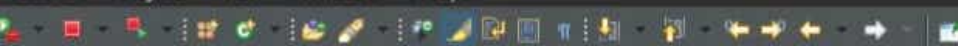


patterns/src/labs05/patterns.java - Spring Tool Suite 4

Search Project Run Window Help



package-info.java patterns.java × pattern.java

```
1 package labs05;
2
3 public class patterns {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         int columns = 5;
8         for (int i = columns; i >= 1; i--) {
9             for (int j = 1; j <= i; j++) {
10                 System.out.print("*");
11             }
12             System.out.println();
13         }
14     }
15
16 }
17
18
19
20
```

Outline ×

labs05  
 patterns  
 main(String[]) : void

Problems Javadoc Declaration Console ×

<terminated> patterns [Java Application] C:\Users\ELCOT\Desktop\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_21.

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

lab05/src/armstrong/lab05.java - Spring Tool Suite 4

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\*lab05.java ×

```
16 // Count the number of digits
17 while (originalNumber != 0) {
18     originalNumber /= 10;
19     digits++;
20 }
21
22 originalNumber = number;
23
24 // Calculate the Armstrong sum
25 while (originalNumber != 0) {
26     remainder = originalNumber % 10;
27     result += Math.pow(remainder, digits);
28     originalNumber /= 10;
29 }
30
31 // Check if the number is an Armstrong number
32 if (result == number) {
33     System.out.println(number + " is an Armstrong number.");
34 } else {
35     System.out.println(number + " is not an Armstrong number.");
36 }
37
38 sc.close();
39 }
40 }
41
```

Outline ×

armstrong  
lab05  
main(String[]) : void

Problems Javadoc Declaration Console ×

<terminated> lab05 [Java Application] C:\Users\ELCOT\Desktop\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_21.0.4

Enter a number: 407

407 is an Armstrong number.

labs5/src/palindromjava/labs5.java - Spring Tool Suite 4

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The screenshot shows the Eclipse IDE interface. The main editor displays the code for `labs5.java`. The code prompts the user to enter a string, converts it to lowercase, reverses it, and checks if it is a palindrome. The right-hand side shows the Outline view with the project structure: `palindromjava` containing `labs5` and its `main` method. The bottom console shows the execution output for the input "level".

```
5 public class labs5 {
6
7     public static void main(String[] args) {
8         Scanner sc = new Scanner(System.in);
9
10        System.out.print("Enter a string: ");
11        String input = sc.nextLine();
12
13        String original = input.toLowerCase(); // Convert input to | for case-insensitive comparison
14        String reversed = "";
15
16        // Reverse the string
17        for (int i = original.length() - 1; i >= 0; i--) {
18            reversed += original.charAt(i);
19        }
20
21        if (original.equals(reversed)) {
22            System.out.println("\n" + input + " is a palindrome.");
23        } else {
24            System.out.println("\n" + input + " is not a palindrome.");
25        }
26
27        sc.close();
28    }
29 }
30
```

Outline:

- palindromjava
  - labs5
    - main(String[]) : void

Console:

```
<terminated> labs5 [Java Application] C:\Users\ELCOT\Desktop\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4
Enter a string: level
"level" is a palindrome.
```