**EX.NO: DRAWING APP**

**DATE:**

**AIM:**

**PROGRAM:**

**DrawingView.java**

**package** com.example.draw;

**import** android.content.Context;

**import** android.graphics.Bitmap;

**import** android.graphics.Canvas;

**import** android.graphics.Color;

**import** android.graphics.Paint;

**import** android.graphics.Path;

**import** android.graphics.PorterDuff;

**import** android.graphics.PorterDuffXfermode;

**import** android.util.AttributeSet;

**import** android.util.Log;

**import** android.util.TypedValue;

**import** android.view.MotionEvent;

**import** android.view.View;

*/\*\**

*\* Created by Priyank(@priyankvex) on 5/9/15.*

*\**

*\* Class which provides the view on which drawing takes place.*

*\*/*

**public class** DrawingView **extends** View{

*// To hold the path that will be drawn.*

**private** Path **drawPath**;

*// Paint object to draw drawPath and drawCanvas.*

**private** Paint **drawPaint**, **canvasPaint**;

*// initial color*

**private int paintColor** = 0xff000000;

**private int previousColor** = **paintColor**;

*// canvas on which drawing takes place.*

**private** Canvas **drawCanvas**;

*// canvas bitmap*

**private** Bitmap **canvasBitmap**;

*// Brush stroke width*

**private float brushSize**, **lastBrushSize**;

*// To enable and disable erasing mode.*

**private boolean erase** = **false**;

**public** DrawingView(Context context, AttributeSet attrs){

**super**(context, attrs);

setUpDrawing();

}

*/\*\**

*\* Initialize all objects required for drawing here.*

*\* One time initialization reduces resource consumption.*

*\*/*

**private void** setUpDrawing(){

**drawPath** = **new** Path();

**drawPaint** = **new** Paint();

**drawPaint**.setColor(**paintColor**);

*// Making drawing smooth.*

**drawPaint**.setAntiAlias(**true**);

**drawPaint**.setStyle(Paint.Style.***STROKE***);

**drawPaint**.setStrokeJoin(Paint.Join.***ROUND***);

**drawPaint**.setStrokeCap(Paint.Cap.***ROUND***);

**canvasPaint** = **new** Paint(Paint.***DITHER\_FLAG***);

*// Initial brush size is medium.*

**brushSize** = getResources().getInteger(R.integer.***medium\_size***);

**lastBrushSize** = **brushSize**;

**drawPaint**.setStrokeWidth(**brushSize**);

}

@Override

**protected void** onSizeChanged(**int** w, **int** h, **int** oldw, **int** oldh) {

**super**.onSizeChanged(w, h, oldw, oldh);

**canvasBitmap** = Bitmap.*createBitmap*(w, h, Bitmap.Config.***ARGB\_8888***);

**drawCanvas** = **new** Canvas(**canvasBitmap**);

}

@Override

**protected void** onDraw(Canvas canvas) {

**super**.onDraw(canvas);

canvas.drawBitmap(**canvasBitmap**, 0, 0, **canvasPaint**);

canvas.drawPath(**drawPath**, **drawPaint**);

}

@Override

**public boolean** onTouchEvent(MotionEvent event) {

*// X and Y position of user touch.*

**float** touchX = event.getX();

**float** touchY = event.getY();

*// Draw the path according to the touch event taking place.*

**switch** (event.getAction()) {

**case** MotionEvent.***ACTION\_DOWN***:

**drawPath**.moveTo(touchX, touchY);

**break**;

**case** MotionEvent.***ACTION\_MOVE***:

**drawPath**.lineTo(touchX, touchY);

**break**;

**case** MotionEvent.***ACTION\_UP***:

**if** (**erase**){

**drawPaint**.setXfermode(**new** PorterDuffXfermode(PorterDuff.Mode.***CLEAR***));

}

**drawCanvas**.drawPath(**drawPath**, **drawPaint**);

**drawPath**.reset();

**drawPaint**.setXfermode(**null**);

**break**;

**default**:

**return false**;

}

*// invalidate the view so that canvas is redrawn.*

invalidate();

**return true**;

}

**public void** setColor(String newColor){

*// invalidate the view*

invalidate();

**paintColor** = Color.*parseColor*(newColor);

**drawPaint**.setColor(**paintColor**);

**previousColor** = **paintColor**;

}

**public void** setBrushSize(**float** newSize){

**float** pixelAmount = TypedValue.*applyDimension*(TypedValue.***COMPLEX\_UNIT\_DIP***,

newSize, getResources().getDisplayMetrics());

