

Assignment 1: Take-Home Assignment

Tasks 1 & 2

Instructions

Create one class named **Tasks1n2** that has static methods that represent each task to be completed below. This class must have a main method and call each of the static methods you have created. The static methods take no arguments and have no return.

Task 1

Asks the user for 2 numbers and an arithmetic operator. The method will perform the arithmetic operation. Accept 6 operators. Use if statements. Do not check for validation.

Total: 5 marks

Task 2

Complete Task 1 using Switch statements.

Total: 5 marks

Tasks 3 & 4

Instructions

Create two classes named **House** and **HouseRunner**. You will be instructed below what to code in those classes.

Task 3

In the House class, create 3 instance variables with unique data types and unique accessibility levels.

Create 7 constructors for this class (including the default constructors).

Total: 10 marks

Task 4

In the HouseRunner class, code a main method (that is, ensure the main method exists).

In the main method, instantiate the House object in 3 unique ways.

Using printf, output the values of all three instance variables of the 3 House objects.

Total: 4 marks

Tasks 5-8

Instructions

Create a class named **Tasks5_8** that has static methods that represent each task to be completed below. This class must have a main method and call the task5 method. The static methods have no return but task 6 and 7 methods have specified parameters.

Task 5

Ask the user for a number that represents the number of elements they would like in their array.

Create an interger array with the specified # of elements (from above), then send the user to the Task 6 method.

From Task 6, run your Task 7 method.

Total: 2 marks

Task 6

This method takes one parameter of integer array

In a loop that starts at the beginning of the array to the end of the array, ask the user for a number to populate each index of the array. Do not check for validation.

Total: 5 marks

Task 7

This method takes one parameter of integer array

Using any loop, output all the values of your array to screen

Total: 3 marks

Task 8

In the main method, run the Task 5 method.

Total: 1 mark

Submission

Submit one file named Assignment1_DDDDDDDDD.zip, where DDDDDDDDD represents your student number. The zip file should only contain .java source files.

Your package name should be Assignment1_DDDDDDDDD