



1. Conditional statements
2. IF statement
3. Variable scope

IF statement

# Conditional statements

# 1. Conditional statements



# 1. Conditional statements



Si botón pulsado es “expresso” entonces fabrica “expresso”

Condición

Acción

# 1. Conditional statements

IF statement

SWITCH  
statement

IF statement

## 2. IF statement

```
if (condition) {  
    //code block  
    //will execute ONLY if condition is true  
}  
//more code
```



## 2. IF statement

boolean value

```
if (condition) {  
    //code block  
    //will execute ONLY if condition is true  
}  
//more code
```

## 2. IF statement

```
if (condition) {  
    //code block  
    //will execute ONLY if condition is true  
}  
//more code
```

## 2. IF statement

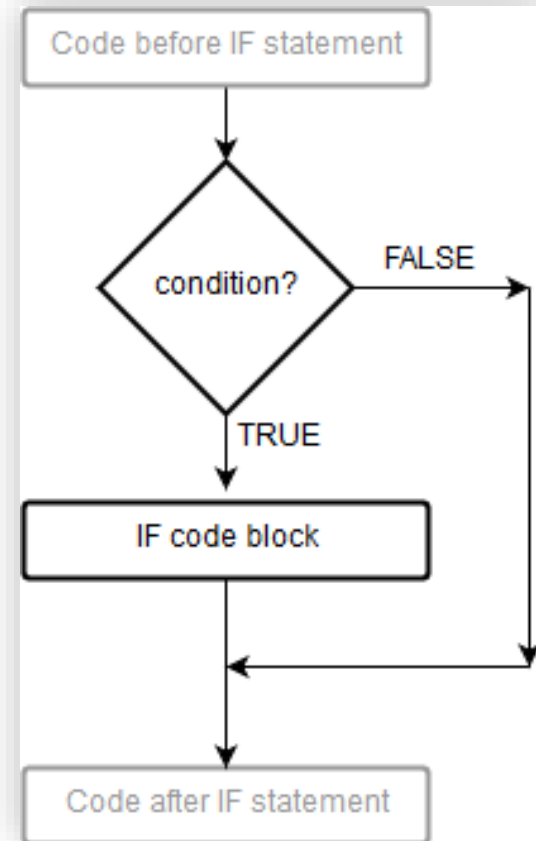
```
//code before IF statement
```

```
if (condition) {
```

```
// IF code block
```

```
}
```

```
//code after IF statement
```



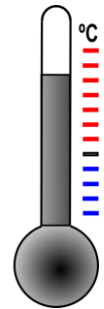
## 2. IF statement

```
boolean isEspresso = ? //true or false
if (isEspresso) {
    System.out.println("Get your espresso, please!");
}

//If isEspresso is true, prints: Get your expressor, please
//If isEspresso is false, no message is printed
```

## 2. IF statement

```
double temperatureInCelsius = -3;  
if (temperatureInCelsius < 0) {  
    System.out.println("It's very cold. Consider wearing a scarf.");  
}  
System.out.println("Have a good day!");  
  
//prints:  
//It's very cold. Consider wearing a scarf.  
// Have a good day!");
```