**brushSize**=pixelAmount;

**drawPaint**.setStrokeWidth(**brushSize**);

}

**public void** setLastBrushSize(**float** lastSize){

**lastBrushSize**=lastSize;

}

**public float** getLastBrushSize(){

**return lastBrushSize**;

}

**public void** setErase(**boolean** isErase){

*//set erase true or false*

**erase** = isErase;

**if**(**erase**) {

**drawPaint**.setColor(Color.***WHITE***);

*//drawPaint.setXfermode(new PorterDuffXfermode(PorterDuff.Mode.CLEAR));*

}

**else** {

**drawPaint**.setColor(**previousColor**);

**drawPaint**.setXfermode(**null**);

}

}

**public void** startNew(){

**drawCanvas**.drawColor(0, PorterDuff.Mode.***CLEAR***);

invalidate();

}

}

**MainActivity.java**

**package** com.example.draw;

**import** android.app.AlertDialog;

**import** android.app.Dialog;

**import** android.content.DialogInterface;

**import** android.os.Bundle;

**import** android.provider.MediaStore;

**import** android.support.v7.app.AppCompatActivity;

**import** android.view.View;

**import** android.widget.ImageButton;

**import** android.widget.LinearLayout;

**import** android.widget.Toast;

**import** java.util.UUID;

**public class** MainActivity **extends** AppCompatActivity **implements** View.OnClickListener{

**private** DrawingView **mDrawingView**;

**private** ImageButton **currPaint**, **drawButton**, **eraseButton**, **newButton**, **saveButton**;

**private float smallBrush**, **mediumBrush**, **largeBrush**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**mDrawingView** = (DrawingView)findViewById(R.id.***drawing***);

*// Getting the initial paint color.*

LinearLayout paintLayout = (LinearLayout)findViewById(R.id.***paint\_colors***);

*// 0th child is white color, so selecting first child to give black as initial color.*

**currPaint** = (ImageButton)paintLayout.getChildAt(1);

**currPaint**.setImageDrawable(getResources().getDrawable(R.drawable.***pallet\_pressed***));

**drawButton** = (ImageButton) findViewById(R.id.***buttonBrush***);

**drawButton**.setOnClickListener(**this**);

**eraseButton** = (ImageButton) findViewById(R.id.***buttonErase***);

**eraseButton**.setOnClickListener(**this**);

**newButton** = (ImageButton) findViewById(R.id.***buttonNew***);

**newButton**.setOnClickListener(**this**);

**saveButton** = (ImageButton) findViewById(R.id.buttonSave);

saveButton.setOnClickListener(**this**);

smallBrush = getResources().getInteger(R.integer.small\_size);

mediumBrush = getResources().getInteger(R.integer.medium\_size);

largeBrush = getResources().getInteger(R.integer.large\_size);

*// Set the initial brush size*

mDrawingView.setBrushSize(mediumBrush);

}

*/\*\**

*\* Method is called when color is clicked from pallet.*

*\** ***@param*** *view ImageButton on which click took place.*

*\*/*

**public void** paintClicked(View view){

**if** (view != currPaint){

*// Update the color*

ImageButton imageButton = (ImageButton) view;

String colorTag = imageButton.getTag().toString();

mDrawingView.setColor(colorTag);

*// Swap the backgrounds for last active and currently active image button.*

imageButton.setImageDrawable(getResources().getDrawable(R.drawable.pallet\_pressed));

currPaint.setImageDrawable(getResources().getDrawable(R.drawable.pallet));

currPaint = (ImageButton)view;

mDrawingView.setErase(**false**);

mDrawingView.setBrushSize(mDrawingView.getLastBrushSize());

}

}

@Override

**public void** onClick(View v) {

**int** id = v.getId();

**switch**(id){

**case** R.id.buttonBrush:

*// Show brush size chooser dialog*

showBrushSizeChooserDialog();

**break**;

**case** R.id.buttonErase:

*// Show eraser size chooser dialog*

showEraserSizeChooserDialog();

**break**;

**case** R.id.buttonNew:

*// Show new painting alert dialog*

showNewPaintingAlertDialog();

**break**;

**case** R.id.buttonSave:

*// Show save painting confirmation dialog.*

showSavePaintingConfirmationDialog();

**break**;

}

}

**private void** showBrushSizeChooserDialog(){

**final** Dialog brushDialog = **new** Dialog(**this**);

brushDialog.setContentView(R.layout.dialog\_brush\_size);

brushDialog.setTitle(**"Brush size:"**);

ImageButton smallBtn = (ImageButton)brushDialog.findViewById(R.id.small\_brush);

smallBtn.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View v) {

mDrawingView.setBrushSize(smallBrush);

mDrawingView.setLastBrushSize(smallBrush);

brushDialog.dismiss();

}

});

ImageButton mediumBtn = (ImageButton)brushDialog.findViewById(R.id.medium\_brush);

mediumBtn.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View v) {

mDrawingView.setBrushSize(mediumBrush);

mDrawingView.setLastBrushSize(mediumBrush);

brushDialog.dismiss();

