**Practical – 6**

Practical 6

Aim: Create a screen that has input boxes for User Name, Password, Address,

Gender (radio buttons for male and female), Age (numeric), Date of Birth

(Datepicker), State (Spinner) and a Submit button. On clicking the submit

button, print all the data below the Submit Button (use any layout).

*MainActivity.java file:*

package com.example.practical\_6;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.fragment.app.DialogFragment;  
  
import android.app.AlertDialog;  
import android.app.DatePickerDialog;  
import android.app.Dialog;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.View;  
import android.widget.ArrayAdapter;  
import android.widget.Button;  
import android.widget.DatePicker;  
import android.widget.RadioButton;  
import android.widget.RadioGroup;  
import android.widget.Spinner;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import java.time.LocalDate;  
import java.time.temporal.ChronoUnit;  
import java.util.ArrayList;  
import java.util.Calendar;  
  
public class MainActivity extends AppCompatActivity {  
  
 private int year, month, day;  
 private Calendar calendar;  
 ArrayList<String> state = new ArrayList<String>();  
 private Button btn,submit;  
 private String username,password,address,gender,age,dob,statef,a,finalage;  
  
 int sysy,sysm,sysd;  
  
 public void spinerset(){  
 Spinner spi = findViewById(R.id.*state*);  
 state.add("Gujarat");  
 state.add("Maharashtra");  
 state.add("Rajasthan");  
 state.add("Madhya Pradesh");  
 state.add("Karnataka");  
 state.add("Kerala");  
 state.add("Tamil Nadu");  
 state.add("Andhra Pradesh");  
 state.add("Telangana");  
 state.add("Uttar Pradesh");  
 state.add("Bihar");  
 state.add("Jharkhand");  
 state.add("West Bengal");  
 state.add("Assam");  
 state.add("Arunachal Pradesh");  
 state.add("Manipur");  
 state.add("Meghalaya");  
 state.add("Mizoram");  
 state.add("Nagaland");  
 state.add("Sikkim");  
 state.add("Tripura");  
 state.add("Jammu and Kashmir");  
 state.add("Himachal Pradesh");  
 state.add("Punjab");  
 state.add("Chandigarh");  
 state.add("Haryana");  
 state.add("Uttarakhand");  
 state.add("Chhattisgarh");  
 state.add("Odisha");  
 ArrayAdapter<String> adp = new ArrayAdapter<>(MainActivity.this, android.R.layout.*simple\_spinner\_dropdown\_item*, state);  
 adp.setDropDownViewResource(android.R.layout.*simple\_spinner\_dropdown\_item*);  
 spi.setAdapter(adp);  
 }  
  
  
 public void dobset(){  
 calendar = Calendar.*getInstance*();  
 year = calendar.get(Calendar.*YEAR*);  
 month = calendar.get(Calendar.*MONTH*);  
 day = calendar.get(Calendar.*DAY\_OF\_MONTH*);  
 sysy = year;  
 sysm = month;  
 sysd = day;  
 showDialog(999);  
 showDate(year, month+1, day);  
  
 int y = sysy - year;  
 int m,d;  
 if((sysm - month)>0){  
 m = sysm - month;  
 }  
 else{  
 y=y-1;  
 m=12-(month-sysm);  
 }  
 if((sysd - day)>0){  
 d = sysd - day;  
 }  
 else {  
 m=m-1;  
 d = 30 - (sysd - day);  
 }  
  
 showDate(y,m,d);   
  
 }  
 protected Dialog onCreateDialog(int id){  
 if(id==999){  
 return new DatePickerDialog(this,myDateListener,year,month,day);  
 }  
 return null;  
 }  
 private DatePickerDialog.OnDateSetListener myDateListener = new  
 DatePickerDialog.OnDateSetListener() {  
 @Override  
 public void onDateSet(DatePicker arg0,  
 int arg1, int arg2, int arg3) {  
 // *TODO Auto-generated method stub* // arg1 = year  
 // arg2 = month  
 // arg3 = day  
  
 showDate(arg1, arg2+1, arg3);  
 }  
 };  
 public void showDate(int year, int month, int day) {  
// TextView dt = (TextView) findViewById(R.id.dob1);  
 sysm=month;  
 sysd=day;  
 sysy=year;  
 a = day+"/"+month+"/"+year;   
 }  
  
 public void onsub(){  
 TextView txt11 = findViewById(R.id.*username*);  
 TextView txt21 = findViewById(R.id.*pass*);  
 TextView txt31 = findViewById(R.id.*add*);  
 TextView txt41 = findViewById(R.id.*age*);  
// TextView txt51 = findViewById(R.id.state);  
  
 username = txt11.getText().toString();  
 password = txt21.getText().toString();  
 address = txt31.getText().toString();  
 age = txt41.getText().toString();  
  
 gender="";  
  
