Experiment 5: Aim: Design an application to check the user is eligibility to vote or not by reading the data of birth and aadhar card number.

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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 marginTop="56dp"
        android:text="Vote Eligibility"
        android: textSize="24sp"
        android: textStyle="bold"
        app:layout constraintEnd toEndOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:layout constraintTop toTopOf="parent" />
    <EditText
        android:id="@+id/editTextname"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout marginBottom="78dp"
        android:ems="10"
        android:hint="Enter your name"
        android:inputType="text"
        app:layout_constraintBottom_toTopOf="@+id/editTextaadhaar"
        app:layout_constraintEnd toEndOf="parent"
        app:layout_constraintStart toStartOf="parent" />
    <EditText
        android:id="@+id/editTextaadhaar"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout_marginEnd="2dp"
        android:layout marginBottom="70dp"
        android:ems="10"
        android:hint="Enter your Aadhaar No"
        android:inputType="text"
        app:layout_constraintBottom_toTopOf="@+id/editTextdob"
        app:layout_constraintEnd_toEndOf="@+id/editTextdob" />
    <EditText
        android:id="@+id/editTextdob"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="260dp"
        android:ems="10"
        android:hint="Enter your Date of Birth"
        android:inputType="text"
        app:layout constraintBottom toBottomOf="parent"
```

```
app:layout constraintEnd toEndOf="parent"
        app:layout constraintStart toStartOf="parent" />
    <Button
        android:id="@+id/button"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout marginTop="85dp"
        android: text="Check"
        app:layout constraintEnd toEndOf="parent"
        app:layout_constraintStart toStartOf="parent"
        app:layout constraintTop toBottomOf="@+id/editTextdob" />
</androidx.constraintlayout.widget.ConstraintLayout>
MainActivity.java
package com.example.voteeligibility05;
import androidx.appcompat.app.AppCompatActivity;
import android.app.DatePickerDialog;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import java.util.Calendar;
public class MainActivity extends AppCompatActivity {
    int diff;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        EditText nameeditext=findViewById(R.id.editTextname);
        EditText aadhaareditext=findViewById(R.id.editTextaadhaar);
        EditText dobeditext=findViewById(R.id.editTextdob);
        Button checkbutton=findViewById(R.id.button);
        dobeditext.setOnClickListener(new View.OnClickListener() {
            public void onClick(View view) {
                Calendar c=Calendar.getInstance();
                int pyear=c.get(Calendar.YEAR);
                int pmonth=c.get(Calendar.MONTH);
                int pdate=c.get(Calendar.DATE);
                DatePickerDialog datepicker=new DatePickerDialog(
                        MainActivity.this,
android.R.style. Theme DeviceDefault DialogWhenLarge,
                        new DatePickerDialog.OnDateSetListener() {
                    @Override
                    public void onDateSet(DatePicker datePicker, int year,
int month, int date) {
                        diff=pyear-year;
                        dobeditext.setText(date+"/"+month+"/"+
```

```
year);
                },pyear,pmonth,pdate);
                datepicker.show();
        });
        checkbutton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String name=nameeditext.getText().toString();
                String aadhaar=aadhaareditext.getText().toString();
                int age=Integer.parseInt(dobeditext.getText().toString());
                Intent i=new Intent(getApplicationContext(),
ResultActivity.class);
                i.putExtra("NAME", name);
                i.putExtra("AADHAAR", aadhaar);
                i.putExtra("AGE", diff);
                startActivity(i);
       });
   }
}
activity_result.xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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=".ResultActivity">
    <TextView
        android:id="@+id/textViewresult"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:layout marginTop="328dp"
        android: textSize="20sp"
        app:layout constraintEnd toEndOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:layout constraintTop toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
ResultActivity.java
package com.example.voteeligibility05;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;
```

