## Nested if:

* Generally, if condition works like yes or no type. If the condition satisfies, it executes some block of code. Otherwise, it doesn’t execute the code. Let us see the syntax of the simple if condition.

**Syntax:**

if( condition ){

if( condition ){

if( condition ){

......

}

}

}

**Program:**

**class** Statement

{

**public** **static** **void** main(String args[])

    {

**int** a=40;

**int** b=50;

**int** c=49;

**if**(a==40){

**if**(b==50){

**if**(c!=59){

                System .out. println("Statement header");

            }

        }

    }

}

**Nested if else:**

* When an if else statement is present inside the body of another “if” or “else” then this is called nested if else.

**Syntax:**

if(condition) {

if(condition2) {

}

else {

}

}

else {

}

Program:**//This java program to demonstrate the use of Nested if statement**

public class JavaNestedIfExample2 {

public static void main(String[] args) {

int age=25;

int weight=48;

if(age>=18){

if(weight>50){

System .out .println ("You are eligible to donate blood");

} else{

System .out. println("You are not eligible to donate blood");

}

} else{

System .out. println("Age must be greater than 18");

}

} }

**Output: You are not eligible to donate blood**

**Nested while:**

* Nested while loop is a while statement inside another while statement. In a nested while loop, one iteration of the outer loop is first executed, after which the inner loop is executed . The execution of the inner loop continues till the condition describe the inner loop is satisfied.

**Syntax:**

while(condition) {

while(condition) {

// statement of inside loop

}

// statement of outer loop

}

**Program:**

class Nestwhile1

{

public static void main(String [] args){

int i=1,j=1;

while(i<=4)

{

while(j<=4)

{

System .out. print(j);

j++;

}

i++;

System .out .println("");

j=1;

}

}

}

**Output:1234**

1234

1234

1234

**Nested do-while:**

* In java programming language ,one do-while loop inside another do-while loop is known as nested do-while loop

**Syntax:**

do{

do{

// statement of inside loop

}while(condition);

// statement of outer loop

}while(condition);

**Program:**

class NestedDoWhile{

public static void main(String [] args){

int row=1,column=1;

int x;

do{

x=4;

do{

System .out .println("");

x--;

}whille(x>=row);

column=1;

do{

System .out. println(column+" ");

column++;

}while(column<=5);

System .out. println(" ");

row++;

}while(row<=5);

}

}

**Output:**1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5