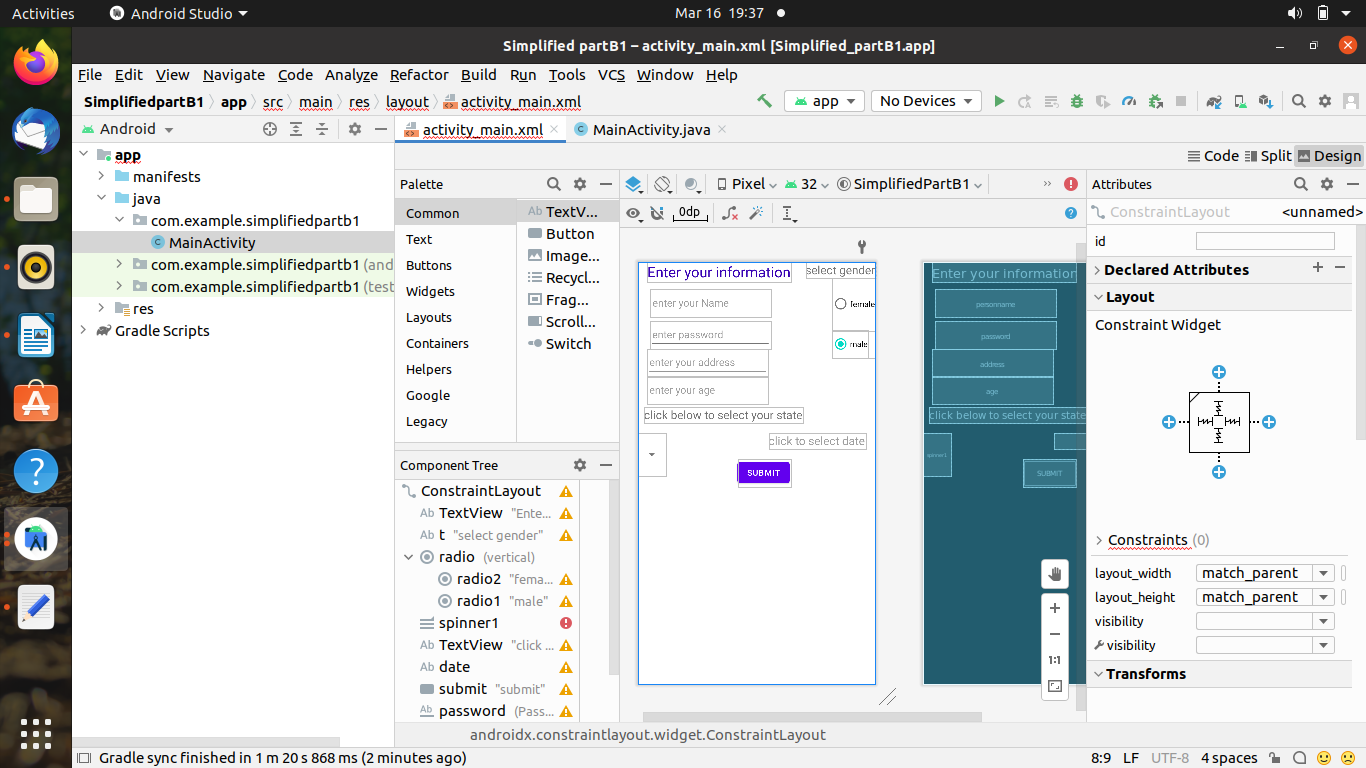
**PART - B**

1. **Create a screen that has input boxes for User Name, Password, Address, Gender (radio buttons for male and female), Age (numeric), Date of Birth (Date Picker), State (Spinner) and a Submit button. On clicking the submit button, print all the data below the Submit Button (use any layout)**

**Activitymain.xml.**



<?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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity"

android:outlineAmbientShadowColor="@color/teal\_200">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:text="Enter your information"

android:textColor="@color/purple\_700"

android:textSize="25dp"

app:layout\_constrainedHeight="true"

app:layout\_constraintBottom\_toTopOf="@+id/personname"

app:layout\_constraintHorizontal\_bias="0.098"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.0" />

