EXPT 2

```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"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp"
    android:background="#FFFFFF">

    <TextView
        android:id="@+id/textViewTitle"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Home Page"
        android:textSize="24sp"
        android:textStyle="bold"
        android:layout_gravity="center"
        android:paddingBottom="16dp"/>

    <GridLayout
        android:id="@+id/gridLayout"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:columnCount="2"
        android:rowCount="2"
        android:alignmentMode="alignMargins"
        android:padding="8dp"
        android:useDefaultMargins="true">

        <!-- Home Button -->
        <LinearLayout
            android:layout_width="0dp"
            android:layout_height="wrap_content"
            android:layout_columnWeight="1"
            android:layout_rowWeight="1"
            android:orientation="vertical"
            android:gravity="center">

            <ImageButton
                android:id="@+id/btnHome"
                android:layout_width="80dp"
                android:layout_height="80dp"
                android:background="@null"
                android:src="@drawable/ic_home"
                android:contentDescription="Home"/>

            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
```

```xml
        android:text="Home"
        android:layout_marginTop="8dp"/>
</LinearLayout>

<!-- Search Button -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_columnWeight="1"
    android:layout_rowWeight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/btnSearch"
        android:layout_width="80dp"
        android:layout_height="80dp"
        android:background="@null"
        android:src="@drawable/ic_search"
        android:contentDescription="Search"/>

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Search"
        android:layout_marginTop="8dp"/>
</LinearLayout>

<!-- Settings Button -->
<LinearLayout
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_columnWeight="1"
    android:layout_rowWeight="1"
    android:orientation="vertical"
    android:gravity="center">

    <ImageButton
        android:id="@+id/btnSettings"
        android:layout_width="80dp"
        android:layout_height="80dp"
        android:background="@null"
        android:src="@drawable/ic_settings"
        android:contentDescription="Settings"/>

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Settings"
        android:layout_marginTop="8dp"/>
</LinearLayout>
```

```xml
    <!-- Logout Button -->
    <LinearLayout
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_columnWeight="1"
        android:layout_rowWeight="1"
        android:orientation="vertical"
        android:gravity="center">

        <ImageButton
            android:id="@+id/btnLogout"
            android:layout_width="80dp"
            android:layout_height="80dp"
            android:background="@null"
            android:src="@drawable/ic_logout"
            android:contentDescription="Logout"/>

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Logout"
            android:layout_marginTop="8dp"/>
    </LinearLayout>

    </GridLayout>
</LinearLayout>
```

MainActivity.java

```java
package com.example.exp2;

import android.os.Bundle;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
import android.view.View;
import android.widget.ImageButton;

public class MainActivity extends AppCompatActivity {
    ImageButton btnHome, btnSearch, btnSettings, btnLogout;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        btnHome = findViewById(R.id.btnHome);
        btnSearch = findViewById(R.id.btnSearch);
        btnSettings = findViewById(R.id.btnSettings);
        btnLogout = findViewById(R.id.btnLogout);
```

```java
        btnHome.setOnClickListener(v -> showToast("Home clicked"));
        btnSearch.setOnClickListener(v -> showToast("Search clicked"));
        btnSettings.setOnClickListener(v -> showToast("Settings clicked"));
        btnLogout.setOnClickListener(v -> showToast("Logout clicked"));
    }

    private void showToast(String message) {
        Toast.makeText(this, message, Toast.LENGTH_SHORT).show();
    }
}
```

EXPT 3

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:padding="24dp"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <EditText
        android:id="@+id/etUsername"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:minHeight="48dp"
        android:padding="12dp"
    android:hint="Username" />

    <EditText
        android:id="@+id/etPassword"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:minHeight="48dp"
        android:hint="Password"
        android:inputType="textPassword" />

    <Button
        android:id="@+id/btnLogin"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Login"
        android:layout_marginTop="16dp" />

    <Button
        android:id="@+id/btnRegister"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Register" />
</LinearLayout>
```

MainActivity.java

```java
package com.example.exp3;

import android.content.ContentValues;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.widget.*;
import androidx.appcompat.app.AppCompatActivity;
```

