

# Java Programming Lab Manual

Asadullah Shah

Zeeshan Bhatti



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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

# **JAVA PROGRAMMING LAB MANUAL**

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**Editors**

**Asadullah Shah  
Zeeshan Bhatti**

**Department of  
Kulliyah of Information & Communication Technology  
International Islamic University Malaysia**

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## Chapter 23

### Argument Passing

Dil Nawaz Hakro, Zeeshan Bhatti, Asadullah Shah

#### Abstract

Each method in Java needs a way to pass arguments so it can communicate with the method. In Java there are two types of argument passing, Pass by Value and Pass by Reference. In this experiment the students will learn about these two types and how they are used.

#### 23.1 Arguments and Parameters

Any expression that has an appropriate data type can serve as a parameter, consider the following example:

```
double u = 3, v = -4;
...
Polynomial p = new Polynomial (1.0, -(u + v), u * v);
double y = p.getValue (2 * v - u);

public class Polynomial
{
    public Polynomial (double a, double b, double c) { ... }
    public double getValue (double x) { ... }
    ...
}
```

- This applies to Boolean expressions, too.
- If an expression cannot be converted to the appropriate type (for example, if a method expects an *int* and the expression's result type is a *double*), then the compiler reports an error.