<TextView

android:id="@+id/t"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="select gender"

android:textSize="20dp"

app:layout\_constraintBottom\_toTopOf="@+id/radio"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<RadioGroup

android:id="@+id/radio"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@id/t">

<RadioButton

android:id="@+id/radio2"

android:layout\_width="wrap\_content"

android:layout\_height="91dp"

android:text="female"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.089" />

<RadioButton

android:id="@+id/radio1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:checked="true"

android:text="male"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="1.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.013" />

</RadioGroup>

<Spinner

android:id="@+id/spinner1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:entries="@array/states"

android:minHeight="75dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.451" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textSize="20dp"

android:text="click below to select your state"

app:layout\_constraintBottom\_toTopOf="@+id/spinner1"

app:layout\_constraintHorizontal\_bias="0.075"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/age"

app:layout\_constraintVertical\_bias="0.237" />

<TextView

android:id="@+id/date"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:hint="click to select date"

android:textColor="@android:color/darker\_gray"

android:textSize="20sp"

android:title="this is your date"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.93"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.42" />

<Button

android:id="@+id/submit"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="submit"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.538"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.499" />

<EditText

android:id="@+id/password"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:ems="10"

android:hint="enter password"

android:inputType="textPassword"

android:minHeight="48dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.027"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.149" />

<EditText

android:id="@+id/address"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:ems="10"

android:hint="enter your address"

android:inputType="textPostalAddress"

android:minHeight="48dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.219" />

<EditText

android:id="@+id/personname"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="40dp"

android:ems="10"

android:hint="enter your Name"

android:inputType="textPersonName"

android:minHeight="48dp"

app:layout\_constraintBottom\_toTopOf="@+id/password"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintEnd\_toStartOf="@+id/radio"

app:layout\_constraintHorizontal\_bias="0.169"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<EditText

android:id="@+id/age"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="16dp"

android:ems="10"

android:hint="enter your age"

android:inputType="number"

android:minHeight="48dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/address"

app:layout\_constraintVertical\_bias="0.0"

tools:ignore="SpeakableTextPresentCheck" />

<TextView

android:id="@+id/t2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="8dp"

android:layout\_marginBottom="8dp"

android:text=""

android:textColor="@android:color/black"

android:textSize="25sp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.732" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Main\_Activity.java**

package com.codingflow.radioandspinner;

import androidx.appcompat.app.AppCompatActivity;

import android.app.DatePickerDialog;

import android.graphics.Color;

import android.graphics.drawable.ColorDrawable;

import android.os.Bundle;

import android.util.Log;

import android.view.View;

import android.widget.AdapterView;

import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.DatePicker;

import android.widget.EditText;

import android.widget.RadioButton;

import android.widget.RadioGroup;

import android.widget.Spinner;

import android.widget.TextView;

import android.widget.Toast;

import java.util.Calendar;

public class MainActivity extends AppCompatActivity implements AdapterView.OnItemSelectedListener {

String text,date,name1,address1,password1;

int age1;

RadioGroup radioGroup;

RadioButton radioButton;

Button button;

TextView textView5,textView8;

EditText name,address,age,password;

private static final String TAG = "MainActivity";

private TextView mDisplayDate;

private DatePickerDialog.OnDateSetListener mDateSetListener;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

name=findViewById(R.id.personname);

age=findViewById(R.id.age);

address=findViewById(R.id.address);

password=findViewById(R.id.password);

