

# 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 11

### Loops in Java

Agha Javad Phatan, Zeeshan Bhatti, Asadullah Shah

#### Abstract

Programming is in fact the art of controlling the flow of program execution and Java lets you control this flow by providing the traditional conditional and looping statements. The looping construction provided in Java have been taken from C and C++, and these are while(), do-While() and for() loops. Each provides the functionality of repeating or looping through certain statements or block of code until certain condition is fulfilled. In this chapter we are going to discuss the while() loop construct and its uses for Java programming.

#### 11.1 The While Statement

The while loop is used to repeat a statement or a block of multiple statements as long as particular condition is true and it stops the execution when the condition becomes false and program control is taken out of the loop block. The syntax of While loop is:

```
While(condition) {  
    Statements...;  
}
```

In the while loop construct the condition must be an expression the returns a Boolean result in form of true or false such as  $(x > 6)$ . This means that the loop will continue to execute until the value of 'x' becomes greater than 6. Consider another example in Figure 11.1 below.