

# Java Fundamentals

## Section 5

```
package inventory;
public class Product {
    private int itemNumber;
    private String name;
    private int quantity;
    private double price;
    private boolean active = true; // Default value
    // Constructor with parameters
    public Product(int itemNumber, String name, int quantity, double price) {
        this.itemNumber = itemNumber;
        this.name = name;
        this.quantity = quantity;
        this.price = price;
    }
    // Getters and Setters
    public int getItemNumber() { return itemNumber; }
    public void setItemNumber(int itemNumber) { this.itemNumber = itemNumber; }
    public String getName() { return name; }
    public void setName(String name) { this.name = name; }
    public int getQuantity() { return quantity; }
    public void setQuantity(int quantity) { this.quantity = quantity; }
    public double getPrice() { return price; }
    public void setPrice(double price) { this.price = price; }
    public boolean isActive() { return active; }
    public void setActive(boolean active) { this.active = active; }
    // Method to calculate inventory value
    public double getInventoryValue() {
        return price * quantity;
    }
    // toString method with ternary operator
    @Override
    public String toString() {
        return "Item Number : " + itemNumber + "\n" +
            "Name : " + name + "\n" +
            "Quantity in stock: " + quantity + "\n" +
            "Price : " + price + "\n" +
            "Stock Value : " + getInventoryValue() + "\n" +
            "Product Status : " + (active ? "Active" : "Discontinued");
    }
}
```

## OUTPUT

```
Enter item number: 1
Enter product name: Greatest Hits
Enter quantity in stock: 25
Enter price: 9.99

Enter item number for second product: 2
Enter product name for second product: Latest Release
Enter quantity in stock for second product: 30
Enter price for second product: 19.99

Product 1 Details:
Item Number : 1
Name : Greatest Hits
Quantity in stock: 25
Price : 9.99
Stock Value : 249.75
Product Status : Active

Product 2 Details:
Item Number : 2
Name : Latest Release
Quantity in stock: 30
Price : 19.99
Stock Value : 599.70
Product Status : Active
```