 RadioGroup rdgen = (RadioGroup) findViewById(R.id.*rdgrp*);  
 int get = rdgen.getCheckedRadioButtonId();  
 if(get!=-1)  
 {  
 RadioButton rdbtn = (RadioButton) findViewById(get);  
 gender = rdbtn.getText().toString();  
 }  
 else{  
 AlertDialog.Builder builder = new AlertDialog.Builder(MainActivity.this);  
 builder.setTitle("Error");  
 builder.setMessage("Not Selected Gender! Try Again");  
  
 builder.setPositiveButton("OK", null);  
  
 AlertDialog dialog = builder.create();  
 dialog.show();  
 }  
  
  
 Spinner spi2 = findViewById(R.id.*state*);  
 statef = spi2.getSelectedItem().toString();  
  
 TextView txt1= findViewById(R.id.*dob1*);  
 TextView txt2= findViewById(R.id.*state1*);  
 TextView txt3= findViewById(R.id.*gen*);  
 TextView txt4= findViewById(R.id.*ag*);  
 TextView txt5= findViewById(R.id.*ad*);  
 TextView txt6= findViewById(R.id.*pas*);  
 TextView txt7= findViewById(R.id.*use*);  
  
 txt3.setText(gender); //done  
 txt4.setText(finalage); //done  
 txt5.setText(address); //done  
 txt6.setText(password); //done  
 txt7.setText(username); //done  
 txt1.setText(a); //date done  
 txt2.setText(statef);  
 }  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 btn= findViewById(R.id.*btn2*);  
 submit = findViewById(R.id.*submit*);  
  
 spinerset();  
  
  
 btn.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 dobset();  
 }  
 });  
  
 submit.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 onsub();  
 }  
 });  
 }  
}

*activity\_main.xml file:*

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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/us"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/username"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="Username"  
 android:inputType="textPersonName"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.079"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.023" />  
  
 <EditText  
 android:id="@+id/pass"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="Password"  
 android:inputType="textPassword"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.079"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.088" />  
  
 <EditText  
 android:id="@+id/add"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="Address"  
 android:inputType="textMultiLine"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.079"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.154" />  
  
 <RadioGroup  
 android:id="@+id/rdgrp"  
 android:layout\_width="218dp"  
 android:layout\_height="46dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.082"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.22">  
  
 <RadioButton  
 android:id="@+id/rdbtn1"  
 android:layout\_width="109dp"  
 android:layout\_height="wrap\_content"  
 android:text="Male" />  
  
 <RadioButton  
 android:id="@+id/rdbtn2"  
 android:layout\_width="109dp"  
 android:layout\_height="wrap\_content"  
 android:text="Female" />  
 </RadioGroup>  
  
 <EditText  
 android:id="@+id/age"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="Age"  
 android:inputType="number"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.079"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.287" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Date of Birth : "  
 android:textSize="15sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.047"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.34" />  
  
 <Spinner  
 android:id="@+id/state"  
 android:layout\_width="230dp"  
 android:layout\_height="36dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.441"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.388" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="State : "  
 android:textSize="15sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.043"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.392" />  
  
 <Button  
 android:id="@+id/submit"  
 android:layout\_width="116dp"  
 android:layout\_height="42dp"  
 android:text="Submit"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.054"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.461" />  
  
 <Button  
 android:id="@+id/btn2"  
 android:layout\_width="92dp"  
 android:layout\_height="37dp"  
 android:text="SET"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.42"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.335" />  
  
 <ImageView  
 android:id="@+id/imageView2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@drawable/line"  
 tools:layout\_editor\_absoluteX="0dp"  
 tools:layout\_editor\_absoluteY="376dp" />  
  
 <TextView  
 android:id="@+id/state1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.175"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.928" />  
  
 <TextView  
 android:id="@+id/dob1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.175"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.875" />  
  
 <TextView  
 android:id="@+id/ag"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.175"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.831" />  
  
 <TextView  
 android:id="@+id/gen"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.175"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.723" />  
  
 <TextView  
 android:id="@+id/ad"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.175"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.675" />  
  
 <TextView  
 android:id="@+id/pas"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.175"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.632" />  
  
 <TextView  
 android:id="@+id/use"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.175"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.588" />  
  
  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

*AndroidManifest.xml*

<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools">  
  
 <application  
 android:allowBackup="true"  
 android:dataExtractionRules="@xml/data\_extraction\_rules"  
 android:fullBackupContent="@xml/backup\_rules"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/Theme.Practical\_6"  
 tools:targetApi="31">  
 <activity  
 android:name=".MainActivity"  
 android:exported="true">  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
  
 <meta-data  
 android:name="android.app.lib\_name"  
 android:value="" />  
 </activity>  
 </application>  
  
</manifest>

*Screenshot:*

