Java Assignment

**Solution for above examples 1 and 2**

Import java.util.\*;

Public class DiwaliSale {

Public static void main(String[] args) {

// Example 1

List<Integer> productPrices1 = Arrays.asList(10, 20, 30, 40, 50, 60);

calculateMaxDiscount(productPrices1);

// Example 2

List<Integer> productPrices2 = Arrays.asList(10, 20, 30, 40, 50, 50, 60);

calculateMaxDiscount(productPrices2);

}

Public static void calculateMaxDiscount(List<Integer> productPrices) {

Collections.sort(productPrices, Collections.reverseOrder());

List<Integer> payableItems = new ArrayList<>();

List<Integer> freeItems = new ArrayList<>();

For (int i = 0; i < productPrices.size(); i++) {

payableItems.add(productPrices.get(i));

If (i + 1 < productPrices.size()) {

freeItems.add(productPrices.get(i + 1));

i++;

}

}

System.out.println(“Payable Items: “ + payableItems);

System.out.println(“Discounted Items (Free): “ + freeItems);

System.out.println();

}

}