}

});

ImageButton largeBtn = (ImageButton)brushDialog.findViewById(R.id.large\_brush);

largeBtn.setOnClickListener(**new** View.OnClickListener(){

@Override

**public void** onClick(View v) {

mDrawingView.setBrushSize(largeBrush);

mDrawingView.setLastBrushSize(largeBrush);

brushDialog.dismiss();

}

});

mDrawingView.setErase(**false**);

brushDialog.show();

}

**private void** showEraserSizeChooserDialog(){

**final** Dialog brushDialog = **new** Dialog(**this**);

brushDialog.setTitle(**"Eraser size:"**);

brushDialog.setContentView(R.layout.dialog\_brush\_size);

ImageButton smallBtn = (ImageButton)brushDialog.findViewById(R.id.small\_brush);

smallBtn.setOnClickListener(**new** View.OnClickListener(){

@Override

**public void** onClick(View v) {

mDrawingView.setErase(**true**);

mDrawingView.setBrushSize(smallBrush);

brushDialog.dismiss();

}

});

ImageButton mediumBtn = (ImageButton)brushDialog.findViewById(R.id.medium\_brush);

mediumBtn.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View v) {

mDrawingView.setErase(**true**);

mDrawingView.setBrushSize(mediumBrush);

brushDialog.dismiss();

}

});

ImageButton largeBtn = (ImageButton)brushDialog.findViewById(R.id.large\_brush);

largeBtn.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View v) {

mDrawingView.setErase(**true**);

mDrawingView.setBrushSize(largeBrush);

brushDialog.dismiss();

}

});

brushDialog.show();

}

**private void** showNewPaintingAlertDialog(){

AlertDialog.Builder newDialog = **new** AlertDialog.Builder(**this**);

newDialog.setTitle(**"New drawing"**);

newDialog.setMessage(**"Start new drawing (you will lose the current drawing)?"**);

newDialog.setPositiveButton(**"Yes"**, **new** DialogInterface.OnClickListener() {

**public void** onClick(DialogInterface dialog, **int** which) {

mDrawingView.startNew();

dialog.dismiss();

}

});

newDialog.setNegativeButton(**"Cancel"**, **new** DialogInterface.OnClickListener() {

**public void** onClick(DialogInterface dialog, **int** which) {

dialog.cancel();

}

});

newDialog.show();

}

**private void** showSavePaintingConfirmationDialog(){

AlertDialog.Builder saveDialog = **new** AlertDialog.Builder(**this**);

saveDialog.setTitle(**"Save drawing"**);

saveDialog.setMessage(**"Save drawing to device Gallery?"**);

saveDialog.setPositiveButton(**"Yes"**, **new** DialogInterface.OnClickListener(){

**public void** onClick(DialogInterface dialog, **int** which){

*//save drawing*

mDrawingView.setDrawingCacheEnabled(**true**);

String imgSaved = MediaStore.Images.Media.insertImage(

getContentResolver(), mDrawingView.getDrawingCache(),

UUID.randomUUID().toString()+**".png"**, **"drawing"**);

**if**(imgSaved!=**null**){

Toast savedToast = Toast.makeText(getApplicationContext(),

**"Drawing saved to Gallery!"**, Toast.LENGTH\_SHORT);

savedToast.show();

}

**else**{

Toast unsavedToast = Toast.makeText(getApplicationContext(),

**"Oops! Image could not be saved."**, Toast.LENGTH\_SHORT);

unsavedToast.show();

}

*// Destroy the current cache.*

mDrawingView.destroyDrawingCache();

}

});

saveDialog.setNegativeButton(**"Cancel"**, **new** DialogInterface.OnClickListener(){

**public void** onClick(DialogInterface dialog, **int** which){

dialog.cancel();

}

});

saveDialog.show();