```java
public class MainActivity extends AppCompatActivity {
    EditText etUsername, etPassword;
    Button btnLogin, btnRegister;
    SQLiteDatabase db;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        etUsername = findViewById(R.id.etUsername);
        etPassword = findViewById(R.id.etPassword);
        btnLogin = findViewById(R.id.btnLogin);
        btnRegister = findViewById(R.id.btnRegister);

        db = openOrCreateDatabase("UserDB", MODE_PRIVATE, null);
        db.execSQL("CREATE TABLE IF NOT EXISTS users(username TEXT, password
TEXT)");

        btnRegister.setOnClickListener(v -> {
            String user = etUsername.getText().toString();
            String pass = etPassword.getText().toString();
            ContentValues cv = new ContentValues();
            cv.put("username", user);
            cv.put("password", pass);
            db.insert("users", null, cv);
            Toast.makeText(this, "Registered Successfully", Toast.LENGTH_SHORT).show();
        });

        btnLogin.setOnClickListener(v -> {
            String user = etUsername.getText().toString();
            String pass = etPassword.getText().toString();
            Cursor cursor = db.rawQuery("SELECT * FROM users WHERE username=? AND
password=?", new String[]{user, pass});
            if (cursor.moveToFirst()) {
                Toast.makeText(this, "Login Successful", Toast.LENGTH_SHORT).show();
            } else {
                Toast.makeText(this, "Login Failed", Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

EXPT 4

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="20dp">

    <LinearLayout
        android:orientation="vertical"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">

        <EditText
            android:id="@+id/etName"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:minHeight="48dp"
            android:padding="12dp"
            android:hint="Enter Name"
            android:textSize="16sp" />


        <Spinner
            android:id="@+id/spinnerSubject"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:minHeight="48dp"
            android:padding="12dp"
            android:layout_marginTop="16dp"
            android:textAlignment="center" />


        <RadioGroup
            android:id="@+id/radioGender"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="horizontal"
            android:layout_marginTop="16dp">
            <RadioButton
                android:id="@+id/radioMale"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Male" />
            <RadioButton
                android:id="@+id/radioFemale"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:text="Female" />
```

```xml
        </RadioGroup>

        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Qualification"
            android:layout_marginTop="16dp"/>

        <CheckBox
            android:id="@+id/chk10th"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="10th" />

        <CheckBox
            android:id="@+id/chk12th"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="12th" />

        <CheckBox
            android:id="@+id/chkGrad"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Graduation" />

        <Button
            android:id="@+id/btnSubmit"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Submit"
            android:layout_marginTop="20dp" />
    </LinearLayout>
</ScrollView>
```

MainActivity.java

```java
package com.example.exp4;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.*;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    EditText etName;
    Spinner spinner;
    RadioGroup radioGroup;
    CheckBox chk10th, chk12th, chkGrad;
    Button btnSubmit;
```

```java
    String[] subjects = {"Math", "Science", "English", "Computer"};

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        etName = findViewById(R.id.etName);
        spinner = findViewById(R.id.spinnerSubject);
        radioGroup = findViewById(R.id.radioGender);
        chk10th = findViewById(R.id.chk10th);
        chk12th = findViewById(R.id.chk12th);
        chkGrad = findViewById(R.id.chkGrad);
        btnSubmit = findViewById(R.id.btnSubmit);

        // Set up spinner
        ArrayAdapter<String> adapter = new ArrayAdapter<>(this,
android.R.layout.simple_spinner_item, subjects);
        adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        spinner.setAdapter(adapter);

        btnSubmit.setOnClickListener(view -> {
            String name = etName.getText().toString();
            String subject = spinner.getSelectedItem().toString();

            int selectedId = radioGroup.getCheckedRadioButtonId();
            RadioButton selectedGender = findViewById(selectedId);
            String gender = selectedGender != null ? selectedGender.getText().toString() : "Not
selected";

            StringBuilder qualification = new StringBuilder();
            if (chk10th.isChecked()) qualification.append("10th ");
            if (chk12th.isChecked()) qualification.append("12th ");
            if (chkGrad.isChecked()) qualification.append("Graduation");