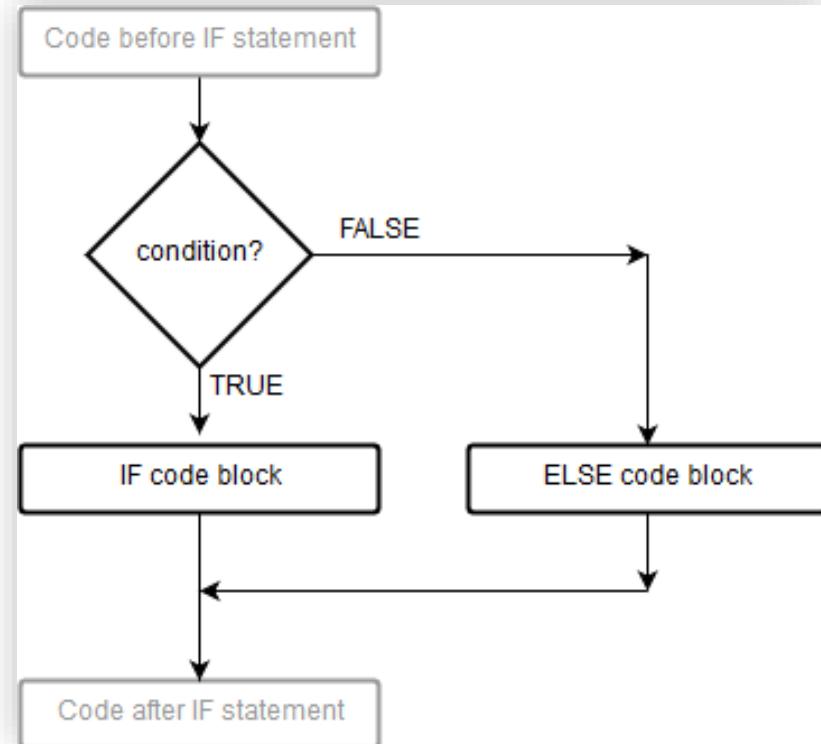


## 2. IF statement

```
if (condition) {  
    //code block  
    //will execute ONLY if condition is true  
}else {  
    //code block  
    //will execute ONLY if condition is false  
}  
//more code
```

## 2. IF statement

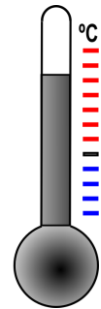
```
//code before IF statement  
if (condition) {  
  //IF code block  
}else {  
  //ELSE code block  
}  
//code after IF statement
```



## 2. IF statement

```
double temperatureInCelsius = 20;
if (temperatureInCelsius < 0) {
    System.out.println("It's very cold. Consider wearing a scarf.");
} else {
    System.out.println("It's not that cold. Wear a t-shirt.");
}
System.out.println("Have a good day!");

//prints:
// It's not that cold. Wear a t-shirt
// Have a good day!";
```

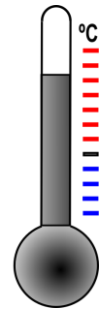




## 2. IF statement

```
double temperatureInCelsius = 20;  
if (temperatureInCelsius < 0) {  
    System.out.println("It's very cold. Consider wearing a scarf.");  
} else {  
    System.out.println("It's not that cold. Wear a t-shirt.");  
}  
System.out.println("Have a good day!");
```

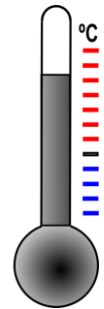
```
//prints:  
// It's not that cold. Wear a t-shirt  
// Have a good day!";
```



## 2. IF statement

```
double temperatureInCelsius = 20;  
if (temperatureInCelsius < 0) {  
    System.out.println("It's very cold. Consider wearing a scarf.");  
} else {  
    System.out.println("It's not that cold. Wear a t-shirt.");  
}  
System.out.println("Have a good day!");
```

```
//prints:  
// It's not that cold. Wear a t-shirt  
// Have a good day!");
```



