

## Java

### Conditional Statement

using conditional statement we can apply condition for statement execution or jump statement according to condition. By-default java statement execute sequentially or according to events.

#### 1) Conditional control Statement

- a) If
- b) If else
- c) Else if
- d) Switch
- e) Conditional operator
- f) nested

#### 2) Conditional Looping Statement

- a) while
- b) For
- c) Do While
- d) For each
- e) nested

# Conditional control

- Conditional control statement use for jump or execute specified statement. conditional control statement apply condition for one or more statement(block).

1) if → If statement apply only one condition for one or more statement ,using if we can check condition first if condition is true execute next statement or block otherwise jump next statement.

- Syntax:

```
» If(condition)
   Statement;
```

```
if(condition)
{
    Statement;
    Statement;
}
```


# if

1) If Condition apply with single statemet

```
int x=20;
```

```
if(x>10)  
    System.out.print("hello");  
System.out.print("Hi");
```

true



helloHi

# If

If Condition apply with single statement

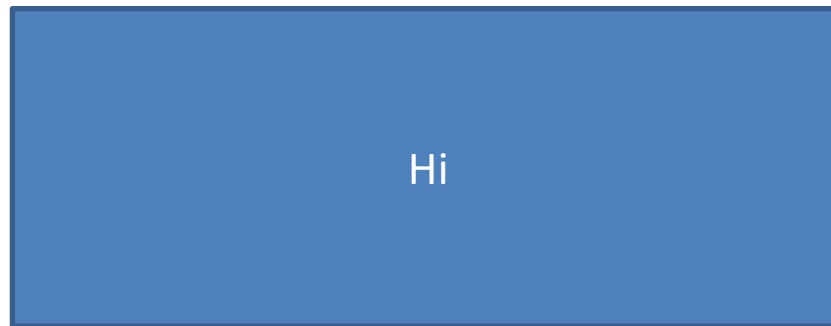
2) int x=5;

if(x>10)

System.out.print("hello");

System.out.print("Hi");

false



# if

1) If Condition apply with multiple statement

```
int x=20;
```

```
if(x>10)
```

```
{
```

```
System.out.print("hello");
```

```
System.out.print("Hi");
```

```
}
```

true

helloHi

# If

If Condition apply with single statement

2) int x=5;

if(x>10)

{

System.out.print("hello");

System.out.print("Hi");

}

false



# If else

2) If else → If else statement apply only two condition for one or more statement but execute only one condition at a time ,using if else we can check condition first if condition is true execute next statement and jump else block statement otherwise jump if statement and execute else block statement.

- Syntax:

```
If(condition)
    Statement;
else
    Statement;
```

```
if(condition)
{
    Statement;
    Statement;
}
else
{
    Statement;
    Statement;
}
```

# If else

Condition for single statement:

```
Int x=5;
```

```
    if(x%2==0)
```

```
        System.out.print("even no");
```

```
    else
```

```
        System.out.print("odd no");
```

false



Odd no



# If else

Condition for single statement:

```
Int x=6;
```

```
    if(x%2==0)
        System.out.print("even no");
    else
        System.out.print("odd no");
```

true

Even no

# If else

Condition for multiple statement:

```
Int x=5;
```

```
    if(x%2==0)
```

```
    {
```

```
        System.out.print("even no");
```

```
        System.out.print("Hello");
```

```
    }
```

```
    else
```

```
    {
```

```
        System.out.print("odd no");
```

```
        System.out.print(" HI");
```

```
    }
```

false

Odd no HI

# If else

Condition for multiple statement:

```
Int x=6;
```

```
    if(x%2==0)
```

```
    {
```

```
        System.out.print("even no");
```

```
        System.out.print("Hello");
```

```
    }
```

```
    else
```

```
    {
```

```
        System.out.print("odd no");
```

```
        System.out.print(" HI");
```

```
    }
```

Even no Hello

# Else if

- Else if statement apply multiple condition for one or more statement but else if execute only one condition. Else if check condition if condition true execute next statement or block and jump all condition otherwise check next condition.

Syntax:

```
if(condition)
    statement;
else if(condition)
    statement;
else if(condition)
    statement;
else
    statement;
```

```
if(condition)
{
    statement;
    statement;
}
else if(condition)
{
    statement;
    statement;
}
else
{
    statement;
    statement;
}
```

# Else if

- `int pm=67;`  
`if(pm>=60)`  
    `System.out.print("First");`  
`else if(pm>=45)`  
    `System.out.print("2nd");`  
`else if(pm>=30)`  
    `System.out.print("3rd");`  
`else`  
    `System.out.print("Fail");`

- `int pm=55;`  
`if(pm>=60)`  
    `System.out.print("First");`  
`else if(pm>=45)`  
    `System.out.print("2nd");`  
`else if(pm>=30)`  
    `System.out.print("3rd");`  
`else`  
    `System.out.print("Fail");`

First

2<sup>nd</sup>

- `int pm=20;`  
`if(pm>=60)`  
false `System.out.print("First");`  
`else if(pm>=45)`  
false `System.out.print("2nd");`  
`else if(pm>=30)`  
`System.out.print("3rd");`  
false `else`  
`System.out.print("Fail");`

fail

# switch

- Switch statement work same as else if but use switch, case, default, break keywords for declaration. Using switch we can apply multiple condition and allow to execute one or more condition at a time.
- Syntax:

```
Switch(variable)
{
    case 1:
        statement;
    case 2:
        Statement;
    case 3:
        statement;
    default
        Statement;
}
```