

JAVA PROGRAMMING COURSE

EXERCISE

USE OF ENUMERATIONS IN JAVA

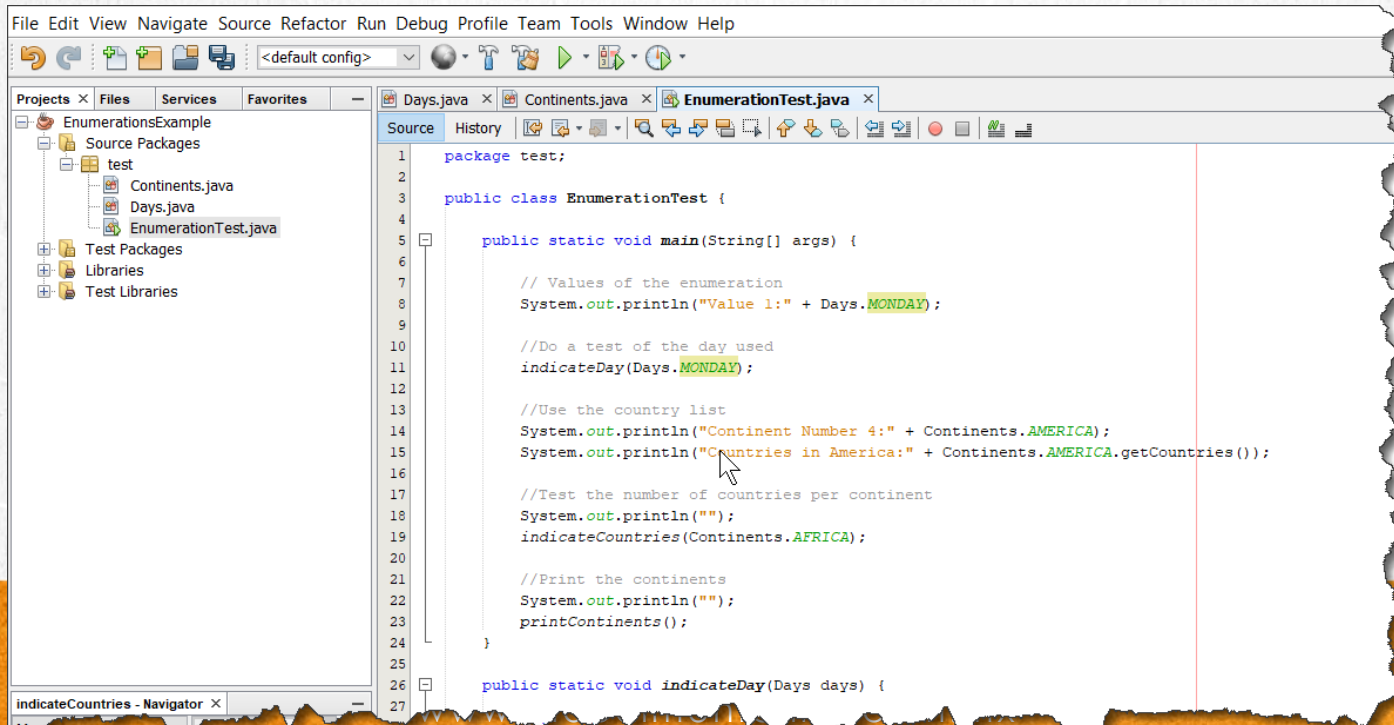


JAVA PROGRAMMING COURSE

www.globalmentoring.com.mx

EXERCISE OBJECTIVE

Create a program to practice using enumerations in Java. At the end we should observe the following:



PASO 1. CREACIÓN DEL PROYECTO

Vamos a crear el proyecto:

New Java Application

Steps

1. Choose Project
2. **Name and Location**

Name and Location

Project Name:

Project Location:

Project Folder:

☐ Use Dedicated Folder for Storing Libraries

Libraries Folder:

Different users and projects can share the same compilation libraries (see Help for details).

☐ Create Main Class

JAVA PROGRAMMING COURSE

www.globalmentoring.com.mx

2. CREATE A NEW CLASS

Create a new class:

New Java Class

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

Class Name: Days

Project: EnumerationsExample

Location: Source Packages

Package: test

Created File: C:\Courses\JavaProgramming\Lesson04\EnumerationsExample\src\test\Days.java

< Back Next > **Finish** Cancel Help

JAVA PROGRAMMING COURSE

www.globalmentoring.com.mx

3. MODIFY THE CODE

Days.java:

```
package test;

public enum Days {
    // They are constant values, that is why they are capitalized
    MONDAY,
    TUESDAY,
    WEDNESDAY,
    THURSDAY,
    FRIDAY,
    SATURDAY,
    SUNDAY
}
```

4. CREATE A NEW CLASS

Create a new class:

New Java Class

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

Class Name:

Project:

Location:

Package:

Created File:

< Back Next > **Finish** Cancel Help

JAVA PROGRAMMING COURSE

www.globalmentoring.com.mx

5. MODIFY THE CODE

Continents.java:

```
package test;

public enum Continents {
    AFRICA(53),
    EUROPE(46),
    ASIA(44),
    AMERICA(34),
    OCEANIA(14);

    // Attribute of each item in an enumeration
    private final int countries;

    // Constructor of each element of the enumeration
    Continents(int countries) {
        this.countries = countries;
    }

    public int getCountries() {
        return countries;
    }
}
```


6. CREATE A NEW CLASS

Create a new class:

New Java Class

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

Class Name:

Project:

Location:

Package:

Created File:

