Bereich: Operatoren

Inkrement und Dekrement

Musterlösung

Package: `de.dhbwka.java.exercise.operators` **Klasse:** `IncrementDecrement`

```
package de.dhbwka.java.exercise.operators;

/**
 * @author DHBW lecturer
 * @version 1.0
 *
 * Part of lectures on 'Programming in Java'.
 * Baden-Wuerttemberg Cooperative State University.
 *
 * (C) 2015 by J. Sidler, T. Schlachter, C. Schmitt, W. Süß
 */
public class IncrementDecrement {

    public static void main(String[] args) {
        int i=0;
        int j=0;
        j = ++i;
        int k = j++ + ++i;
        System.out.println("k: " + k);                    k: 3
        System.out.println("*: " + j++ + ++i);           *: 23
        System.out.println(j++ + ++i);                   7
        int m = j++ * ++i;
        System.out.println("m: " + m);                   m: 20
        int n = --j * --i;
        System.out.println("n: " + n);                   n: 16
        System.out.println("i: " + i);                   i: 4
        System.out.println("j: " + j);                   J: 4
   }

}
```

Bereich: Operatoren

Ostertermin berechnen

Musterlösung

Package: `de.dhbwka.java.exercise.operators` **Klasse:** `Easter`

```
package de.dhbwka.java.exercise.operators;

import java.util.Scanner;

/**
 * @author DHBW lecturer
 * @version 1.0
 *
 * Part of lectures on 'Programming in Java'. Baden-Wuerttemberg
 * Cooperative State University.
 *
 * (C) 2015 by J. Sidler, T. Schlachter, C. Schmitt, W. Süß
 */
public class Easter {

	public static void main(String[] args) {
		Scanner scan = new Scanner(System.in);
		System.out.print("Ostertermin fuer welches Jahr berechnen? ");
		int year = scan.nextInt();
		scan.close();
		int a = year % 19;
		int b = year % 4;
		int c = year % 7;
		int k = year / 100;
		int p = (8 * k + 13) / 25;
		int q = k / 4;
		int M = (15 + k - p - q) % 30;
		int N = (4 + k - q) % 7;
		int d = (19 * a + M) % 30;
		int e = (2 * b + 4 * c + 6 * d + N) % 7;
		int easter = (22 + d + e);
		System.out.println("Im Jahr " + year +
			" ist der Ostersonntag am "+
			(easter<32 ? easter : easter-31) + ". " +
			(easter<32 ? "März" : "April"));
	}
}
```

Beispielausgaben:

```
Ostertermin für welches Jahr berechnen? 2016
Im Jahr 2016 ist der Ostersonntag am 27. März

Ostertermin für welches Jahr berechnen? 2019
Im Jahr 2019 ist der Ostersonntag am 21. April
```

Bereich: Operatoren

Vorrang von Operatoren	**Musterlösung**
Package: `de.dhbwka.java.exercise.operators`	**Klasse:** `Priority`

```
package de.dhbwka.java.exercise.operators;

/**
 * @author DHBW lecturer
 * @version 1.0
 *
 * Part of lectures on 'Programming in Java'. Baden-Wuerttemberg
 * Cooperative State University.
 *
 * (C) 2015 by J. Sidler, T. Schlachter, C. Schmitt, W. Süß
 */
public class Priority {

    public static void main(String[] args) {
        System.out.println("1: " + (5 / 2 * 2));           4
        System.out.println("2: " + (9. / 2 * 5));          22.5

        boolean a = true, b = false, c = false;
        System.out.println("3: " + (a && b || c));         false

        char ch = 'c';
        System.out.println("4: " + ('a' + 1 < ch));        true

        int i = 1, j = 2, k = 3;
        System.out.println("5: " + (-i - 5 * j >= k + 1)); false

        i = 1;
        if (a || (++i == 2)) {
            System.out.println("6: " + i);                 1
        }

        i = 1;
        if (a | (++i == 2)) {
            System.out.println("7: " + i);                 2
        }
    }

}
```