Spinner spinner=findViewById(R.id.spinner1);

radioGroup=findViewById(R.id.radio);

textView8=findViewById(R.id.date);

textView5=findViewById(R.id.t2);

button=findViewById(R.id.submit);

button.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

int radioid=radioGroup.getCheckedRadioButtonId();

radioButton=findViewById(radioid);

name1=name.getText().toString();

password1=password.getText().toString();

address1=address.getText().toString();

age1= (Integer.valueOf(age.getText().toString()));

textView5.setText(new StringBuilder().append("\nname is :").append(name1).append(" \naddress :").append(address1).append("\nage :").append(age1).append("\npassword is :").append(password1).append("\ndate entered :").append(date).append("\ngender is :").append(radioButton.getText()).append("\nstate belonging : ").append(text));

}});

mDisplayDate = (TextView) findViewById(R.id.date);

mDisplayDate.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Calendar cal = Calendar.getInstance();

int year = cal.get(Calendar.YEAR);

int month = cal.get(Calendar.MONTH);

int day = cal.get(Calendar.DAY\_OF\_MONTH);

DatePickerDialog dialog = new DatePickerDialog(

MainActivity.this,

android.R.style.Theme\_Holo\_Light\_Dialog\_MinWidth,

mDateSetListener,

year,month,day);

dialog.getWindow().setBackgroundDrawable(new ColorDrawable(Color.TRANSPARENT));

dialog.show();

}

});

mDateSetListener = new DatePickerDialog.OnDateSetListener() {

@Override

public void onDateSet(DatePicker datePicker, int year, int month, int day) {

month = month + 1;

Log.d(TAG, "onDateSet: mm/dd/yyy: " + month + "/" + day + "/" + year);

date = month + "/" + day + "/" + year;

// textView8.setText("date is:"+date);

}

};

ArrayAdapter<CharSequence >adapter=ArrayAdapter.createFromResource(this,R.array.states, android.R.layout.simple\_spinner\_item );

adapter.setDropDownViewResource(android.R.layout.simple\_spinner\_dropdown\_item);

spinner.setAdapter(adapter);

spinner.setOnItemSelectedListener(this);

}

@Override

public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {

text=parent.getSelectedItem().toString();

// Toast.makeText(this,"text",Toast.LENGTH\_SHORT).show();

}

@Override

public void onNothingSelected(AdapterView<?> parent) {

}

}

**Paste under strings.xml**

<resources>

<string name="app\_name">spinner</string>

<string-array name="states">

<item>karnataka</item>

<item>kerla</item>

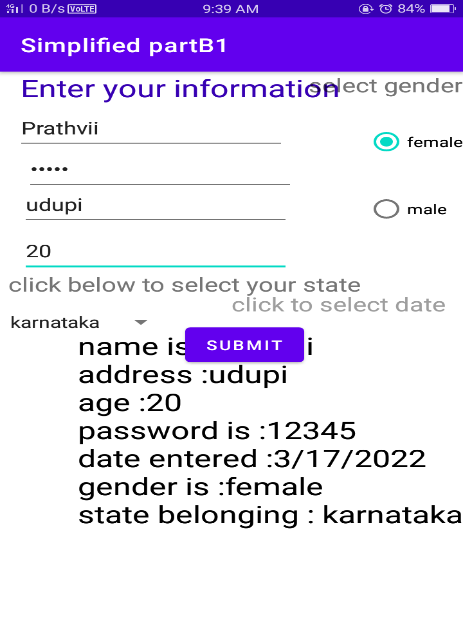
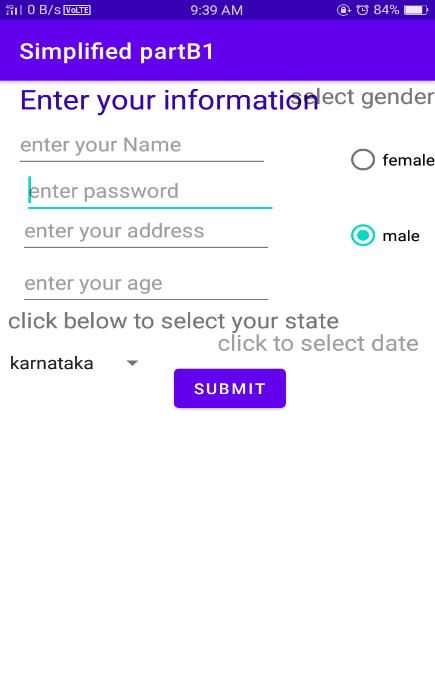
<item>delhi</item>

