1. **Read/write the local data.**

* 1. Click Start →**Android Studio**, a Welcome to Android Studio dialog box will appear. **Click NewProject**, the New Project Dialog box appears.
  2. Choose **Empty Views Activity** then clicks next.
  3. Specify the **Name of your project**, Select the **Language as Java**, and Select the **Minimum SDK as API 24 (“Nougat”, Android 7.0).** Click Finish Button
  4. To create another activity for **Home Page,** Right Click **App New Activity**  **Empty Views Activity.** A **New Android Activity** dialog box appears, Specify the **Name** of the activity as **Mainactivity2** then click **Finish**.



* 1. Create one **TextView** resource in
  2. **activity\_main2.xml** and update the following code.

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android" xmlns:app="http://schemas.android.com/apk/res-auto" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity2"

android:orientation="vertical">

<Button android:id="@+id/btnFetch" android:layout\_width="168dp" android:layout\_height="wrap\_content" android:text="Fetch" />

<TextView android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="User Name" >

</TextView> <EditText

android:id="@+id/etUserName" android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

</EditText>

<TextView android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Password">

</TextView>

<EditText android:id="@+id/etPassword" android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

</EditText>

</LinearLayout>

**4. MainActivity2.java:**

package com.example.program8;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context; import android.content.SharedPreferences; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.EditText;

public class MainActivity2 extends AppCompatActivity {

Button btnFetch;

EditText etUserName,etPassword;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main2); btnFetch = (Button) findViewById(R.id.btnFetch); etUserName = (EditText)findViewById(R.id.etUserName); etPassword = (EditText)findViewById(R.id.etPassword); btnFetch.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View view)

{

SharedPreferences sharedPreferences = getSharedPreferences("MyPrefs",

Context.MODE\_PRIVATE);

String username = sharedPreferences.getString("username", ""); String password = sharedPreferences.getString("password", ""); etUserName.setText(username);

etPassword.setText(password);

}

});

}}

**6. Activity\_main.xml:**

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android" xmlns:app="http://schemas.android.com/apk/res-auto" xmlns:tools="http://schemas.android.com/tools" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity"

android:orientation="vertical">

<TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:text="User Name"/>

<EditText android:id="@+id/etUserName" android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

</EditText>

<TextView android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Password">

</TextView>

<EditText android:id="@+id/etPassword" android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

</EditText>

<Button

android:id="@+id/btnsave" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:text="Save" />

<Button

android:id="@+id/btnnext" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"

android:text="Next" />

</LinearLayout>

**7. MainActivity.java:**

package com.example.program8; import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context; import android.content.Intent;

import android.content.SharedPreferences; 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 {

Button btnsave, btnnext;

EditText etUserName, etPassword;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.activity\_main); btnsave = (Button) findViewById(R.id.btnsave); btnnext = (Button) findViewById(R.id.btnnext); etUserName = (EditText) findViewById(R.id.etUserName); etPassword = (EditText) findViewById(R.id.etPassword); btnsave.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

SharedPreferences sharedPreferences = getSharedPreferences("MyPrefs",

Context.MODE\_PRIVATE);

SharedPreferences.Editor editor = sharedPreferences.edit(); editor.putString("username", etUserName.getText().toString()); editor.putString("password", etPassword.getText().toString()); editor.apply();

Toast.makeText(getApplicationContext(), "Saved successfully", Toast.LENGTH\_LONG).show();

}

});

btnnext.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Intent intent = new Intent(getApplicationContext(), MainActivity2.class); startActivity(intent);

}

});

}

}

**11. Create an application to send an Email.**

1. **Click Start- Android Studio**, a Welcome to **Android Studio dialog box will appear**. Click New Project, the **New Project Dialog box appears**.
2. Choose **Empty Views Activity** then click Next.
3. Specify the Name of your project, Select the **Language as Java**, and Select the **SDK as API**

**24(“Nougat”,Android 7.0)**.Click Finish **Button**.

1. Update the following code in **activity\_main.xml** and **MainActivity.java**
2. Click Run app or shift+F10 to execute the application.

1. **activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android" xmlns:app="http://schemas.android.com/apk/res-auto" xmlns:tools="http://schemas.android.com/tools" android:id="@+id/main" android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity">

<EditText

android:id="@+id/editTextTo" android:layout\_width="match\_parent" android:layout\_height="wrap\_content"

android:hint="To" />

<EditText android:id="@+id/editTextSubject" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_below="@id/editTextTo"

android:hint="Subject" />

<EditText

android:id="@+id/editTextMessage" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_below="@id/editTextSubject" android:hint="Message"/>

<Button

android:id="@+id/buttonSend" android:layout\_height="wrap\_content" android:layout\_below="@id/editTextMessage"

android:text="Send" />

</RelativeLayout>

**6. MainActivity.java:**

package com.example.lab\_11pro;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint; import android.content.Intent; import android.os.Bundle; import android.view.View; import android.widget.Button; import android.widget.EditText; public class MainActivity extends AppCompatActivity { EditText editTextTo, editTextSubject, editTextMessage;

Button buttonSend; @Override

protected void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState); setContentView(R.layout.*activity\_main*); editTextTo = findViewById(R.id.*editTextTo*); editTextSubject = findViewById(R.id.*editTextSubject*); editTextMessage = findViewById(R.id.*editTextMessage*); buttonSend = findViewById(R.id.*buttonSend*);

buttonSend.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View v)

{

sendEmail();

}

});

}

@SuppressLint("QueryPermissionsNeeded")

private void sendEmail() {

String to = editTextTo.getText().toString().trim();

String subject = editTextSubject.getText().toString().trim();

String message = editTextMessage.getText().toString().trim(); Intent intent = new Intent(Intent.*ACTION\_SEND*);

intent.setType("text/plain");

intent.putExtra(Intent.*EXTRA\_EMAIL*, new String[]{to}); intent.putExtra(Intent.*EXTRA\_SUBJECT*, subject); intent.putExtra(Intent.*EXTRA\_TEXT*, message);

if (intent.resolveActivity(getPackageManager()) != null)

{

startActivity(Intent.*createChooser*(intent, "Choose an email client"));

}

}

}