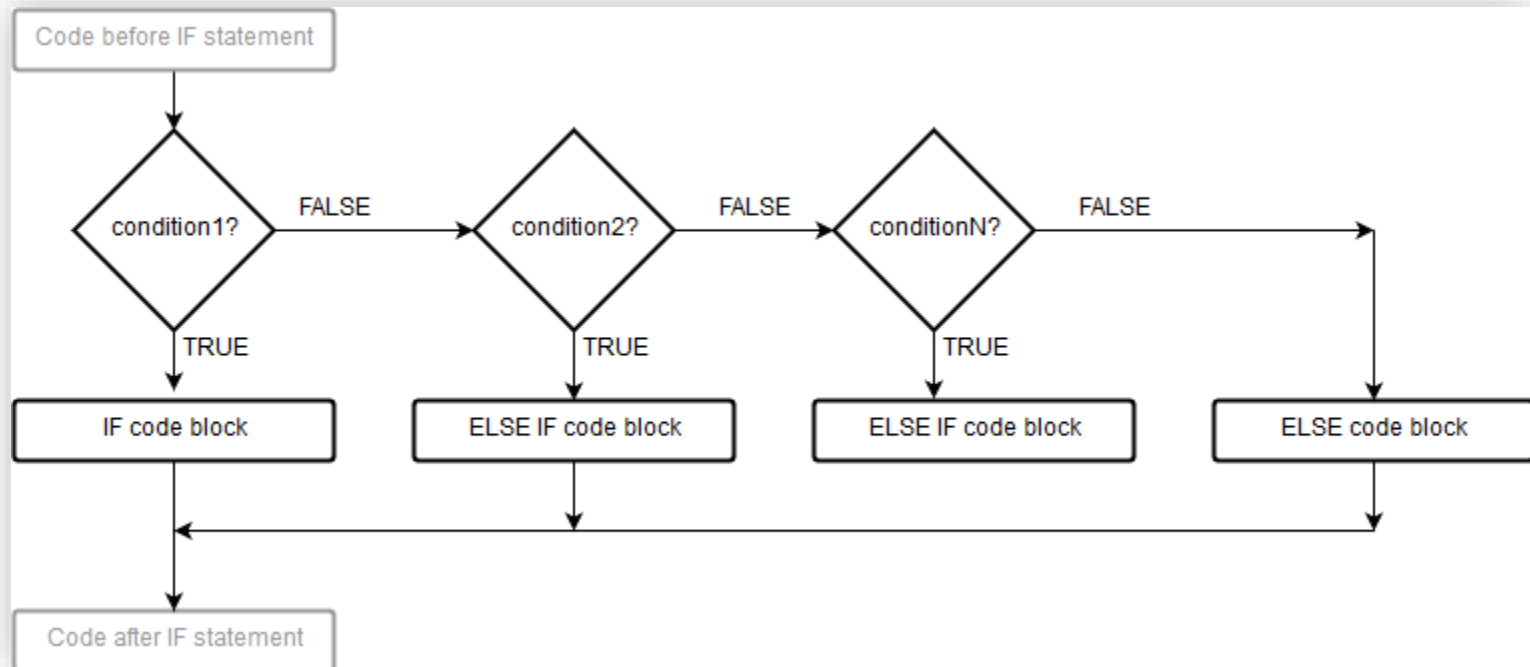
## 2. IF statement

```
if (condition1) {  
    //code block  
    //will execute ONLY if condition1 is true  
} else if (condition2) {  
    //code block  
    //will execute ONLY if condition1 is false and condition2 is true  
} else if (conditionN) {  
    //code block  
    //will execute ONLY if condition1, condition2 are false and conditionN is true  
} else {  
    //code block  
    //will execute ONLY if condition1, condition2, conditionN are false  
}  
//more code
```

## 2. IF statement

```
if (condition1) {  
    //code block  
    //will execute ONLY if condition1 is true  
} else if (condition2) {  
    //code block  
    //will execute ONLY if condition1 is false and condition2 is true  
}  
//more code
```

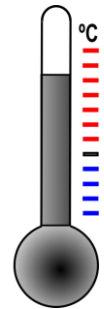
## 2. IF statement



## 2. IF statement

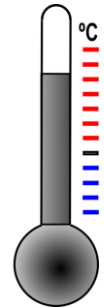
```
double temperatureInCelsius = 28;
if (temperatureInCelsius < 0) {
    System.out.println("It's very cold. Consider wearing a scarf.");
} else if (temperatureInCelsius > 25) {
    System.out.println("It's really warm. Don't forget to wear sunscreen.");
} else {
    System.out.println("It's not that cold. Wear a t-shirt.");
}
System.out.println("Have a good day!");

//prints:
// It's really warm. Don't forget to wear sunscreen.
// Have a good day!");
```