<item>andra</item>

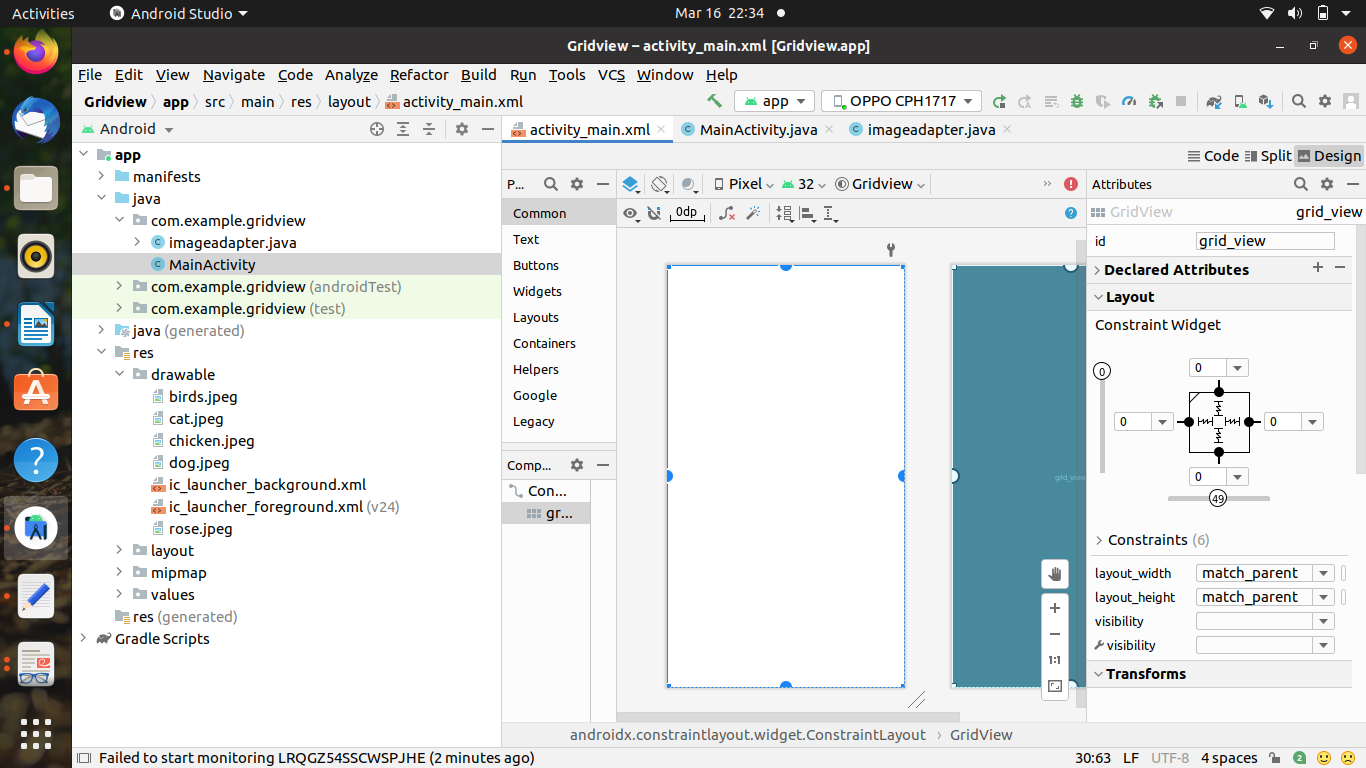
</string-array>

</resources>

**Output :-**



**2. Create an Android application to display images in Grid View (min 5 images).**

**Activity-main xml**

*<?*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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <GridView  
 android:id="@+id/grid\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:numColumns="1"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.0" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