}

}

**large.xml**

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

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

**android:dither="true"**

**android:shape="oval"**>

<**size**

**android:height="@dimen/large\_brush"**

**android:width="@dimen/large\_brush"**/>

<**solid android:color="#FF666666"**/>

</**shape**>

**medium.xml**

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

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

**android:dither="true"**

**android:shape="oval"**>

<**size**

**android:height="@dimen/medium\_brush"**

**android:width="@dimen/medium\_brush"**/>

<**solid android:color="#FF666666"**/>

</**shape**>

**small.xml**

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

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

**android:dither="true"**

**android:shape="oval"**>

<**size**

**android:height="@dimen/small\_brush"**

**android:width="@dimen/small\_brush"**/>

<**solid android:color="#FF666666"**/>

</**shape**>

**pallet.xml**

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

<**layer-list xmlns:android="http://schemas.android.com/apk/res/android"**>

<**item**>

<**shape android:shape="rectangle"**>

<**stroke**

**android:width="4dp"**

**android:color="#FF999999"**/>

<**solid android:color="#00000000"**/>

<**padding**

**android:bottom="0dp"**

**android:left="0dp"**

**android:right="0dp"**

**android:top="0dp"**/>

</**shape**>

</**item**>

<**item**>

<**shape xmlns:android="http://schemas.android.com/apk/res/android"**>

<**stroke**

**android:width="4dp"**

**android:color="#FF999999"**/>

<**solid android:color="#00000000"**/>

<**corners android:radius="10dp"**/>

</**shape**>

</**item**>

</**layer-list**>

**pallet\_pressed.xml**

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

<**layer-list xmlns:android="http://schemas.android.com/apk/res/android"**>

<**item**>

<**shape android:shape="rectangle"**>

<**stroke**

**android:width="4dp"**

**android:color="#FF333333"**/>

<**solid android:color="#00000000"**/>

<**padding**

**android:bottom="0dp"**

**android:left="0dp"**

**android:right="0dp"**

**android:top="0dp"**/>

</**shape**>

</**item**>

<**item**>

<**shape xmlns:android="http://schemas.android.com/apk/res/android"**>

<**stroke**

**android:width="4dp"**

**android:color="#FF333333"**/>

<**solid android:color="#00000000"**/>

<**corners android:radius="10dp"**/>

</**shape**>

</**item**>

</**layer-list**>

**activity\_main.xml**

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

**xmlns:tools="http://schemas.android.com/tools"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity"**

**android:gravity="center"**

**android:paddingTop="5dp"**

**android:paddingBottom="5dp"**

**android:orientation="vertical"**

>

<**LinearLayout**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:orientation="horizontal"**

