

# Java Programming Lab Manual

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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

# **JAVA PROGRAMMING LAB MANUAL**

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**Editors**

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## Chapter 15

### Nested Loops

**Agha Javad Phatan, Zeeshan Bhatti, Asadullah Shah**

#### Abstract

The use of nested loops is also very common and vital. The nested loops are a loop defined within the body of another loop. In this chapter students will learn the use of nested loops and then some tasks will be given at the end to practice the use of nested loops.

#### 15.1 Nested Loops flow

First any loop can be nested with any other type of loop. For nested loops it is not necessary that both loops must be of same type, hence a for() loop body can contain while or do-while loop and vice versa. The syntax of nested loop is as follows:

```
while (condition) {  
    while() {  
        Some statements ;  
    }//end of inner loop  
}// end of outer loop
```

- You can nest any number of loops within the body of another loop.

#### 15.2 Control Flow of Nested loops

It is essential to understand the control flow of the nested loops. If the loop is nested then when the outer loop execute once the inner loop executes until its condition is false, then the outer loop