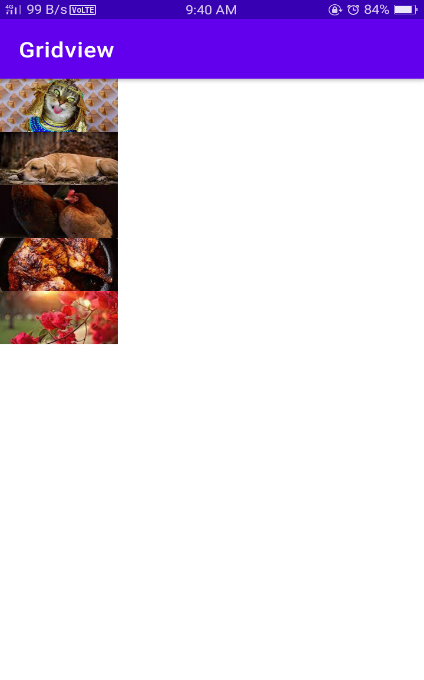
**Main-activity.java**

package com.example.gridview;  
import androidx.appcompat.app.AppCompatActivity;  
import android.os.Bundle;  
import android.widget.GridView;  
import android.widget.ListAdapter;  
  
public class MainActivity extends AppCompatActivity {  
 GridView gridView;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 gridView=(GridView) findViewById(R.id.*grid\_view*);  
 gridView.setAdapter(new image(this));  
 }  
  
 }

**Imageadapter.java**

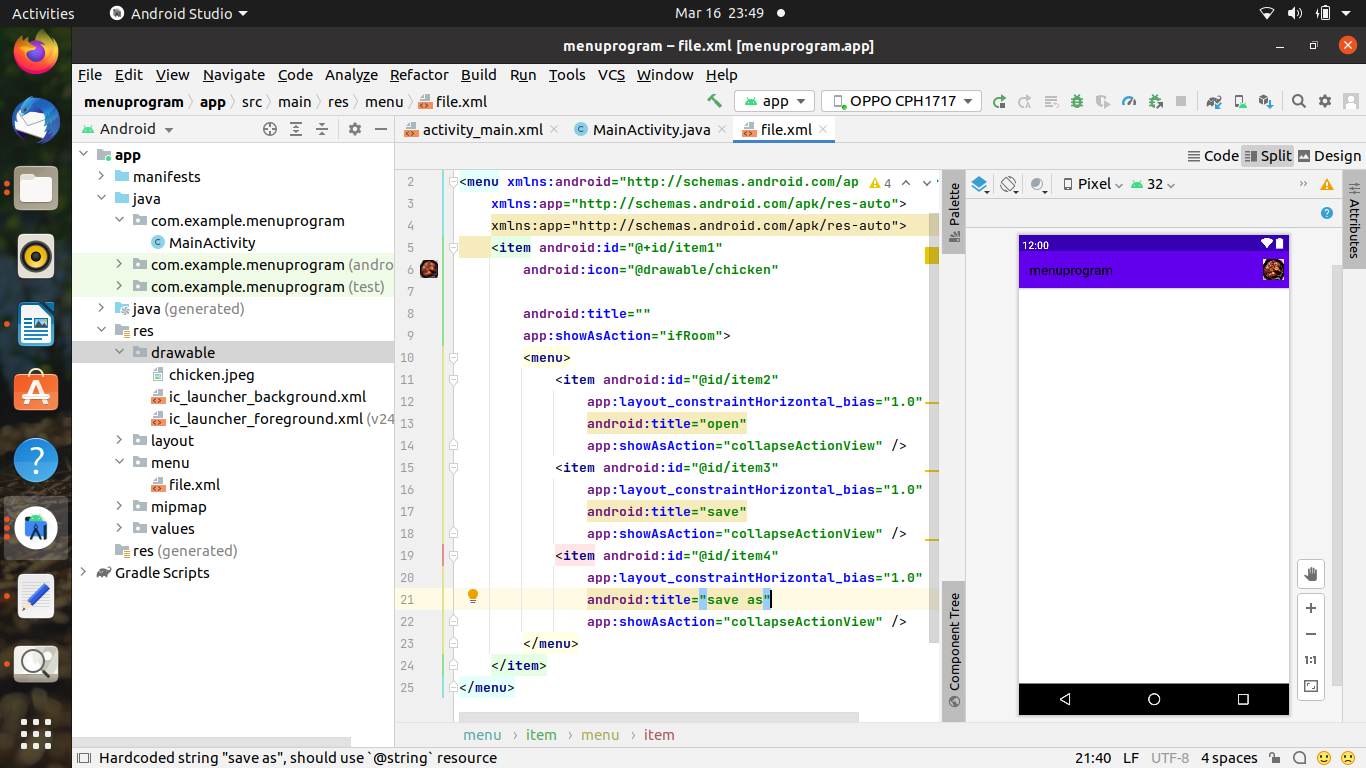
package com.example.gridview;  
import android.content.Context;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.BaseAdapter;  
*//import android.widget.GridView;*  
import android.widget.ImageView;  
  
