```
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import java.io.File;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.IOException;
import java.security.SecureRandom;
import javax.crypto.Cipher;
import javax.crypto.CipherOutputStream;
import javax.crypto.KeyGenerator;
import javax.crypto.SecretKey;

public class MainActivity extends AppCompatActivity {

    private EditText mUsernameEditText;
    private EditText mPasswordEditText;

    private Cipher mCipher;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_main);

mUsernameEditText = findViewById(R.id.username_edit_text);
mPasswordEditText = findViewById(R.id.password_edit_text);

Button mLoginButton = findViewById(R.id.login_button);
mLoginButton.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
handleLogin();
}
});

// Initialize the cipher
try {
mCipher = Cipher.getInstance("AES/CTR/NoPadding");
} catch (Exception e) {
e.printStackTrace();
}
}

private void handleLogin() {
String username = mUsernameEditText.getText().toString();
String password = mPasswordEditText.getText().toString();

SecureRandom random = new SecureRandom();
```

```
KeyGenerator keyGenerator = null;
try {
keyGenerator = KeyGenerator.getInstance("AES");
} catch (Exception e) {
e.printStackTrace();
}
keyGenerator.init(256, random);
SecretKey secretKey = keyGenerator.generateKey();

try {
mCipher.init(Cipher.ENCRYPT_MODE, secretKey);
CipherOutputStream cos = new CipherOutputStream(
new FileOutputStream(new File(getFilesDir(), "credentials.txt")),
mCipher
);
cos.write((username + "," + password).getBytes());
cos.close();
Toast.makeText(this, "Credentials saved", Toast.LENGTH_SHORT).show();
} catch (Exception e) {
e.printStackTrace();
}

if (username.equals("admin") && password.equals("password")) {
Toast.makeText(this, "Login successful", Toast.LENGTH_SHORT).show();
} else {
Toast.makeText(this, "Incorrect username or password", Toast.LENGTH_SHORT).sh
```

```
    }
  }
}
```