

## 7. 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**.
5. Create one **TextView** resource in
6. **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_c
        ontent"
        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_pa  
rent"  
android:layout_height="wrap_co  
ntent">  
</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_pa
rent"
android:layout_height="wrap_con
tent">
</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_pa
rent"
android:layout_height="wrap_co
ntent">
</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.SharedPrefere
nces; 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**.
4. Update the following code in **activity\_main.xml** and **MainActivity.java**
5. Click **Run app** or **shift+F10** to execute the application.

### 6. 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"
        t"
        android:layout_below="@id/editTextTo"
        To"
        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"));
    }
}
}

```