import com.example.gridview.R;  
  
class image extends BaseAdapter {  
 private Context mContext;  
 public int[] image={  
 R.drawable.*cat*,R.drawable.*dog*, R.drawable.*birds*, R.drawable.*chicken*, R.drawable.*rose*  
};  
 public image (Context mContext ) { this.mContext = mContext; }  
 *//public myapplication5(Context mContext) {this.mContext=mContext; }*  
@Override  
 public int getCount() { return image.length; }  
 @Override  
 public Object getItem(int position) { return null; }  
 @Override  
 public long getItemId(int position) { return image[position]; }  
 @Override  
 public View getView(int position, View ConvertView, ViewGroup parent) {  
 ImageView imageView=new ImageView(mContext);  
 imageView.setImageResource(image[position]);  
  
 imageView.setScaleType(ImageView.ScaleType.*CENTER\_CROP*);  
 imageView.setLayoutParams(new ViewGroup.LayoutParams(200, 100));  
 return imageView;  
 }  
  
}

**Output :-**



**3. . Write an android program to demonstrate a Menu with name File with New, 4. Open, Save and Save As as menu items. Give toast msgs on click of each menu item.**

**Activity\_main.XML**



*<?*xml version="1.0" encoding="utf-8"*?>*  
<menu xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto">  
 xmlns:app="http://schemas.android.com/apk/res-auto">  
 <item android:id="@+id/item1"  
 android:icon="@drawable/chicken"  
  
 android:title=""  
 app:showAsAction="ifRoom">  
 <menu>  
 <item android:id="@id/item2"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 android:title="open"  
 app:showAsAction="collapseActionView" />  
 <item android:id="@id/item3"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 android:title="save"  
 app:showAsAction="collapseActionView" />  
 <item android:id="@id/item4"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 android:title="save as"  
 app:showAsAction="collapseActionView" />  
 </menu>  
 </item>  
</menu>

**(paste it under mainactivity.java)**

package com.codingflow.filemenu;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

import android.view.Menu;

import android.view.MenuInflater;

import android.view.MenuItem;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

@Override

public boolean onCreateOptionsMenu(Menu menu){

MenuInflater inflater=getMenuInflater();

inflater.inflate(R.menu.file,menu);

return true;

}

@Override

public boolean onOptionsItemSelected(@NonNull MenuItem item) {

switch (item.getItemId()) {

case R.id.item2:

Toast.makeText(this, "you clicked open", Toast.LENGTH\_LONG).show();

break;

case R.id.item3:

Toast.makeText(this, "you clicked save", Toast.LENGTH\_LONG).show();

break;

case R.id.item4:

Toast.makeText(this, "you clicked save as", Toast.LENGTH\_LONG).show();

}

return super.onOptionsItemSelected(item);

