16. Create a login form with all necessary validations (On success or unsuccessful login, display appropriate toast Message)

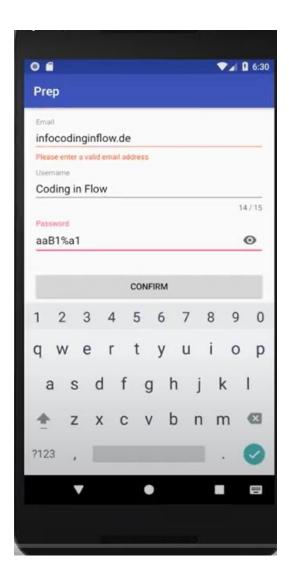
This day Login and Registration form in Android are part of every application. So, when we are programming, we work with many registration forms. Forms can be very different from a simple login or registration to a complex ordering form for any application.

A login application is the screen asking your credentials to login to some particular application. You might have seen it when logging into Facebook, twitter etc. First you have to define two Text View asking username and password of the user. Define a button with login text. In the java file, inside the method of onClick get the username and passwords text using getText() and toString() method and match it with the text using equals() function.

The last thing to do is to provide a security mechanism, so that unwanted attempts should be avoided. For this initialize a variable and on each false attempt, decrement it. And when it reaches to 0, disable the login button.

With registration, how you can check data that the user has entered with simple validation. Validation can check many conditions. We can verify if an email address is a valid email and if a user entered all the required data, for instance, we check if Edit Text is empty for the first and last name. We can prepare a way to notify the user that the data is not valid. On login activity, we should check for password length. There are a few things login and registration form need:

- Clean user interface.
- Validation (check if the email is an email and if the user entered all the data).
- Notifications for the user that the data is incorrect.
- Instructions for the user (e.g. how many characters are required for password).



- 1. Explain the use of equals() function.
- 2. Explain validation of user input?
- 3. List and explain various GUI components used to design the login form with validation.
 - 1. Write a program to create the login form and display login successful/ Unsuccessful toast message.
 - 2. Write a program to create the login form with necessary validations like length of username and password, empty text fields, proper format for valid Email address and count of unsuccessful login attempts. Display the login successful/Unsuccessful toast message. https://www.youtube.com/watch?v=cnD_7qFeZcY