## MaxValue

```
import java.util.ArrayList;
public class MaximumFinder {
 public static Integer findMaximum(ArrayList<Integer> numbers) {
   if (numbers == null || numbers.isEmpty()) {
     return null;
   }
   Integer largest = numbers.get(0);
   for (Integer number: numbers) {
     if (number > largest) {
       largest = number;
     }
   }
   return largest;
 }
}
```

## SortList

```
import java.util.ArrayList;
import java.util.Collections;

public class ListSorter {
   public static void arrangeAscending(ArrayList<Integer> numbers) {
```

```
if (numbers != null) {
    Collections.sort(numbers);
}
}
```

## GroceryItemOrder

```
public class ShoppingItem {
  private String itemName;
  private int itemQuantity;
  private double unitPrice;
  public ShoppingItem(String itemName, double unitPrice) {
   this.itemName = itemName;
   this.unitPrice = unitPrice;
   this.itemQuantity = 1; // Default quantity is 1
  }
  public double calculateCost() {
   return itemQuantity * unitPrice;
 }
  public void updateQuantity(int itemQuantity) {
   this.itemQuantity = itemQuantity;
```

```
public String getItemName() {
    return itemName;
}

public int getItemQuantity() {
    return itemQuantity;
}

public double getUnitPrice() {
    return unitPrice;
}
```

## **GroceryListTest**

```
public class ShoppingListDemo {
  public static void main(String[] args) {
    // Create shopping list
    ShoppingList list = new ShoppingList();

    // Create shopping items
    ShoppingItem milk = new ShoppingItem("Milk", 1.50);
    milk.updateQuantity(2);
```

```
ShoppingItem bread = new ShoppingItem("Bread", 2.00);
bread.updateQuantity(3);
ShoppingItem eggs = new ShoppingItem("Eggs", 0.50);
eggs.updateQuantity(12);

// Add items to the shopping list
list.addItem(milk);
list.addItem(bread);
list.addItem(eggs);

// Display the total cost of the shopping list
System.out.printf("Total cost of the shopping list: $%.2f%n", list.calculateTotalCost());
}
```