}

}

**File.xml**

**(NOTE :- paste it under resource folder with file.xml name by right clicking on menu resource folder and choose new->menu resource file)**

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

<menu xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto">

<item android:id="@+id/item1"

android:icon="@drawable/file"

android:title=""

app:showAsAction="ifRoom">

<menu>

<item android:id="@id/item2"

app:layout\_constraintHorizontal\_bias="1.0"

android:title="open"

app:showAsAction="collapseActionView" />

<item android:id="@id/item3"

app:layout\_constraintHorizontal\_bias="1.0"

android:title="save"

app:showAsAction="collapseActionView" />

<item android:id="@id/item4"

app:layout\_constraintHorizontal\_bias="1.0"

android:title="save as"

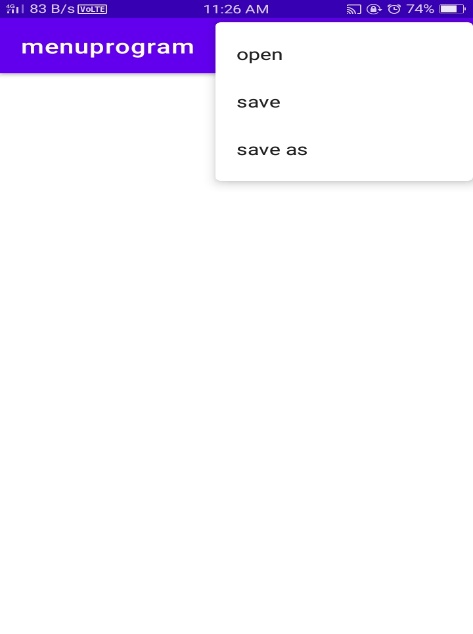
app:showAsAction="collapseActionView" />

