

A+ Computer Science

IFS

**What is
an if
statement?**

The If Statement

**if I am hungry
I eat something**

**if I am tired
I go to sleep**

The If Statement

if it is dark

I turn a light on

if I can't hear the song

I make it louder

Logic

10101001000011
100010001111001
10101010101011001

Relational

frequently used operators

Operator	Use
$x == y$	checks if x and y have the same value
$x > y$	checks if x is greater than y
$x < y$	checks if x is less than y
$x >= y$	checks if x is greater than or equal to y
$x <= y$	checks if x is less than or equal to y
$x != y$	checks if x is not equal to y

Boolean

A boolean is any condition or variable that can be evaluated to true or false.

10 == 10

boolean isOdd = true;

boolean isEven = false;

If Statements

The If Statement

An if statement is a block of code that is associated with a condition. The block of code may execute once or not at all depending on the evaluation of the condition.

The If Statement

```
if ( boolean condition placed here )  
{  
    do something 1;  
    do something 2;  
}
```

The If Statement

```
int aplus = 109;  
if(aplus < 100)  
{  
    System.out.println("aplus < 100");  
}
```

OUTPUT

aplus > 100

```
if(aplus > 100)  
{  
    System.out.println("aplus > 100");  
}
```

The If Statement

```
int uilScore = 240;
if(uilScore==240)
{
    System.out.println("state champ");
}
if(uilScore<100)
{
    System.out.println("work harder");
}
```

OUTPUT

state champ

The If Statement

```
String stringOne = "big";  
if(stringOne.equals("it"))  
{  
    System.out.println("== it");  
}
```

OUTPUT

== big

```
if(stringOne.equals("big"))  
{  
    System.out.println("== big");  
}
```

The If Statement

```
boolean isOdd = true;
if(isOdd == true)
{
    System.out.println("isodd");
}
```

OUTPUT

isodd

```
if(isOdd == false)
{
    System.out.println("iseven");
}
```

ifone.java
ifoneuil.java

iftwo.java
ifonestring.java

ifoneboolean.java
ternary.java

Nesting Ifs

```
int num=7;  
if(num>2)  
{  
    if(num<10)  
        System.out.println(">2<10");  
    if(num>10)  
        System.out.println(">2>10");  
}
```

OUTPUT

>2<10

ifnesting.java

Common Errors

```
If(total >= 25);
```

```
{  
}
```

```
if(total = 10)
```

```
{  
}
```

Common Errors

Never put a ;
before an open { brace

;

{

illegal

}

;

legal

Work on Programs!

Crank

Some Code!

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