QUE. Write a program to create the login form with necessary validations like length of username and password, empty text fields, count of unsuccessful login attempts. Display the login successful/Unsuccessful toastmessage.

Activity_Main.java

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp"
    tools:context=".MainActivity">
    <EditText android:id="@+id/username "
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Username"
        android:inputType="text" />
    <EditTextandroid:id="@+id/emailEditText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
android:layout_below="@id/usernameEditText" android:layout_marginTop="16dp"
        android:hint="Email"
android:inputType="textEmailAddress" />
    <EditText
        android:id="@+id/passwordEditText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"

android:layout_below="@id/emailEditText"
        android:layout_marginTop="16dp"
        android:hint="Password"
        android:inputType="textPassword" />
    <Button
        android:id="@+id/loginButton"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
android:layout_below="@id/passwordEditText"
        android:layout_marginTop="16dp"
        android:text="Login" />
</RelativeLayout>
```

MainActivity.java

```java
package com.example.pr28;
public class MainActivity extends
AppCompatActivity {
    private EditText usernameEditText,
emailEditText, passwordEditText;
    private Button loginButton;
    private int attemptCount = 0;
    private final int MAX_ATTEMPTS = 3;
    @Override
    protected void onCreate(Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
usernameEditText = findViewById
(R.id.usernameEditText);
emailEditText = findViewById
(R.id.emailEditText);
passwordEditText =
findViewById(R.id.passwordEditText);
loginButton = findViewById
(R.id.loginButton);
        loginButton.setOnClickListener(new
View.OnClickListener() {
@Override
public void onClick(View v) {
login();}
});}
    private void login() {String username =
usernameEditText.getText().toString().trim()
;
String email =
emailEditText.getText().toString().trim();
String password =
passwordEditText.getText().toString().trim();
if (username.isEmpty() || email.isEmpty()
|| password.isEmpty()) {
showToast("Username, email, or password
cannot be empty.");
return; }
    if (username.length() < 4) {
showToast("Username must be at least 4
characters long.");
return;
}
```

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```
if(!Patterns.EMAIL_ADDRESS.matcher(email
).matches()) {
showToast("Invalid email address.");
return;
}
if (password.length() < 6) {
showToast("Password must be at least 6
characters long.");
return;
}if (username.equals("riyapratik") &&
email.equals("riyapratik@gmail.com") &&
password.equals("reaction")) {
        showToast("Login successful!");
    } else {attemptCount++;
        if (attemptCount >=
MAX_ATTEMPTS) {
```

```
        showToast("Maximum login
attempts reached. Try again later.");
        loginButton.setEnabled(false);
    } else {
        showToast("Invalid username,
email, or password. Attempts left: " +
(MAX_ATTEMPTS - attemptCount));
        }
    }
  }
  private void showToast(String message) {
    Toast.makeText(this, message,
Toast.LENGTH_SHORT).show();
  }
}
```

OUTPUT :