```
import org.w3c.dom.Text;
public class ResultActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity result);
        Intent i=getIntent();
        String name=i.getStringExtra("NAME");
        String aadhaar=i.getStringExtra("AADHAAR");
        int age=i.getIntExtra("AGE",0);
        TextView resulttextview=
                findViewById(R.id.textViewresult);
        if(age>=18)
            resulttextview.setText("Name:"+name+
                    "\nAadhaar No:"+aadhaar+
                    "\nIs Eligible to vote");
        else
            resulttextview.setText("Name:"+name+
                    "\nAadhaar No:"+aadhaar+"" +
                    "\nIs Not Eligible to vote");
   }
}
```

Experiment 6: Aim: Design an application to order the cake by selecting the date and time and display the order details in another activity.

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
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_marginTop="52dp"
        android:text="Cake App"
        android:textSize="24sp"
        app:layout constraintEnd toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
    <TextView
        android:id="@+id/textView2"
        android:layout width="wrap_content"
        android:layout height="wrap content"
        android:layout marginTop="56dp"
```

```
android: text="Flavour"
   android:textSize="20sp"
   app:layout constraintEnd toEndOf="parent"
   app:layout_constraintHorizontal bias="0.066"
   app:layout constraintStart toStartOf="parent"
   app:layout constraintTop toBottomOf="@+id/textView" />
   android:id="@+id/textView3"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:layout marginTop="56dp"
   android:text="Date"
   android:textSize="20sp"
   app:layout_constraintEnd_toEndOf="parent"
   app:layout_constraintHorizontal_bias="0.062"
   app:layout_constraintStart toStartOf="parent"
   app:layout constraintTop toBottomOf="@+id/spinner" />
<TextView
   android:id="@+id/textView4"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:layout marginTop="36dp"
   android:text="Time"
   android:textSize="20sp"
   app:layout constraintEnd toEndOf="parent"
   app:layout_constraintHorizontal_bias="0.043"
   app:layout constraintStart toStartOf="parent"
   app:layout constraintTop toBottomOf="@+id/imageViewcalendar" />
<Button
   android:id="@+id/button"
   android:layout width="wrap content"
   android:layout height="wrap content"
   android:layout marginTop="52dp"
   android:text="Place order"
   app:layout constraintEnd toEndOf="parent"
   app:layout constraintStart toStartOf="parent"
   app:layout constraintTop toBottomOf="@+id/imageViewclock" />
<ImageView</pre>
   android:id="@+id/imageViewcalendar"
   android:layout width="127dp"
   android:layout height="82dp"
   android:layout marginTop="92dp"
   app:layout constraintEnd toEndOf="parent"
   app:layout constraintStart toStartOf="parent"
   app:layout_constraintTop_toBottomOf="@+id/spinner"
   app:srcCompat="@drawable/calendar" />
< ImageView
   android:id="@+id/imageViewclock"
   android:layout width="171dp"
   android:layout height="119dp"
   android:layout_marginTop="36dp"
   app:layout constraintEnd toEndOf="parent"
   app:layout constraintStart toStartOf="parent"
   app:layout constraintTop toBottomOf="@+id/imageViewcalendar"
   app:srcCompat="@drawable/clock" />
```

```
<Spinner
        android:id="@+id/spinner"
        android:layout width="341dp"
        android:layout height="28dp"
        android:layout marginTop="36dp"
        app:layout constraintEnd toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toBottomOf="@+id/textView2" />
</androidx.constraintlayout.widget.ConstraintLayout>
MainActivity.Java
package com.example.cake06;
import androidx.appcompat.app.AppCompatActivity;
import android.app.DatePickerDialog;
import android.app.TimePickerDialog;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.ArrayAdapter;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.ImageView;
import android.widget.Spinner;
import android.widget.TimePicker;
import java.util.Calendar;
public class MainActivity extends AppCompatActivity {
    String bookeddate, bookedtime;
    String[] flavours={"Vanilla", "Red Velvet", "Chocolate",
            "Strawberry", "Butterscotch" };
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        Spinner sp=findViewById(R.id.spinner);
        ImageView calendar=findViewById(R.id.imageViewcalendar);
        ImageView clock=findViewById(R.id.imageViewclock);
        Button orderbutton=findViewById(R.id.button);
        ArrayAdapter ad=new ArrayAdapter(getApplicationContext(),
                android.R.layout.simple spinner item, flavours);
        sp.setAdapter(ad);
        calendar.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Calendar c=Calendar.getInstance();
                int pyear=c.get(Calendar.YEAR);
                int pmonth=c.get(Calendar.MONTH);
                int pdate=c.get(Calendar.DATE);
                DatePickerDialog datepicker=new
                        DatePickerDialog(
                        getApplicationContext(),
```

```
android.R.style. Theme_DeviceDefault_DialogWhenLarge,
                        new DatePickerDialog.OnDateSetListener() {
                    @Override
                    public void onDateSet(DatePicker datePicker, int year,
                                           int month, int date) {
                        bookeddate=date+"/"+month+"/"+
                                year;
                    }
                },pyear,pmonth,pdate);
                datepicker.show();
            }
        });
        clock.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Calendar c=Calendar.getInstance();
                int phour=c.get(Calendar.HOUR);
                int pminute=c.get(Calendar.MINUTE);
                TimePickerDialog timepicker=new
                        TimePickerDialog(
                        MainActivity.this,
android.R.style. Theme DeviceDefault DialogWhenLarge,
                        new TimePickerDialog.OnTimeSetListener() {
                    public void onTimeSet(TimePicker timePicker, int hour,
                                           int minute) {
                        bookedtime=hour+":"+minute;
                    }
                },phour,pminute,false);
                timepicker.show();
            }
        });
        orderbutton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String fl=sp.getSelectedItem().toString();
                Intent i=new Intent(getApplicationContext(),
                        OrderActivity.class);
                i.putExtra("Flavour",fl);
                i.putExtra("BookDate", bookeddate);
                i.putExtra("BookTime", bookedtime);
                startActivity(i);
        });
    }
activity_order.xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</pre>
```

```
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=".OrderActivity">
    <TextView
        android:id="@+id/textViewresult"
        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" />
</androidx.constraintlayout.widget.ConstraintLayout>
OrderActivity.java
package com.example.cake06;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;
public class OrderActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity order);
        TextView tv=findViewById(R.id.textViewresult);
        Intent i=getIntent();
        String fl=i.getStringExtra("Flavour");
        String bd=i.getStringExtra("BookDate");
        String bt=i.getStringExtra("BookTime");
        tv.setText("Flavour:"+fl+"\nBooking Date:"+bd+
                "\nBooking Time"+bt);
    }
```