</menu>

</item>

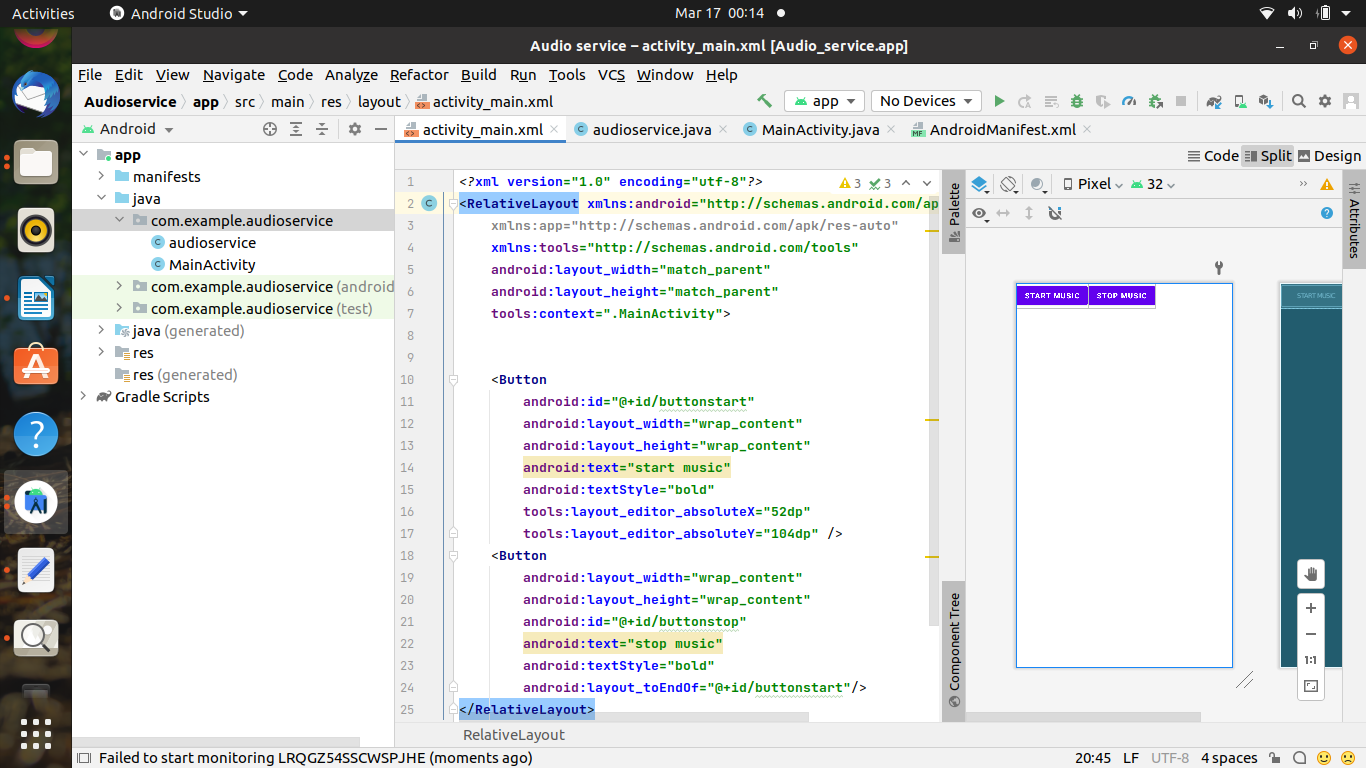
</menu>

**Output :-**



**4. Create an Android application to play audio using Service.**

**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">  
  
  
 <Button  
 android:id="@+id/buttonstart"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="start music"  
 android:textStyle="bold"  
 tools:layout\_editor\_absoluteX="52dp"  
 tools:layout\_editor\_absoluteY="104dp" />  
 <Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/buttonstop"  
 android:text="stop music"  
 android:textStyle="bold"  
 android:layout\_toEndOf="@+id/buttonstart"/>  
</RelativeLayout>

**(paste under mainactivity.java)**

package com.codingflow.audioplayer;

import android.content.Intent;

import android.media.MediaPlayer;

import android.provider.Settings;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {

//button objects

private Button buttonStart;

private Button buttonStop;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

//getting buttons from xml

buttonStart = (Button) findViewById(R.id.buttonStart);

buttonStop = (Button) findViewById(R.id.buttonStop);

//attaching onclicklistener to buttons

buttonStart.setOnClickListener(this);

buttonStop.setOnClickListener(this);

}

@Override

public void onClick(View view) {

if (view == buttonStart) {

//starting service

startService(new Intent(this, audioservice.class));

} else if (view == buttonStop) {

//stopping service

stopService(new Intent(this, audioservice.class));

}

}

}

**audioservice.java**

**(NOTE :- create by right clicking on com.codingflow.audioplayer)**

package com.codingflow.audioplayer;

import android.app.Service;

import android.content.Intent;

import android.media.MediaPlayer;

import android.os.IBinder;

import android.provider.Settings;

import org.jetbrains.annotations.Nullable;

public class audioservice extends Service {

//creating a mediaplayer object

private MediaPlayer player;

@Nullable

@Override

public IBinder onBind(Intent intent) {

return null;

}

@Override

public int onStartCommand(Intent intent, int flags, int startId) {

//getting systems default ringtone

player = MediaPlayer.create(this,

Settings.System.DEFAULT\_RINGTONE\_URI);

//setting loop play to true

//this will make the ringtone continuously playing

player.setLooping(true);

//staring the player

player.start();

//we have some options for service

//start sticky means service will be explicity started and stopped

return START\_STICKY;

}

@Override

public void onDestroy() {

super.onDestroy();

player.stop();

}

}

**android manifest.xml :-**

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

package="com.codingflow.audioplayer">

<application

android:allowBackup="true"

android:icon="@mipmap/ic\_launcher"

android:label="@string/app\_name"

android:roundIcon="@mipmap/ic\_launcher\_round"

android:supportsRtl="true"

android:theme="@style/Theme.Audioplayer">

<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>

</activity>

<service android:name=".audioservice" />

</application>

</manifest>

**Output :-**

