3) Create an application to develop login window using UI controls.
Steps are :

1) Open Android studio → Click New Project → Select Empty View Activity →
Next.

2) Select name as "My Application Login", Language as Java and Minimum
SDK as API 16 ("Jelly Bean", Android 4·01). Click Finish.

3) activity_main.xml :

```xml
<?xml version = "1·0" encoding = "utf-8"?>
<LinearLayout xmlns:android = "https//schemas.android.com/apk/
                                                        res/android"

    android: layout_width = "match_parent"
    android: layout_height = "match_parent"
    android: gravity = "center_vertical"
    android: orientation = "vertical"
    android: padding = "16dp">
    <!--Username EditText -->


    <EditText
        android : id = "@+Id/edit TextUsername"
        android : layout_width = "match_parent"
        android : layout_height = "60dp"
        android : hint = "@string/ username"
        android : Input Type = "text"/>
    <!-- Password EditText -->


    <EditText
        android : id = "@+Id/edit TextPassword"
        android : layout_width = "match_parent"
        android : layout_height = "60dp"
```

Date _____

Expt. No. _____ 3 _____ Page No. _____ 9 _____

```xml
        android:hint = "@string/password"
        android:inputType = "textPassword" />
<!-- Login Button -->

    <Button
        android:id = "@+id/buttonLogin"
        android:layout_width = "match_parent"
        android:layout_height = "wrap_content"
        android:rotationX = "6"
        android:text = "@string/login" />

</LinearLayout>
```

4) MainActivity.java:

```java
package com.example.myapplicationlogin;
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;
public class MainActivity extends AppCompatActivity {

    private EditText editTextUsername, editTextPassword;
    private Button buttonLogin;
    @Override

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

Date _____

Expt. No. _____ 3 _____   Page No. _____ 10

```
setContentView (R. layout. activity _ main);

//Initialize UI elements
editTextUsername = findViewById (R. Id. editTextUsername);
editTextPassword = findViewById (R. Id. editTextPassword);
buttonLogin = findViewById (R. Id. buttonLogin);

// set a click listener for the login button
buttonLogin. setOnClickListener (new View. OnClickListener() {
@Override
public void onClick (View view) {
  //Retrieve entered username and password
    String username = editTextUsername. getText (). toString();
    String password = editTextPassword. getText (). toString();

  //Implement authentication logic here
  if (username. equals ("Admin") && password. equals ("123")) {
    // successful login
    Toast. makeText (MainActivity. this, "Login successful",
                      Toast. LENGTH_SHORT). show();

  } else {
    // Failed login
    Toast. makeText (MainActivity. this, "Invalid username or
                password," Toast. LENGTH_SHORT). show();
    }
   }
 });
 }
}
```

5) Click Run app ▶ or shift + 10 to execute the application.