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# Exercise

1. Write a program that can do the following tasks:
    1. Create an array List1 and initialize the array with integer/ double datatype.
    2. Create an array List2 and initialize the array with integer/ double datatype.
    3. Merge List1 and List2.
    4. Create a method to sort the merged list in ascending order.
    5. Create a method to sort the merged list in descending order.
    6. Create a method to find the biggest number in the merged list.
    7. Create a method to find the smallest number in the merged list.

# Lab Test

1. (*Menu and price*) Write a program that can display the available menu and price. The program also must be able to find the expensive menu.

    **Here is a sample run:**

```
Menu                    Price (RM)
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Fried rice              RM 5.0
Chicken rice            RM 5.5
Spaghetti               RM 8.0
Beef Lasagna            RM 12.0
Laksa Penang            RM 3.5

The expensive menu is: Beef Lasagna  RM 12.0
```

2. **(Sorted)** Write the following method that returns true if the list is already sorted in increasing order. Write a test program that prompts the user to enter a list and displays whether the list is sorted or not.

   **public static boolean** isSorted(**int**[] list)

   **Here is a sample run.**

   **Enter list: 8 10 1 5 16 61 9 11 1**
   **The list is not sorted**
   **Enter list: 10 1 1 3 4 4 5 7 9 11 21**
   **The list is already sorted**

3. **(Student's score)** Write a program that able to receive input for student's score. Write a method to classify the student's score based on the below grade and able to count number of student based on their grade. Write a method that can calculate the percentage of the student's grade.

   | Score | Grade |
   |---|---|
   | 80 – 100 | A |
   | 65 - 79 | B |
   | 50 - 64 | C |
   | 40 - 49 | D |
   | 0 - 39 | F |

   **Here is a sample run.**

   **Enter number of student: 50**
   **Enter student's score for Student 1: 80**
   **Enter student's score for Student 2: 70**
   **….**
   **….**
   **Number of student obtained grade A: 10 (10 %)**
   **Number of student obtained grade B: 30 (20 %)**
   **….**
   **….**