>

<**ImageButton**

**android:id="@+id/buttonNew"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="fill\_parent"**

**android:contentDescription="@string/start\_new"**

**android:src="@drawable/new\_pic"**/>

<**ImageButton**

**android:id="@+id/buttonBrush"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="fill\_parent"**

**android:contentDescription="@string/brush"**

**android:src="@drawable/brush"**/>

<**ImageButton**

**android:id="@+id/buttonErase"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="fill\_parent"**

**android:contentDescription="@string/erase"**

**android:src="@drawable/eraser"**/>

<**ImageButton**

**android:id="@+id/buttonSave"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="fill\_parent"**

**android:contentDescription="@string/save"**

**android:src="@drawable/save"**/>

</**LinearLayout**>

<**com.example.draw.DrawingView**

**android:id="@+id/drawing"**

**android:layout\_width="match\_parent"**

**android:layout\_height="0dp"**

**android:layout\_marginBottom="3dp"**

**android:layout\_marginLeft="5dp"**

**android:layout\_marginRight="5dp"**

**android:layout\_marginTop="3dp"**

**android:layout\_weight="1"**

**android:background="@color/white"**

/>

*<!-- Color pallet -->*

<**LinearLayout**

**android:id="@+id/paint\_colors"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:orientation="horizontal"**>

<**ImageButton**

**android:layout\_width="@dimen/large\_brush"**

**android:layout\_height="@dimen/large\_brush"**

**android:layout\_margin="2dp"**

**android:background="@color/skin"**

**android:contentDescription="@string/paint"**

**android:onClick="paintClicked"**

**android:src="@drawable/pallet"**

**android:tag="@color/skin"**/>

<**ImageButton**

**android:layout\_width="@dimen/large\_brush"**

**android:layout\_height="@dimen/large\_brush"**

**android:layout\_margin="2dp"**

**android:background="@color/black"**

**android:contentDescription="@string/paint"**

**android:onClick="paintClicked"**

**android:src="@drawable/pallet"**

**android:tag="@color/black"**/>

<**ImageButton**

**android:layout\_width="@dimen/large\_brush"**

**android:layout\_height="@dimen/large\_brush"**

**android:layout\_margin="2dp"**

**android:background="@color/red"**

**android:contentDescription="@string/paint"**

**android:onClick="paintClicked"**

**android:src="@drawable/pallet"**

**android:tag="@color/red"**/>

<**ImageButton**

**android:layout\_width="@dimen/large\_brush"**

**android:layout\_height="@dimen/large\_brush"**

**android:layout\_margin="2dp"**

**android:background="@color/green"**

**android:contentDescription="@string/paint"**

**android:onClick="paintClicked"**

**android:src="@drawable/pallet"**

**android:tag="@color/green"**/>

<**ImageButton**

**android:layout\_width="@dimen/large\_brush"**

**android:layout\_height="@dimen/large\_brush"**

**android:layout\_margin="2dp"**

**android:background="@color/blue"**

**android:contentDescription="@string/paint"**

**android:onClick="paintClicked"**

**android:src="@drawable/pallet"**

**android:tag="@color/blue"**/>

<**ImageButton**

**android:layout\_width="@dimen/large\_brush"**

**android:layout\_height="@dimen/large\_brush"**

**android:layout\_margin="2dp"**

**android:background="@color/yellow"**

**android:contentDescription="@string/paint"**

**android:onClick="paintClicked"**

**android:src="@drawable/pallet"**

**android:tag="@color/yellow"**/>

</**LinearLayout**>

</**LinearLayout**>

**dialog\_brush\_size.xml**

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

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

**android:orientation="vertical"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:gravity="center"**

>

<**ImageButton**

**android:id="@+id/small\_brush"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_weight="1"**

**android:contentDescription="@string/small"**

**android:src="@drawable/small"**/>

<**ImageButton**

**android:id="@+id/medium\_brush"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_weight="1"**

**android:contentDescription="@string/medium"**

**android:src="@drawable/medium"**/>

<**ImageButton**

**android:id="@+id/large\_brush"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_weight="1"**

**android:contentDescription="@string/large"**

**android:src="@drawable/large"**/>

</**LinearLayout**>

**menu\_main.xml**

<**menu 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"tools:context=".MainActivity"**>

<**item android:id="@+id/action\_settings"android:title="@string/action\_settings"**

