IF-ELSE STATEMENT IN JAVA

An **if** statement can be followed by an optional **else** statement, which executes when the Boolean expression is false.
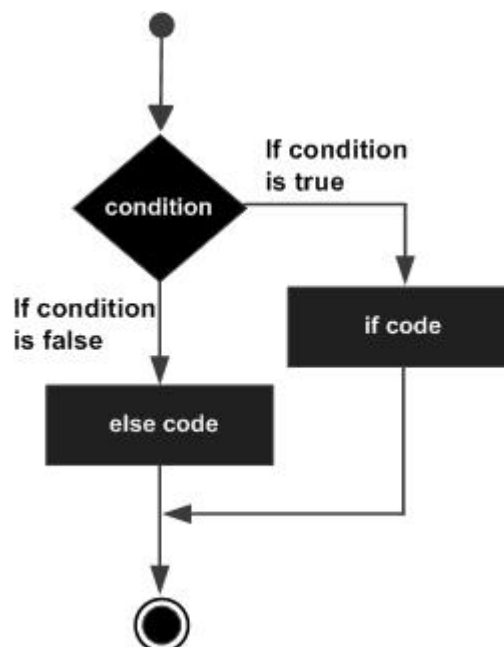
Syntax:

The syntax of an if...else is:

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

If the boolean expression evaluates to true, then the if block of code will be executed, otherwise else block of code will be executed.

Flow Diagram

Example:

```
public class Test {

   public static void main(String args[]){
      int x = 30;

      if( x < 20 ){
         System.out.print("This is if statement");
      }else{
         System.out.print("This is else statement");
      }
   }
}
```

This would produce the following result:

```
This is else statement
```

The if...else if...else Statement:

An if statement can be followed by an optional *else if...else* statement, which is very useful to test various conditions using single if...else if statement.

When using if , else if , else statements there are few points to keep in mind.

- An if can have zero or one else's and it must come after any else if's.

- An if can have zero to many else if's and they must come before the else.

- Once an else if succeeds, none of the remaining else if's or else's will be tested.

Syntax:

The syntax of an if...else is:

```
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.
}
```

Example:

```
public class Test {

   public static void main(String args[]){
      int x = 30;

      if( x == 10 ){
         System.out.print("Value of X is 10");
      }else if( x == 20 ){
         System.out.print("Value of X is 20");
      }else if( x == 30 ){
         System.out.print("Value of X is 30");
      }else{
         System.out.print("This is else statement");
      }
   }
}
```

This would produce the following result:

```
Value of X is 30
```