< Back Next > **Finish** Cancel Help

JAVA PROGRAMMING COURSE

www.globalmentoring.com.mx

7. MODIFY THE CODE

EnumerationTest.java:

```
package test;

public class EnumerationTest {

    public static void main(String[] args) {

        // Values of the enumeration
        System.out.println("Value 1:" + Days.MONDAY);

        //Do a test of the day used
        indicateDay(Days.MONDAY);

        //Use the country list
        System.out.println("Continent Number 4:" + Continents.AMERICA);
        System.out.println("Countries in America:" + Continents.AMERICA.getCountries());

        //Test the number of countries per continent
        System.out.println("");
        indicateCountries(Continents.AFRICA);

        //Print the continents
        System.out.println("");
        printContinents();

    }
```

7. MODIFY THE CODE

EnumerationTest.java:

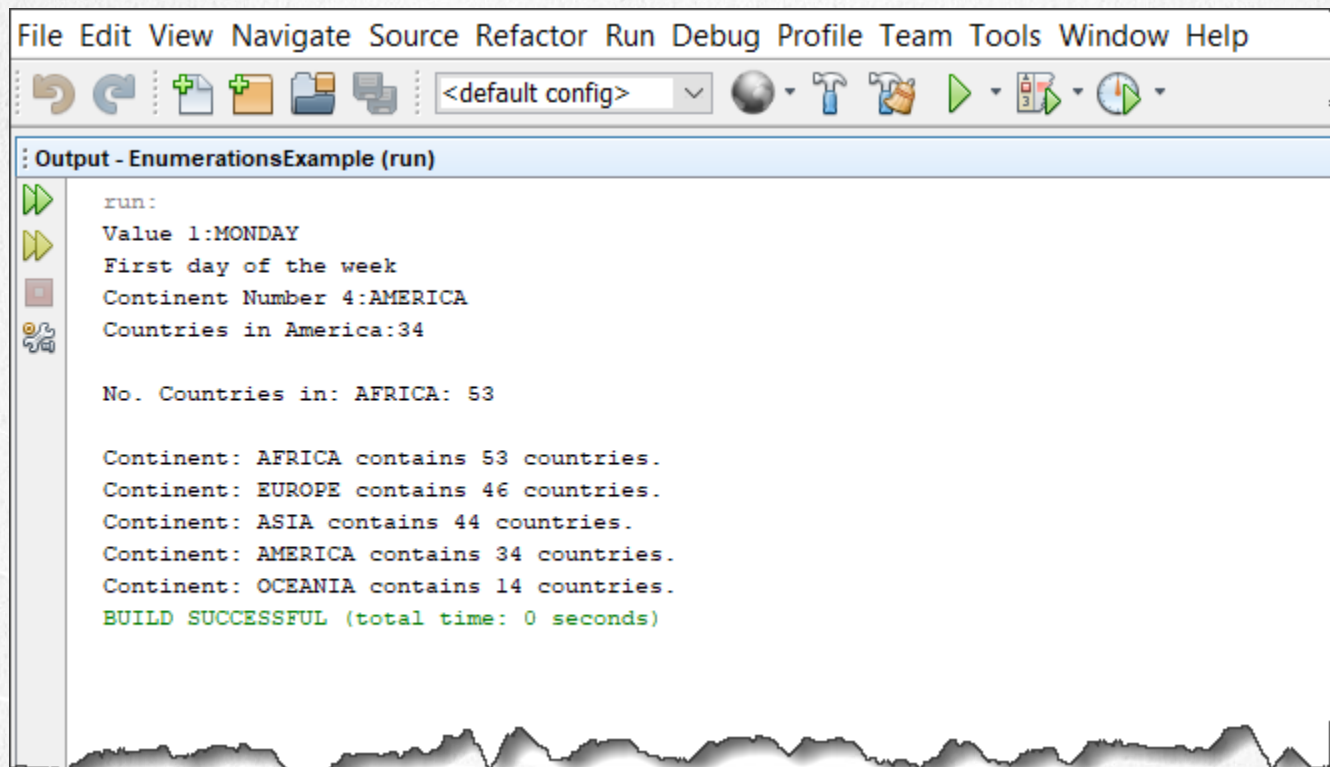
```
public static void indicateDay(Days days) {  
  
    switch (days) {  
        // We can use some constant value of the enumeration directly  
        case MONDAY:  
            System.out.println("First day of the week");  
            break;  
        case TUESDAY:  
            System.out.println("Second day of the week");  
            break;  
        default:  
            System.out.println("And so we continue with the other days");  
    }  
}
```

7. MODIFY THE CODE

EnumerationTest.java:

```
public static void indicateCountries(Continents continents) {  
    switch (continents) {  
        // We can use some constant value of the enumeration directly  
        case AFRICA:  
            System.out.println("No. Countries in: " + continents + ": " + continents.getCountries());  
            break;  
        default:  
            System.out.println("And so we continue with the other continents");  
    }  
}  
  
public static void printContinents() {  
    // We use a forEach  
    for (Continents c : Continents.values()) {  
        System.out.println("Continent: " + c + " contains " + c.getCountries() + " countries.");  
    }  
}
```

PASO 8. EXECUTE THE PROJECT



JAVA PROGRAMMING COURSE

www.globalmentoring.com.mx

EXERCISE CONCLUSION

We have seen the use of the enum types, as well as some of their applications in our Java code.

For more information on the types listed, check:

<https://docs.oracle.com/javase/tutorial/java/javaOO/enum.html>

ONLINE COURSE

JAVA PROGRAMMING

By: Eng. Ubaldo Acosta



JAVA PROGRAMMING COURSE

www.globalmentoring.com.mx