**android:orderInCategory="100"app:showAsAction="never"**/>

</**menu**>

**colour.xml**

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

<**resources**>

<**item name="white"type="color"**>#ffffff</**item**>

<**item name="black"type="color"**>#000000</**item**>

<**item name="green"type="color"**>#00ff00</**item**>

<**item name="red"type="color"**>#ff0000</**item**>

<**item name="blue"type="color"**>#0000ff</**item**>

<**item name="yellow"type="color"**>#ffff00</**item**>

<**item name="skin"type="color"**>#ffcc99</**item**>

</**resources**>

**styles.xml**

<**resources**>

*<!-- Base application theme. -->*

<**style name="AppTheme"parent="Theme.AppCompat.Light.DarkActionBar"**>

*<!-- Customize your theme here. -->*

</**style**>

</**resources**>

**strings.xml**

<**resources**>

<**string name="app\_name"**>Paint App</**string**>

<**string name="hello\_world"**>Hello world!</**string**>

<**string name="action\_settings"**>Settings</**string**>

<**string name="start\_new"**>New</**string**>

<**string name="brush"**>Brush</**string**>

<**string name="erase"**>Erase</**string**>

<**string name="save"**>Save</**string**>

<**string name="paint"**>Paint</**string**>

<**string name="small"**>Small</**string**>

<**string name="medium"**>Medium</**string**>

<**string name="large"**>Large</**string**>

</**resources**>

**dimens.xml**

<**resources**>

*<!-- Default screen margins, per the Android Design guidelines. -->*

<**dimen name="activity\_horizontal\_margin"**>16dp</**dimen**>

<**dimen name="activity\_vertical\_margin"**>16dp</**dimen**>

*<!-- Brush sizes -->*

<**dimen name="small\_brush"**>10dp</**dimen**>

<**integer name="small\_size"**>10</**integer**>

<**dimen name="medium\_brush"**>20dp</**dimen**>

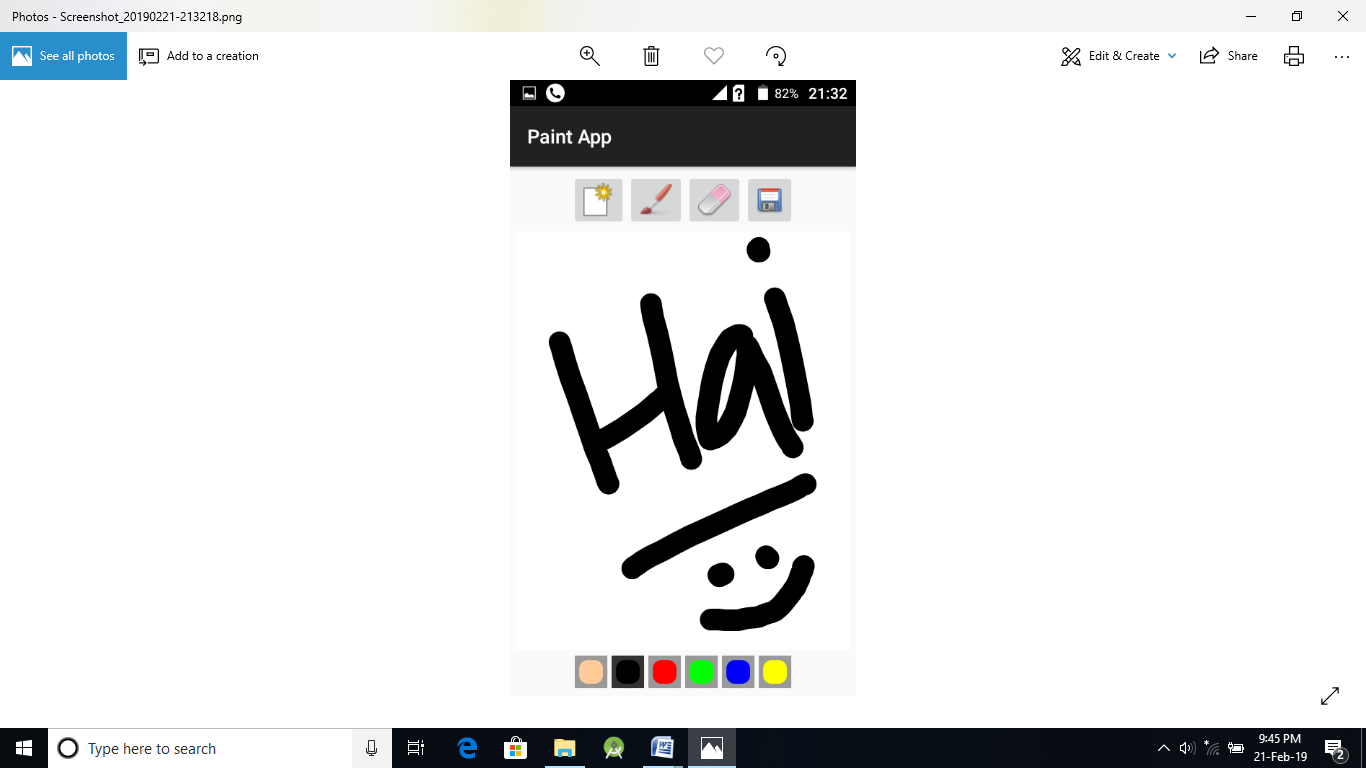
<**integer name="medium\_size"**>20</**integer**>

<**dimen name="large\_brush"**>30dp</**dimen**>

<**integer name="large\_size"**>30</**integer**>

</**resources**>

**OUTPUT:**

****

**RESULT:**

**EX.NO: DATABASE CONNECTIVITY**

**DATE:**

**AIM:**

**PROGRAM:**

**AndroidManifest.xml**

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

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

**package="com.example.databaseconnectivity"**>

<**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/AppTheme"**>

<**activity android:name=".MainActivity"**>

<**intent-filter**>

<**action android:name="android.intent.action.MAIN"**/>

<**category android:name="android.intent.category.LAUNCHER"**/>

</**intent-filter**>

</**activity**>

</**application**>

</**manifest**>

**MainActivity.java**

**package** com.example.databaseconnectivity;

**import** android.app.Activity;

**import** android.app.AlertDialog.Builder;

**import** android.content.Context;

**import** android.database.Cursor;

**import** android.database.sqlite.SQLiteDatabase;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.view.View.OnClickListener;

**import** android.widget.Button;

**import** android.widget.EditText;

**public class** MainActivity **extends** Activity **implements** OnClickListener

{

EditText **editRollno**,**editName**,**editMarks**;

Button **btnAdd**,**btnDelete**,**btnModify**,**btnView**,**btnViewAll**,**btnShowInfo**;SQLiteDatabase **db**;

@Override

**public void** onCreate(Bundle savedInstanceState)

{

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**editRollno**=(EditText)findViewById(R.id.***editRollno***);

**editName**=(EditText)findViewById(R.id. ***editName***);

**editMarks**=(EditText)findViewById(R.id.***editMarks***);

**btnAdd**=(Button)findViewById(R.id.***btnAdd***);

**btnDelete**=(Button)findViewById(R.id.***btnDelete***);

**btnModify**=(Button)findViewById(R.id.***btnModify***);

**btnView**=(Button)findViewById(R.id.***btnView***);

**btnViewAll**=(Button)findViewById(R.id.***btnViewAll***);

**btnShowInfo**=(Button)findViewById(R.id.***btnShowInfo***);

**btnAdd**.setOnClickListener(**this**);

**btnDelete**.setOnClickListener(**this**);

**btnModify**.setOnClickListener(**this**);

**btnView**.setOnClickListener(**this**);

**btnViewAll**.setOnClickListener(**this**);

**btnShowInfo**.setOnClickListener(**this**);

**db**=openOrCreateDatabase(**"StudentDB"**, Context. ***MODE\_PRIVATE***,

**null**);

**db**.execSQL(**"CREATE TABLE IF NOT EXISTS student(rollno VARCHAR,name VARCHAR,marks VARCHAR);"**);

}

**public void** onClick(View view)

{

**if**(view==**btnAdd**)

{

**if**(**editRollno**.getText().toString().trim().length()==0||

**editName**.getText().toString().trim().length()==0||

**editMarks**.getText().toString().trim().length()==0)

{

showMessage(**"Error"**, **"Please enter all values"**);

**return**;

}

**db**.execSQL(**"INSERT INTO student VALUES('"**+**editRollno**.getText()+**"','"**+**editName**.getText()+

**"','"**+**editMarks**.getText()+**"');"**);

showMessage(**"Success"**, **"Record added"**);clearText();

}

**if**(view==**btnDelete**)

{

**if**(**editRollno**.getText().toString().trim().length()==0)

{

showMessage(**"Error"**, **"Please enter Rollno"**);

**return**;

}

Cursor c=**db**.rawQuery(**"SELECT \* FROM student WHERE rollno='"**+**editRollno**.getText()+**"'"**, **null**);

**if**(c.moveToFirst())

{

**db**.execSQL(**"DELETE FROM student WHERE rollno='"**+**editRollno**.getText()+**"'"**);

showMessage(**"Success"**, **"Record Deleted"**);

}

**else**

{

showMessage(**"Error"**, **"Invalid Rollno"**);

}

clearText();

}

**if**(view==btnModify)

{

**if**(editRollno.getText().toString().trim().length()==0)

{

showMessage(**"Error"**, **"Please enter Rollno"**);

**return**;

}

Cursor c=db.rawQuery(**"SELECT \* FROM student WHERE rollno='"**+editRollno.getText()+**"'"**, **null**);

**if**(c.moveToFirst())

{

db.execSQL(**"UPDATE student SET name='"**+editName.getText()+**"',marks='"**+editMarks.getText()+

**"' WHERE rollno='"**+editRollno.getText()+**"'"**);

showMessage(**"Success"**, **"Record Modified"**);

}

**else**

{

showMessage(**"Error"**, **"Invalid Rollno"**);}

clearText();

}

**if**(view==btnView)

{

**if**(editRollno.getText().toString().trim().length()==0)

{

showMessage(**"Error"**, **"Please enter Rollno"**);

**return**;

}

Cursor c=db.rawQuery(**"SELECT \* FROM student WHERE rollno='"**+editRollno.getText()+**"'"**, **null**);

**if**(c.moveToFirst())

{

editName.setText(c.getString(1));

editMarks.setText(c.getString(2));

}

**else**

{

showMessage(**"Error"**, **"Invalid Rollno"**);

clearText();

}

}

**if**(view==btnViewAll)

{

Cursor c=db.rawQuery(**"SELECT \* FROM student"**, **null**);

**if**(c.getCount()==0)

{

showMessage(**"Error"**, **"No records found"**);

**return**;

}

StringBuffer buffer=**new** StringBuffer();

**while**(c.moveToNext())

{

buffer.append(**"Rollno: "**+c.getString(0)+**"\n"**);

buffer.append(**"Name: "**+c.getString(1)+**"\n"**);

buffer.append(**"Marks: "**+c.getString(2)+**"\n\n"**);

}

showMessage(**"Student Details"**, buffer.toString());

}

**if**(view==btnShowInfo)

{showMessage(**"Student Management Application"**, **"Developed By IT Students"**);

}

}

**public void** showMessage(String title,String message)

{

Builder builder=**new** Builder(**this**);

builder.setCancelable(**true**);

builder.setTitle(title);

builder.setMessage(message);

builder.show();

}

**public void** clearText()

{

editRollno.setText(**""**);

editName.setText(**""**);

editMarks.setText(**""**);

editRollno.requestFocus();

