        while (num <= n) {
16            sum = sum + num;
17            num++;
18        }
19        keyboard.close();
20        System.out.print(sum);
21    }
22 }
```

2. Output:

```
Problems @ Javadoc Declaration Console
<terminated> SumOfNumbers [Java Application] C:\Users'
Input a positive integer
-1
Invalid number. Try again.
5
15|
```

Example 4: Draw a Rectangle Using “*”

1. Source Code:

```
DrawingRectangle.java
1 import java.util.Scanner;
2
3 public class DrawingRectangle {
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 height of the rectangle, then enter the width.");
9         int h = keyboard.nextInt();
10        int w = keyboard.nextInt();
11        int row, col;
12        while (h < 0 && w < 0) {
13            System.out.println("Invalid height and/or width. Please try again.");
14            w = keyboard.nextInt();
15            h = keyboard.nextInt();
16        }
17        for (col = 1; col <= h; col++) {
18            System.out.println();
19            for (row = 1; row <= w ; row++) {
20                System.out.print("*");
21            }
22        }
23    }
24 }
```

2. Output:

```
Problems @ Javadoc Declaration Console
<terminated> DrawingRectangle [Java Application] C:\Users\jpmd1\Desktop
Enter the height of the rectangle, then enter the width.
4
4

****
****
****
****
```