

OOP

Lab 10 : Collections

Q. SIP Season is here! The Placement Unit wants your help to create a program that manages the Students and Companies. Please help the PU!

The whole process is divided into two parts: Applying and Hiring.

The students apply to various companies and the companies interview and hire them.

You have been provided with 2 interfaces : ApplyingInterface and HiringInterface

And 7 classes : Student, CSStudent, PhoenixStudent, Company, ITCompany, CoreCompany and PlacementUnit.

You need to complete these classes.

Some important implementation details:

1. Each company has a minimum criteria which needs to be satisfied by a Student applying: CGPA and PassingYear.
2. A Student has some expected stipend that he wants to receive.
3. ITCompanies allow Students from any branch to apply but CoreCompanies allow only PhoenixStudents.
4. After the application process, the Companies interview the students in order of their CGPA.
5. The Company have some criteria through which a Student clears the interview and can be hired by the Student, which depends on projects, DSA, CP and CoreSkills.
6. All this is mediated by the PlacementUnit. At the start of the season, all students and companies enroll with the PU.
7. After this, the PU lets the Companies interview the students. Since the PU wants the Students to gain maximum benefit of the SIP, it hosts the Companies in order of their stipend and the number of students that they are left to hire.
8. The Company interviews the Student that they want to interview. If the interview is cleared, it informs the PU. The PU then lets the Company to hire the Student.

Help the PU by completing the classes. Follow the comments given to understand what is expected from each method.

You may follow the Driver to check your implementations.

Submission Guidelines:

After completing the lab, compress your solution in a .zip format. The zip file and the folder inside it should have the name format 202XYYYY9999G_Lab10.

Upload before completion time i.e. 3:50:00 PM. To be safe, you can upload your solution near the completion time and continue working to avoid missing the deadline. No excuse regarding late submission will be handled.