Faculty of Information Technology
Dept of Computer Science

BIRZEIT UNIVERSITY
Birzeit, Palestine
Spring 2012/2013

COMP231
Final Practical Exam

Name:…………………………………. Number Section: 2

Birzeit University has many faculties. All of these faculties are listed in a file as follows:

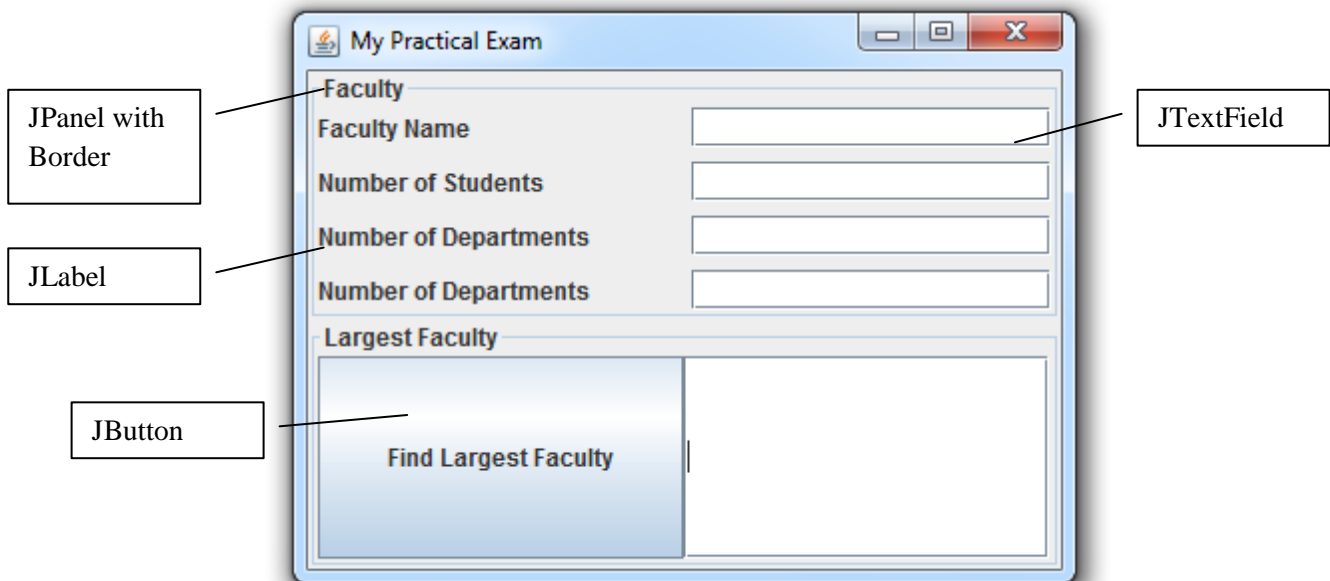| Faculty Name	Num of Students	Num of Teachers	Num of Departments
IT	500	22	2
Arts	1000	45	6
Engineering	760	30	6
Law	1002	60	3

….

Create a Java class named Faculty, which contains the information mentioned above as data fields. This class should contain setter and getter for each data field (do all necessary verifications in the setter methods).

Implement the **compareTo**() method in the Comparable interface which compare the number of students in each faculty.

Override the **toString()** method in the Faculty class to return full information about each Faculty as the format in the sample output (page 2).

Write a test program that creates a list (OR an array) of faculties, and find the largest faculty in the list (array) (the faculty which has the max number of students is the largest one).

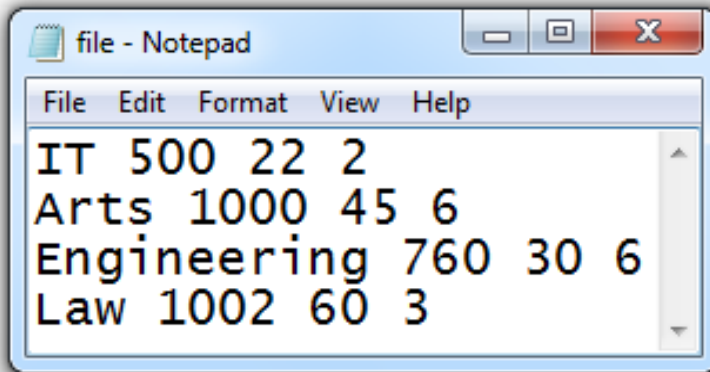In the same project, create the following GUI.

JPanel with Border

JTextField

JLabel

JButton

My Practical Exam

Faculty
Faculty Name
Number of Students
Number of Departments
Number of Departments

Largest Faculty

Find Largest Faculty

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Sample Input

Sample Output:

```
The University has 4 Faculties

In IT Faculty, 22 Teachers and 500 students in 2 Departments
In Arts Faculty, 45 Teachers and 1000 students in 6 Departments
In Engineering Faculty, 30 Teachers and 760 students in 6 Departments
In Law Faculty, 60 Teachers and 1002 students in 3 Departments

The largest Faculty is Law, Which has 1002 Students
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