## 2. IF statement

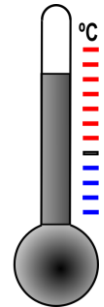
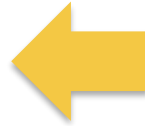
```
double temperatureInCelsius = 28;  
if (temperatureInCelsius < 0) {  
    System.out.println("It's very cold. Consider wearing a scarf.");  
} else if (temperatureInCelsius > 25) {  
    System.out.println("It's really warm. Don't forget to wear sunscreen.");  
} else {  
    System.out.println("It's not that cold. Wear a t-shirt.");  
}  
System.out.println("Have a good day!");  
  
//prints:  
// It's really warm. Don't forget to wear sunscreen.  
// Have a good day!);
```



## 2. IF statement

```
double temperatureInCelsius = 28;
if (temperatureInCelsius < 0) {
    System.out.println("It's very cold. Consider wearing a scarf.");
} else if (temperatureInCelsius > 25) {
    System.out.println("It's really warm. Don't forget to wear sunscreen.");
} else {
    System.out.println("It's not that cold. Wear a t-shirt.");
}
System.out.println("Have a good day!");

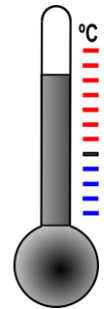
//prints:
// It's really warm. Don't forget to wear sunscreen.
// Have a good day!");
```





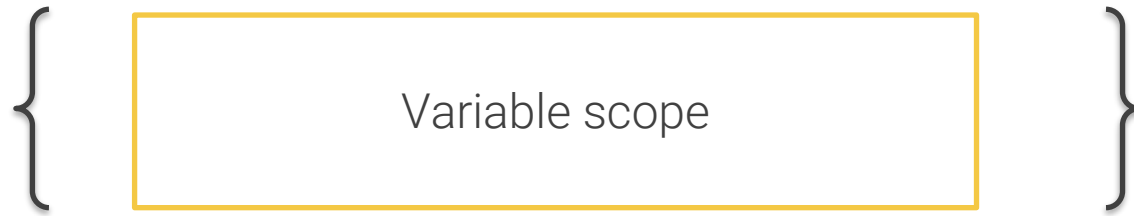
## 2. IF statement

```
double temperatureInCelsius = 28;  
if (temperatureInCelsius < 0) {  
    System.out.println("It's very cold. Consider wearing a scarf.");  
} else if (temperatureInCelsius > 25) {  
    System.out.println("It's really warm. Don't forget to wear sunscreen.");  
} else {  
    System.out.println("It's not that cold. Wear a t-shirt.");  
}  
System.out.println("Have a good day!");  
  
//prints:  
// It's really warm. Don't forget to wear sunscreen.  
// Have a good day!);
```



Variable scope

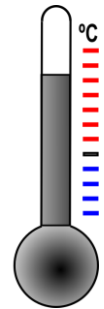
### 3. Variable scope



A set of curly braces  
defines a variable scope

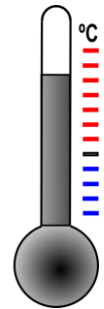
### 3. Variable scope

```
public class Main{  
    public static void main(String[] args) {  
        double temperatura= 28;  
        if (temperatura >25) {  
            System.out.println("Hace calor. No olvides ponerte tus gafas de sol.");  
        }  
        System.out.println("La temperatura ambiente es: "+temperatura+"°C.");  
        .....  
    }  
}  
  
//prints:  
// Hace calor. No olvides ponerte tus gafas de sol.  
// La temperatura ambiente es: 28°C.);
```



