

TINKER ACADEMY

AP Computer Science Prep (Java DS & Algo)

Homework 6: Insertion Sort

Make sure you read the Handout slides!

Overview

In this Homework you **will** be modifying the Insertion Sort Algorithm. Instead of sorting the entire array you will be only sorting part of the array.

Open the Homework

Import Java Project

1. Open File Manager
2. Navigate to TinkerCourses, TA-JAV-3, homework6
3. Right Click, extract Homework6.zip
4. Double click to Open eclipse (under Tinker Apps)
5. Right click over Package Explorer
6. Import...
7. Select extracted folder Homework6

Before you begin

Keep the handout slides for Week 6 open

Structure of the Program

Homework5 is an Eclipse Java Project. The Project has

1. A Java Source File called "Main.java"
2. A Java Source File called "InsertionSort.java"
3. The Main class contains the main method

Complete the Homework

Homework

The Insertion Sort we covered in class sorted the entire array.

For example the unsorted array looked like this

5	1	4	3	2
---	---	---	---	---

After Insertion Sort the array looked like this

1	2	3	4	5
---	---	---	---	---

In this homework, you would need to modify the InsertionSort algorithm so that it sorts only arrays between array index m and array index n

For example, if

$m = 2$ and $n = 4$

Only the section marked green should be sorted. The section marked red should not be sorted.

5	1	4	3	2
---	---	---	---	---

After your modified Insertion Sort algorithm completes, the array should look like this

5	1	2	3	4
---	---	---	---	---

Once you make your changes, you should save the files using File->Save All in Eclipse before submitting the homework.

All the Best!

Submit the Homework

Submit your changes

1. Make sure you are on the Home WiFi.
2. Save All your changes
3. Open File Manager
4. Click TinkerSetup
5. Double Click "Course Submit"

All the Best!