            // Pass data to ShowActivity
            Intent intent = new Intent(MainActivity.this, ShowActivity.class);
            intent.putExtra("name", name);
            intent.putExtra("subject", subject);
            intent.putExtra("gender", gender);
            intent.putExtra("qualification", qualification.toString().trim());
            startActivity(intent);
        });
    }
}
```

activity_show.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
```

```xml
    android:orientation="vertical"
    android:padding="20dp"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:id="@+id/tvResult"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Results will be displayed here"
        android:textSize="18sp"
        android:padding="16dp" />

</LinearLayout>
```

ShowActivity.java

```java
package com.example.exp4;

import android.os.Bundle;
import android.widget.TextView;
import androidx.appcompat.app.AppCompatActivity;

public class ShowActivity extends AppCompatActivity {
    TextView tvResult;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_show);

        tvResult = findViewById(R.id.tvResult);

        String name = getIntent().getStringExtra("name");
        String subject = getIntent().getStringExtra("subject");
        String gender = getIntent().getStringExtra("gender");
        String qualification = getIntent().getStringExtra("qualification");

        String result = "Name: " + name + "\n"
                + "Subject: " + subject + "\n"
                + "Gender: " + gender + "\n"
                + "Qualification: " + qualification;

        tvResult.setText(result);
    }
}
```

EXPT 5

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/mainLayout"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="20dp">

    <Button
        android:id="@+id/btnDialog"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Show Alert Dialog" />

    <Button
        android:id="@+id/btnPopup"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Show Popup Menu"
        android:layout_marginTop="16dp" />

    <TextView
        android:id="@+id/tvContext"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Long Press Me for Context Menu"
        android:textSize="18sp"
        android:padding="20dp"
        android:background="#DDDDDD"
        android:layout_marginTop="16dp" />
</LinearLayout>
```

MainActivity.java

```java
package com.example.expt5;

import android.os.Bundle;
import android.view.ContextMenu;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
import android.widget.PopupMenu;
import android.widget.TextView;
import android.widget.Toast;
```

```java
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    Button btnDialog, btnPopup;
    TextView tvContext;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        btnDialog = findViewById(R.id.btnDialog);
        btnPopup = findViewById(R.id.btnPopup);
        tvContext = findViewById(R.id.tvContext);

        // Alert Dialog
        btnDialog.setOnClickListener(v -> {
            new AlertDialog.Builder(MainActivity.this)
                    .setTitle("Alert Dialog")
                    .setMessage("Do you want to continue?")
                    .setPositiveButton("Yes", (dialog, which) ->
                            Toast.makeText(MainActivity.this, "Yes clicked",
Toast.LENGTH_SHORT).show())
                    .setNegativeButton("No", (dialog, which) ->
                            Toast.makeText(MainActivity.this, "No clicked",
Toast.LENGTH_SHORT).show())
                    .show();
        });

        // Popup Menu
        btnPopup.setOnClickListener(v -> {
            PopupMenu popupMenu = new PopupMenu(MainActivity.this, btnPopup);
            popupMenu.getMenuInflater().inflate(R.menu.popup_menu, popupMenu.getMenu());
            popupMenu.setOnMenuItemClickListener(item -> {
                Toast.makeText(MainActivity.this, item.getTitle() + " selected",
Toast.LENGTH_SHORT).show();
                return true;
            });
            popupMenu.show();
        });

        // Context Menu
        registerForContextMenu(tvContext);
    }

    // Context Menu creation
    @Override
    public void onCreateContextMenu(ContextMenu menu, View v,
```

```
ContextMenu.ContextMenuInfo menuInfo) {
    super.onCreateContextMenu(menu, v, menuInfo);
    MenuInflater inflater = getMenuInflater();
    inflater.inflate(R.menu.context_menu, menu);
}

// Context Menu selection
@Override
public boolean onContextItemSelected(MenuItem item) {
    Toast.makeText(this, item.getTitle() + " selected from context menu",
Toast.LENGTH_SHORT).show();
    return true;
}

// Options Menu
@Override
public boolean onCreateOptionsMenu(Menu menu) {
    getMenuInflater().inflate(R.menu.options_menu, menu);
    return true;
}

