Program Number	24
Roll Number	1545
Title of program	Create an application to play audio and video files.
Objective	Create an application to play audio and video files.

VideoView is a UI widget that is used to display video content to the users within android applications. We can add video in this video view from different resources such as a video stored on the user device, or a video from a server. In this article, we will take a look at How to use Video View in the android application.

Media Controller:
In Android Studio, a MediaController (specifically from the Jetpack Media3 library or the legacy android.widget.MediaController) is used to interact with and control media playback. It acts as a bridge between a user interface (UI) and the underlying media player and its associated MediaSession.

Source Code:

activity_main.xml

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

    <Button
        android:id="@+id/playAudioButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Play / Pause Audio"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="20dp"/>

    <VideoView
        android:id="@+id/videoView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@id/playAudioButton"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="20dp"/>

</RelativeLayout>
```

MainActivity.java

```
package com.example.videoaudio;

import androidx.appcompat.app.AppCompatActivity;
import android.media.MediaPlayer;
import android.net.Uri;
import android.os.Bundle;
import android.widget.Button;
import android.widget.MediaController;
import android.widget.VideoView;

public class MainActivity extends AppCompatActivity {

    private MediaPlayer mediaPlayer;
    private VideoView videoView;
    private Button playAudioButton;

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

        // Audio Playback
        playAudioButton = findViewById(R.id.playAudioButton);
        playAudioButton.setOnClickListener(v -> {
            if (mediaPlayer == null) {
                mediaPlayer = MediaPlayer.create(this, R.raw.sampleaudio);
            }
            if (!mediaPlayer.isPlaying()) {
                mediaPlayer.start();
            } else {
                mediaPlayer.pause();
            }
        });

        // Video Playback
        videoView = findViewById(R.id.videoView);
        String videoPath = "android.resource://" + getPackageName() + "/" +
R.raw.samplevideo;
        Uri uri = Uri.parse(videoPath);
        videoView.setVideoURI(uri);

        MediaController mediaController = new MediaController(this);
        videoView.setMediaController(mediaController);
        mediaController.setAnchorView(videoView);

        videoView.start();
    }

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

Output: