

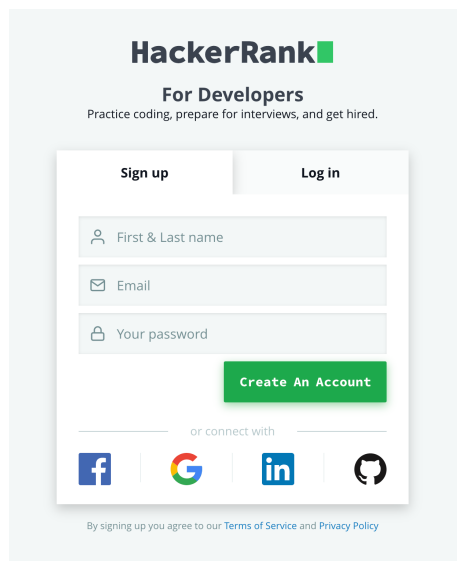
Lab 2

Sparse Matrix – Sorting – Linked List

1 Hackerrak

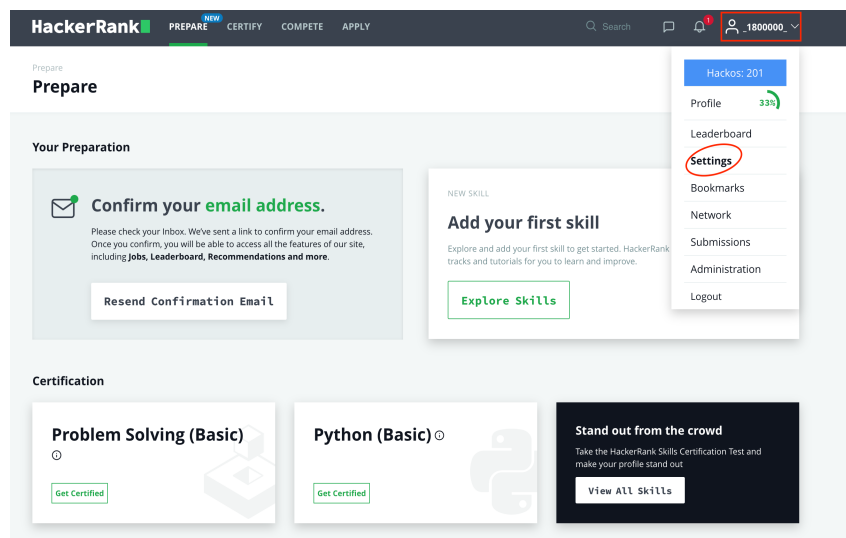
The problems are created and added to hackerrank <https://www.hackerrank.com> and you have to do the following:

- 1- Create an account <https://www.hackerrank.com/auth/signup>



The image shows the HackerRank sign-up page for developers. It features a 'Sign up' tab and a 'Log in' tab. The sign-up form includes fields for 'First & Last name', 'Email', and 'Your password'. Below these fields is a green 'Create An Account' button. Underneath the button, it says 'or connect with' followed by social media icons for Facebook, Google, LinkedIn, and GitHub. At the bottom, there is a link to the 'Terms of Service and Privacy Policy'.

- 2- Change username to be in the format `_id`. For example, if your id is 1800000, then the username should be `_1800000`. If you got an error that the username already exists, then add underscores before or after the id. **Grading will be based on the username and this step is important.**



The image shows the HackerRank user dashboard. The top navigation bar includes links for 'PREPARE', 'CERTIFY', 'COMPETE', and 'APPLY'. The user's profile is shown in the top right corner with a dropdown menu containing options like 'Profile', 'Leaderboard', 'Settings' (highlighted with a red circle), 'Bookmarks', 'Network', 'Submissions', 'Administration', and 'Logout'. The main content area is divided into sections: 'Your Preparation' with a 'Confirm your email address' message and a 'Resend Confirmation Email' button; 'NEW SKILL' with an 'Add your first skill' prompt and an 'Explore Skills' button; and 'Certification' with 'Problem Solving (Basic)' and 'Python (Basic)' sections, each with a 'Get Certified' button. A dark blue box on the right encourages the user to 'Stand out from the crowd' by taking the HackerRank Skills Certification Test.

A screenshot of the HackerRank account settings page. The page has a dark header with the HackerRank logo and navigation links: PREPARE, NEW, CERTIFY, COMPETE, and APPLY. On the right of the header are search, chat, and notification icons, along with a user profile icon and the username '_1800000_'. The main content area is divided into two sections: 'ACCOUNT' and 'PREFERENCES'. The 'ACCOUNT' section includes links for Settings (highlighted), Teams, Password, Shipping Details, and Phone. The 'PREFERENCES' section includes links for Emails, Language, and Personalization, with a 'Save Changes' button at the bottom. The 'Your Username' section shows the current username '_1800000_' with a red arrow pointing to it. The 'Email Addresses' section shows a primary email 'test@test.hhh' with a 'Resend verification email' button and an 'Add another email' button. The 'Connected Accounts' section shows buttons to connect to Facebook, GitHub, and LinkedIn. The 'Merge Accounts' section has a note about accidentally creating two accounts.

3- Open the contest and solve the challenges.

<https://www.hackerrank.com/data-structures-lab-2-1635077002>

2 Notes

- You are required to use hackerrank and solve the challenges.
- You must use *scanf()* to read the integer value inputs to your program and *printf()* to write the output value from your program.
- You should work individually.
- You are encouraged to ask any questions on teams, or in person.
- Cheating will be severely penalized (for both parties). So, it is better to deliver nothing than deliver a copy!

Good Luck