@Override
public boolean onOptionsItemSelected(MenuItem item) {
    Toast.makeText(this, item.getTitle() + " selected from options menu",
Toast.LENGTH_SHORT).show();
    return true;
}
}
```

res->right click->new->android resource directory->name = menu value=menu->create 3 xml files :

popup_menu.xml
```
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:id="@+id/popup_1" android:title="Popup Item 1"/>
    <item android:id="@+id/popup_2" android:title="Popup Item 2"/>
</menu>
```

context_menu.xml
```
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:id="@+id/context_1" android:title="Context Item 1"/>
    <item android:id="@+id/context_2" android:title="Context Item 2"/>
</menu>
```

options_menu.xml
```
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:id="@+id/option_1" android:title="Option Item 1"/>
```

```xml
    <item android:id="@+id/option_2" android:title="Option Item 2"/>
</menu>
```

EXPT 6

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/activity_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <WebView
        android:id="@+id/webView"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />

</RelativeLayout>
```

MainActivity.java

package com.example.expt6; // 🔁 Change this if your package name is different

```java
import android.os.Bundle;
import android.webkit.WebSettings;
import android.webkit.WebView;
import android.webkit.WebViewClient;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    private WebView myWebView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        myWebView = findViewById(R.id.webView);
        myWebView.setWebViewClient(new WebViewClient());

        WebSettings webSettings = myWebView.getSettings();
        webSettings.setJavaScriptEnabled(true);

        myWebView.loadUrl("https://www.youtube.com");
    }

    @Override
    public void onBackPressed() {
        if (myWebView.canGoBack()) {
            myWebView.goBack();
        } else {
            super.onBackPressed();
```

```
        }
    }
}
```

AndroidManifest->AndoidManifest.xml include below line above application tag

<uses-permission android:name="android.permission.INTERNET" />

EXPT 7

```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"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <androidx.viewpager2.widget.ViewPager2
        android:id="@+id/viewPager"
        android:layout_width="0dp"
        android:layout_height="0dp"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"/>

</androidx.constraintlayout.widget.ConstraintLayout>
```

slider_item.xml
```xml
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <ImageView
        android:id="@+id/imageView"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:scaleType="centerCrop" />
</FrameLayout>
```

ImageAdapter.java
```java
package com.example.exp7;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
import java.util.List;

public class ImageAdapter extends
RecyclerView.Adapter<ImageAdapter.ImageViewHolder> {
    private final List<Integer> images;
```

```java
    public ImageAdapter(List<Integer> images) {
        this.images = images;
    }

    @NonNull
    @Override
    public ImageViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int
viewType) {
        View view = LayoutInflater.from(parent.getContext())
                .inflate(R.layout.slider_item, parent, false);
        return new ImageViewHolder(view);
    }

    @Override
    public void onBindViewHolder(@NonNull ImageViewHolder holder, int position) {
        holder.imageView.setImageResource(images.get(position));
    }

    @Override
    public int getItemCount() {
        return images.size();
    }

    public static class ImageViewHolder extends RecyclerView.ViewHolder {
        ImageView imageView;

        public ImageViewHolder(@NonNull View itemView) {
            super(itemView);
            imageView = itemView.findViewById(R.id.imageView);
        }
    }
}
```

MainActivity.java
```java
package com.example.exp7;

import android.os.Bundle;
import androidx.appcompat.app.AppCompatActivity;
import androidx.viewpager2.widget.ViewPager2;
import java.util.ArrayList;
import java.util.List;

public class MainActivity extends AppCompatActivity {
    private ViewPager2 viewPager2;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
```

```
        viewPager2 = findViewById(R.id.viewPager);

        // Add image resource IDs
        List<Integer> imageList = new ArrayList<>();
        imageList.add(R.drawable.image1);
        imageList.add(R.drawable.image2);
        imageList.add(R.drawable.image3);

        // Set adapter
        viewPager2.setAdapter(new ImageAdapter(imageList));
    }
}
```

To add the images:
project->app->src->main->res->drawable->paste all the images with proper names as their in code

EXPT 8

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:orientation="vertical"
   android:gravity="center"
   android:padding="16dp">

   <Button
      android:id="@+id/playButton"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Play" />

   <Button
      android:id="@+id/pauseButton"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Pause"
      android:layout_marginTop="10dp"/>

   <Button
      android:id="@+id/stopButton"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:text="Stop"
      android:layout_marginTop="10dp"/>
</LinearLayout>
```

MainActivity.java