### 3. Variable scope

```
public class Main{  
    public static void main(String[] args) {  
        double temperatura= 28;  
        if (temperatura >25) {  
            System.out.println("Hace calor. No olvides ponerte tus gafas de sol.");  
        }  
        System.out.println("La temperatura ambiente es: "+temperatura+"°C.");  
        .....  
    }  
}  
  
//prints:  
// Hace calor. No olvides ponerte tus gafas de sol.  
// La temperatura ambiente es: 28°C.);
```

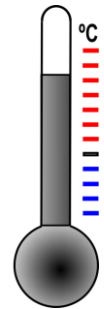


### 3. Variable scope

```
public class Main{  
    public static void main(String[] args) {  
        double temperatura= 28;  
        if (temperatura >25) {  
            System.out.println("Hace calor. No olvides ponerte tus gafas de sol.");  
        }  
        System.out.println("La temperatura ambiente es: "+temperatura+"°C.");  
        .....  
    }  
}
```

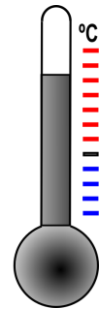
Variable scope

```
//prints:  
// Hace calor. No olvides ponerte tus gafas de sol.  
// La temperatura ambiente es: 28°C.);
```



### 3. Variable scope

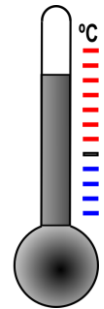
```
public class Main{  
    public static void main(String[] args) {  
        double temperatura= 28;  
        if (temperatura >25) {  
            System.out.println("Hace calor. No olvides ponerte tus gafas de sol.");  
        }  
        System.out.println("La temperatura ambiente es: "+temperatura+"°C.");  
        .....  
    }  
}  
  
//prints:  
// Hace calor. No olvides ponerte tus gafas de sol.  
// La temperatura ambiente es: 28°C.);
```



### 3. Variable scope

```
public class Main{
    public static void main(String[] args) {
        double temperatura= 28;
        if (temperatura >25) {
            double humedad= 50;
            System.out.println("Hace calor. No olvides ponerte tus gafas de sol.");
            System.out.println("La humedad relativa es: "+humedad+"%.");
        }
        System.out.println("La temperatura ambiente es: "+temperatura+"°C.");
        .....
    }
}

//prints:
// Hace calor. No olvides ponerte tus gafas de sol.
// La humedad relativa es: 50%.
// La temperatura ambiente es: 28°C.);
```



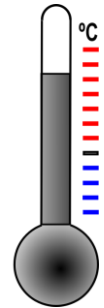


### 3. Variable scope

```
public class Main{  
    public static void main(String[] args) {  
        double temperatura= 28;  
        if (temperatura >25) {  
            double humedad= 50;  
            System.out.println("Hace calor. No olvides ponerte tus gafas de sol.");  
            System.out.println("La humedad relativa es: "+humedad+"%.");  
        }  
        System.out.println("La temperatura ambiente es: "+temperatura+"°C.");  
        .....  
    }  
}
```

```
//prints:  
// Hace calor. No olvides ponerte tus gafas de sol.  
// La humedad relativa es: 50%.  
// La temperatura ambiente es: 28°C.);
```

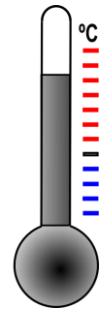
Variable scope



### 3. Variable scope

```
public class Main{
    public static void main(String[] args) {
        double temperatura= 28;
        if (temperatura >25) {
            double humedad= 50;
            System.out.println("Hace calor. No olvides ponerte tus gafas de sol.");
            System.out.println("La humedad relativa es: "+humedad+"%.");
        }
        System.out.println("La temperatura ambiente es: "+temperatura+"°C.");
        humedad = humedad - 10;
        .....
    }
}

//prints:
// Hace calor. No olvides ponerte tus gafas de sol.
// La humedad relativa es: 50%.
// La temperatura ambiente es: 28°C.);
```



“No tengo talentos especiales, pero sí soy  
profundamente curioso”

*Albert Einstein*

