**I. Folosirea *switch***

* *switch(expresie) {*

*case value 1: .....(vine cod)*

*Break;*

*case value2:....;*

*case value3:....;*

*case value4:....;*

*Break;*

default ....

}

**1. Ex. Scrie luna si anul pentru a genera numarul de zile folosind switch.**

**package** years;  
**import** java.util.Scanner;  
  
**public class** Years {  
 **public static void** main(String[] args) {  
 Scanner scanner = **new** Scanner(System.***in***);  
 System.***out***.print(**"Scrie luna: "**);  
 **int** month = scanner.nextInt();  
  
 System.***out***.print(**"Scrie anul: "**);  
 **int** year = scanner.nextInt();  
  
 **if**(month == 1||month ==3||month ==5||month ==7||month ==8||month ==10||month ==12) {  
 System.***out***.println(**"Luna are 31 de zile."**);  
 }  
 **if**(month == 4||month ==6||month ==9||month ==11) {  
 System.***out***.println(**"Luna are 30 de zile"**);  
 }  
 **int** dayCount = 0;  
 **if**(month==2) {  
  
 }  
 **else**{  
 System.***out***.print(**"Luna este invalida."**);  
  
 }  
  
  
 **switch** (month) {  
 **case** 1:  
 **case** 3:  
 **case** 5:  
 **case** 7:  
 **case** 8:  
 **case** 10:  
 **case** 12:  
 dayCount = 31;  
 **break**;  
  
 **case** 4:  
 **case** 6:  
 **case** 9:  
 **case** 11:  
 dayCount = 30;  
 **break**;  
  
 **case** 2:  
 **if** (year % 4 != 0) System.***out***.println(**"Luna are 28 de zile."**);  
 **else if** (year % 100 != 0) {  
 System.***out***.println(**"Luna are 29 de zile."**);  
 } **else if** (year % 400 != 0) {  
 System.***out***.println(**"Luna are 28 de zile."**);  
 **break**;  
 }  
 **default**:  
 }  
  
 }  
}

**EX 2. Numar par/impar**

**2.1 Metoda 1**

**package** parimpar;  
  
**import** java.util.Scanner;  
  
**public class** Parimar {  
  
 **public static void** main(String[] args) {  
  
 Scanner scanner = **new** Scanner(System.***in***);  
 System.***out***.print(**"Scrie un numar: "**);  
 **int** number = scanner.nextInt();  
  
  
  
 **if** (number % 2 == 0) {  
 System.***out***.println(number + **" este numar par"**);  
 } **else** {  
 System.***out***.println(number + **" este numar impar"**);  
 }  
 **switch** (number) {  
 **case** 1:  
 ;  
 **break**;  
 **case** 2:  
 **break**;  
  
 }  
 }  
}

**2.2. Metoda 2**

**package** parimpar;  
  
  
  
  
**import** java.util.Scanner;  
  
**public class** Parimar {  
  
 **public static void** main(String[] args) {  
  
 Scanner scanner = **new** Scanner(System.***in***);  
 System.***out***.print(**"Scrie un numar: "**);  
 **int** number = scanner.nextInt();  
 **int** rest = number%2;  
  
  
 **switch** (rest) {  
 **case** 0: System.***out***.println(number + **" este numar par"**);  
 ;  
 **break**;  
 **default**: System.***out***.println(number + **" este numar impar"**);  
  
 }  
 }  
}

**II. Ray**

int[] numbers= new int[10];

int x= numbers [2];

ex: String[]names= new String[5];

**Exercitiu: Scrie un program in care sa scrii numarul si sa dea ce luna este, iar daca numarul nu face parte din cele 12 luni sa genereze mesajul !!! INVALID.**

**package** MonyhArray;  
**import** java.util.Scanner;  
  
**public class** monthArray {  
 **public static void** main(String[] args) {  
 String[] monthNames = {  
 **"January"**,  
 **"February"**,  
 **"March"**,  
 **"April"**,  
 **"May"**,  
 **"June"**,  
 **"July"**,  
 **"August"**,  
 **"September"**,  
 **"October"**,  
 **"November"**,  
 **"December"** };  
 System.***out***.println(**"Input your month number: "**);  
 Scanner scanner = **new** Scanner(System.***in***);  
 **int** monthNumber = scanner.nextInt();  
  
 **if** (monthNumber<1 || monthNumber>12) {  
 System.***out***.println(**"The month name is: INVALID!!!"**);  
  
  
 }**else** { String monthName = monthNames[monthNumber - 1];  
 System.***out***.println(**"The month name is: "** + monthName);  
 }  
  
  
  
 }  
}

**III.** ***For***

for(int = 0; i<100; i++){

}

**Ex: De citit de la tastatura cinci nume**

**package** cincinume;  
**import** java.util.Scanner;  
**public class** Cincinume {  
  
 **public static void** main(String[]args) {  
 Scanner scanner = **new** Scanner(System.***in***);  
  
 String[] names = **new** String[5];  
 **for**(**int** i=0 ; i<5; i++) {  
 System.***out***.println(**"Type your name number "** + (i + 1)+ **" : "**);  
 names[i] =scanner.nextLine();  
 }  
 System.***out***.println(**"Here is your name list: "**);  
 **for**(**int** i=4; i >= 0; i--){  
 System.***out***.println((5-i) + **" . "** +names[i]);  
 }  
 }  
}

**EX: De citit la tastatura 5 numere.Faceti suma, minim, maxim si media.**

**package** suma;  
**import** java.util.Scanner;  
**public class** Suma {  
 **public static void** main(String[] args) {  
 Scanner scanner = **new** Scanner(System.***in***);  
  
 **int**[] numbers = **new int**[5];  
 **int** sum = 0;  
 **int** max = Integer.***MIN\_VALUE***;  
 **int** min = Integer.***MAX\_VALUE***;  
 **int** avg = 0;  
  
 **for**(**int** i = 0; i<5;i++) {  
 System.***out***.println(**"Type your number "** +(i+1)+ **" : "**);  
 numbers[i] = scanner.nextInt();  
 }  
 **for**(**int** i = 0; i<5; i++) {  
 sum = sum + numbers[i] ;  
 avg = sum/numbers[i];  
 **if**(numbers[i]>max){  
 max = numbers[i];  
 }  
 **if**(numbers[i]<min) {  
 min = numbers[i];  
 }  
 }  
 System.***out***.println(**"Suma celor cinci numere este egala cu "** + sum);  
 System.***out***.println(**"Maximul este "** + max);  
 System.***out***.println(**"Minimul este "** + min);  
 System.***out***.println(**"Media este "** + avg);  
  
  
 }  
}

**EX. : De scris un numar si de afisat primele numere prime**

package ro.sda;

import java.util.Scanner;

public class NumerePrime {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.println("Type the number:");

int count = scanner.nextInt();

int[] primes = new int[count];

for(int i=2;i<count;i++){

boolean wasAnyDivision = false;

for(int j=2;j<i;j++){

if(i % j == 0) {

wasAnyDivision = true;

}

}

if(!wasAnyDivision) {

System.out.println("Prime number: " + i);

}

}

}

}

**}**

**}**