```java
package com.example.expt8;

import android.media.MediaPlayer;
import android.os.Bundle;
import android.widget.Button;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

   private MediaPlayer mediaPlayer;

   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
```

```java
        setContentView(R.layout.activity_main);

        Button playButton = findViewById(R.id.playButton);
        Button pauseButton = findViewById(R.id.pauseButton);
        Button stopButton = findViewById(R.id.stopButton);

        // Initialize MediaPlayer with the audio file from res/raw
        mediaPlayer = MediaPlayer.create(this, R.raw.chalo_chale_flute);

        playButton.setOnClickListener(v -> {
            if (!mediaPlayer.isPlaying()) {
                mediaPlayer.start();
            }
        });

        pauseButton.setOnClickListener(v -> {
            if (mediaPlayer.isPlaying()) {
                mediaPlayer.pause();
            }
        });

        stopButton.setOnClickListener(v -> {
            if (mediaPlayer != null) {
                mediaPlayer.stop();
                mediaPlayer.release();
                mediaPlayer = MediaPlayer.create(this, R.raw.chalo_chale_flute); // Re-
initialize
            }
        });
    }

    @Override
    protected void onDestroy() {
        if (mediaPlayer != null) {
            mediaPlayer.release();
        }
        super.onDestroy();
    }
}
```

**res->new->resource directory->name=raw and value=raw->paste audio->also
change name in code**

EXPT 9

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="16dp">

    <EditText
        android:id="@+id/editTextText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Text" />

    <Button
        android:onClick="saveToInternal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Save to Internal Storage" />

    <Button
        android:onClick="loadFromInternal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Load from Internal Storage" />

    <Button
        android:onClick="saveToExternal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Save to External Storage" />

    <Button
        android:onClick="loadFromExternal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Load from External Storage" />
</LinearLayout>
```

MainActivity.java

```java
package com.example.exp9;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
```

```java
import android.widget.Toast;
import java.io.FileOutputStream;
import java.io.FileInputStream;
import java.io.File;
import android.os.Environment;

public class MainActivity extends AppCompatActivity {
    EditText editText;
    String internalFileName = "myfile.txt";
    String externalFileName = "externalfile.txt";

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        editText = findViewById(R.id.editTextText);
    }

    // Save to internal storage
    public void saveToInternal(View view) {
        try {
            FileOutputStream fos = openFileOutput(internalFileName, MODE_PRIVATE);
            fos.write(editText.getText().toString().getBytes());
            fos.close();
            Toast.makeText(this, "Saved to Internal Storage", Toast.LENGTH_SHORT).show();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }

    // Load from internal storage
    public void loadFromInternal(View view) {
        try {
            FileInputStream fis = openFileInput(internalFileName);
            int c;
            StringBuilder temp = new StringBuilder();
            while ((c = fis.read()) != -1) {
                temp.append((char) c);
            }
            fis.close();
            editText.setText(temp.toString());
            Toast.makeText(this, "Loaded from Internal Storage",
Toast.LENGTH_SHORT).show();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }

    // Save to external storage
    public void saveToExternal(View view) {
        if (isExternalStorageWritable()) {
```

```java
        File file = new File(getExternalFilesDir(null), externalFileName);
        try {
            FileOutputStream fos = new FileOutputStream(file);
            fos.write(editText.getText().toString().getBytes());
            fos.close();
            Toast.makeText(this, "Saved to External Storage",
Toast.LENGTH_SHORT).show();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
}

    // Load from external storage
    public void loadFromExternal(View view) {
        File file = new File(getExternalFilesDir(null), externalFileName);
        try {
            FileInputStream fis = new FileInputStream(file);
            int c;
            StringBuilder temp = new StringBuilder();
            while ((c = fis.read()) != -1) {
                temp.append((char) c);
            }
            fis.close();
            editText.setText(temp.toString());
            Toast.makeText(this, "Loaded from External Storage",
Toast.LENGTH_SHORT).show();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }

    // Check if external storage is writable
    private boolean isExternalStorageWritable() {
        return
Environment.getExternalStorageState().equals(Environment.MEDIA_MOUNTED);
    }
}
```

AndroidManifest.xml

```xml
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE"
android:maxSdkVersion="28"/>
    <uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE"
android:maxSdkVersion="28"/>
```