



JAVA

Class 3

Agenda

Operators in Java

If Statement

If Else Statement

Modulus Operators in Java

The modulus operator (%) returns the remainder of a division operation.

It can be applied to floating-point types as well as integer types.

```
1 package com.class1;
2
3 public class Modulus {
4
5     public static void main(String[] args) {
6         int a=10;
7         int b=3;
8
9         int remainder=a%b;
10        System.out.println(remainder);
11
12    }
13 }
```

Console

<terminated> Modulus [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_144.jdk/Contents/Home/bin/java

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Operators in Java

Relational & Equality Operators

OPERATOR	MEANING	EXAMPLE	RESULT
<	Less than	1<2	True
>	Greater than	1>2	False
<=	Less than or equal to	1<=2	True
>=	Greater than or equal to	1>=2	False
==	Equal to	1==2	False
!=	Not equal to	1!=2	True

Control Flow Statements

Java Flow Control

- 1) Java Conditional Statements
- 2) Java Loop Statements

Code is generally executed from top to bottom, in the order that they appear.

Control flow statements, however, break up the flow of execution by employing decision making, looping, and branching, enabling your program to conditionally execute particular blocks of code.

Java

Conditional Statements

Conditional Statements are used to insert verification points and error handling.

Two types of Conditional statements in Java

1) if statement

2) switch Statement

if statement

```
If (I study hard) {
```



I got the job !

```
}else {
```



I did not get
the job !

```
}
```

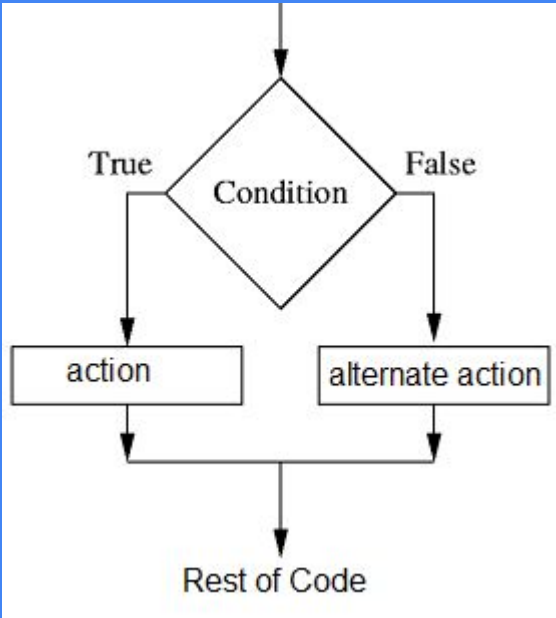
if statement

This is the most basic of all the control flow statements, it tells your program to execute when a particular condition is true.

```
if(Boolean_expression) {  
    // Executes when the Boolean expression is true  
}
```

Example:

```
if(a==2) {  
    System.out.println("The value of a is 2");  
}
```



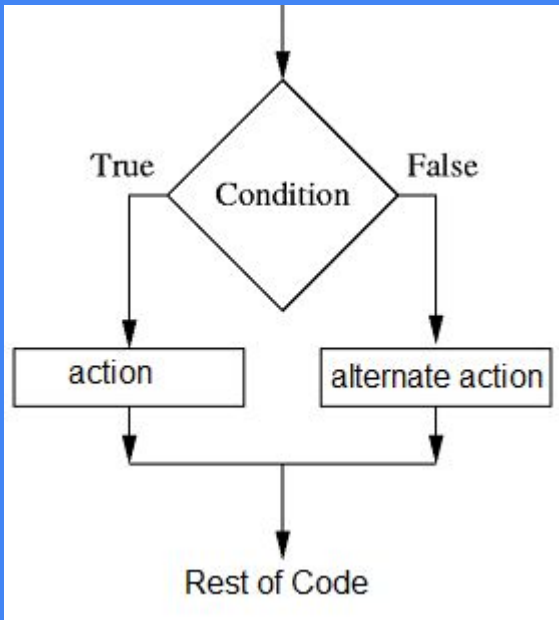
if ... else statement

This statement provides a secondary path of execution when an “if” condition is false it executes the command in else statement.

```
if(Boolean_expression) {  
    // Executes when the Boolean expression is true  
}else {  
    // Executes when the Boolean expression is false  
}
```

Example:

```
int a=2;  
if (a == 2) {  
    system.out.println(" the value of a is 2");  
} else {  
    system.out.println(" the value of a not 2");  
}
```



Task

1. Create a Java program and name it Double Comparison. Declare 2 double values and if value of first variable is higher then print “Double value __ is larger than __.” Otherwise print...
2. Create a Java program and name it Temperature Check. Create variable to store temperature. Your program should check if temperature is below 32 then it should print “Water will freeze with temperature __”, otherwise “Water will NOT freeze with temperature __”.

if...else...if Statement

This statement used to test various conditions

```
if(Boolean_expression 1) {  
    // Executes when the Boolean expression 1 is true  
}else if(Boolean_expression 2) {  
    // Executes when the Boolean expression 2 is true  
}else if(Boolean_expression 3) {  
    // Executes when the Boolean expression 3 is true  
}else {  
    // Executes when the none of the above condition  
    is true.  
}
```

if...else...if Statement

```
int day=3;

if (day==1) {
    System.out.println("Monday");
}else if(day==2){
    System.out.println("Tuesday");
}else if(day==3){
    System.out.println("Wednesday");
}else if(day==4){
    System.out.println("Thursday");
}else if(day==5){
    System.out.println("Friday");
}else if(day==6){
    System.out.println("Saturday");
}else if(day==7){
    System.out.println("Sunday");
}
```

Task

1. Create a Java program and declare int variable that will hold a month. Based on the value of the variable your program should print the name of the month.

2. **Interview Question**

Write a Java Program to check whether number is Even or Odd.