

## PRACTICAL 4

### CODE

#### MainActivity.kt

```
package com.example.sharedpreference

import android.content.SharedPreferences
import android.os.Bundle
import android.widget.Button
import android.widget.EditText
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        val etName = findViewById<EditText>(R.id.name)
        val etRollNo = findViewById<EditText>(R.id.rollno)
        val save = findViewById<Button>(R.id.saveBtn)
        val get = findViewById<Button>(R.id.getBtn)

        val sharedPref = getSharedPreferences("addName", MODE_PRIVATE)
        val edit = sharedPref.edit()

        save.setOnClickListener {
            edit.putString("name", etName.text.toString())
            edit.putString("rollno", etRollNo.text.toString())
            edit.apply() // apply() is preferred over commit() for asynchronous saving
            Toast.makeText(this, "Data saved", Toast.LENGTH_SHORT).show()
        }

        get.setOnClickListener {
            val myName = sharedPref.getString("name", "default value")
            val myRoll = sharedPref.getString("rollno", "default value")
            Toast.makeText(this, "Name: $myName - Roll No: $myRoll",
                Toast.LENGTH_SHORT).show()
        }
    }
}
```

## 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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="50dp"
        android:text="Shared Preferences"
        android:textSize="20sp"
        android:textStyle="bold" />

    <EditText
        android:id="@+id/name"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="100dp"
        android:layout_marginStart="20dp"
        android:layout_marginEnd="20dp"
        android:hint="Name"
        android:inputType="textPersonName" />

    <EditText
        android:id="@+id/rollno"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/name"
        android:layout_marginTop="20dp"
        android:layout_marginStart="20dp"
        android:layout_marginEnd="20dp"
        android:hint="Roll No:"
        android:inputType="textPersonName" />

    <Button
        android:id="@+id/saveBtn"
```

ANDROID APPLICATION DEVELOPMENT

```
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_below="@id/rollno"
android:layout_marginTop="30dp"
android:layout_marginStart="20dp"
android:text="SAVE" />
```

```
<Button
    android:id="@+id/getBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/rollno"
    android:layout_marginTop="30dp"
    android:layout_marginEnd="20dp"
    android:layout_alignParentEnd="true"
    android:text="GET" />
```

```
</RelativeLayout>
```

## **build.gradle.kts(:app)**

```
plugins {
    alias(libs.plugins.android.application)
    alias(libs.plugins.kotlin.android)
}

android {
    namespace = "com.example.sharedpreference"
    compileSdk = 35

    defaultConfig {
        applicationId = "com.example.sharedpreference"
        minSdk = 24
        targetSdk = 34
        versionCode = 1
        versionName = "1.0"

        testInstrumentationRunner = "androidx.test.runner.AndroidJUnitRunner"
    }

    buildTypes {
        release {
            isMinifyEnabled = false
            proguardFiles(
```

## ANDROID APPLICATION DEVELOPMENT

```
        getDefaultProguardFile("proguard-android-optimize.txt"),
        "proguard-rules.pro"
    )
}
}
compileOptions {
    sourceCompatibility = JavaVersion.VERSION_11
    targetCompatibility = JavaVersion.VERSION_11
}
kotlinOptions {
    jvmTarget = "11"
}
}

dependencies {

    implementation(libs.androidx.core.ktx)
    implementation(libs.androidx.appcompat)
    implementation(libs.material)
    implementation(libs.androidx.activity)
    implementation(libs.androidx.constraintlayout)
    testImplementation(libs.junit)
    androidTestImplementation(libs.androidx.junit)
    androidTestImplementation(libs.androidx.espresso.core)
}
```

## OUTPUT