}

}

**activity\_main.xml**

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

<**AbsoluteLayout**

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

**android:id="@+id/myLayout"**

**android:stretchColumns="0"**

**android:layout\_width="fill\_parent"**

**android:layout\_height="fill\_parent"**>

<**TextView**

**android:text="title"**

**android:layout\_x="110dp"**

**android:layout\_y="10dp"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**/>

<**TextView**

**android:text="roll\_no"**

**android:layout\_x="30dp"**

**android:layout\_y="50dp"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**/>

<**EditText**

**android:id="@+id/editRollno"**

**android:inputType="number"**

**android:layout\_x="150dp"**

**android:layout\_y="50dp"**

**android:layout\_width="150dp"**

**android:layout\_height="40dp"**/>

<**TextView**

**android:text="name"**

**android:layout\_x="30dp"**

**android:layout\_y="100dp"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**/>

<**EditText**

**android:id="@+id/editName"**

**android:inputType="text"**

**android:layout\_x="150dp"**

**android:layout\_y="100dp"**

**android:layout\_width="150dp"**

**android:layout\_height="40dp"**/>

<**TextView**

**android:text="marks"**

**android:layout\_x="30dp"**

**android:layout\_y="150dp"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**/>

<**EditText android:id="@+id/editMarks"**

**android:inputType="number"**

**android:layout\_x="150dp"**

**android:layout\_y="150dp"**

**android:layout\_width="150dp"**

**android:layout\_height="40dp"**/>

<**Button**

**android:id="@+id/btnAdd"**

**android:text="add"**

**android:layout\_x="30dp"**

**android:layout\_y="200dp"**

**android:layout\_width="100dp"**

**android:layout\_height="40dp"**/>

<**Button**

**android:id="@+id/btnDelete"**

**android:text="delete"**

**android:layout\_x="150dp"**

**android:layout\_y="200dp"**

**android:layout\_width="100dp"**

**android:layout\_height="40dp"**/>

<**Button android:id="@+id/btnModify"**

**android:text="modify"**

**android:layout\_x="30dp"**

**android:layout\_y="250dp"**

**android:layout\_width="100dp"**

**android:layout\_height="40dp"**/>

<**Button android:id="@+id/btnView"**

**android:text="view"**

**android:layout\_x="150dp"**

**android:layout\_y="250dp"**

**android:layout\_width="100dp"**

**android:layout\_height="40dp"**/>

<**Button android:id="@+id/btnViewAll"**

**android:text="view\_all"**

**android:layout\_x="30dp"**

**android:layout\_y="300dp"**

**android:layout\_width="100dp"**

**android:layout\_height="40dp"**/>

<**Button android:id="@+id/btnShowInfo"**

**android:text="show\_info"**

**android:layout\_x="150dp"**

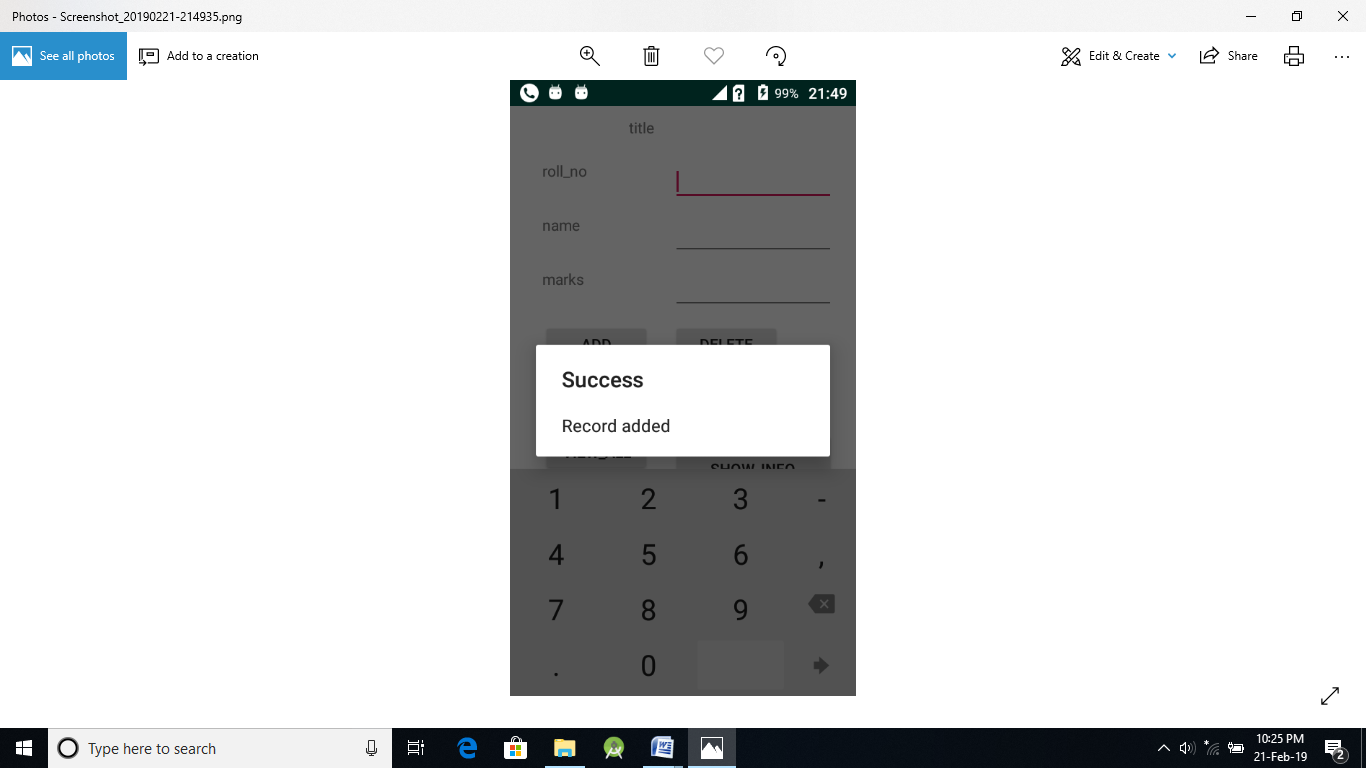
**android:layout\_y="300dp"**

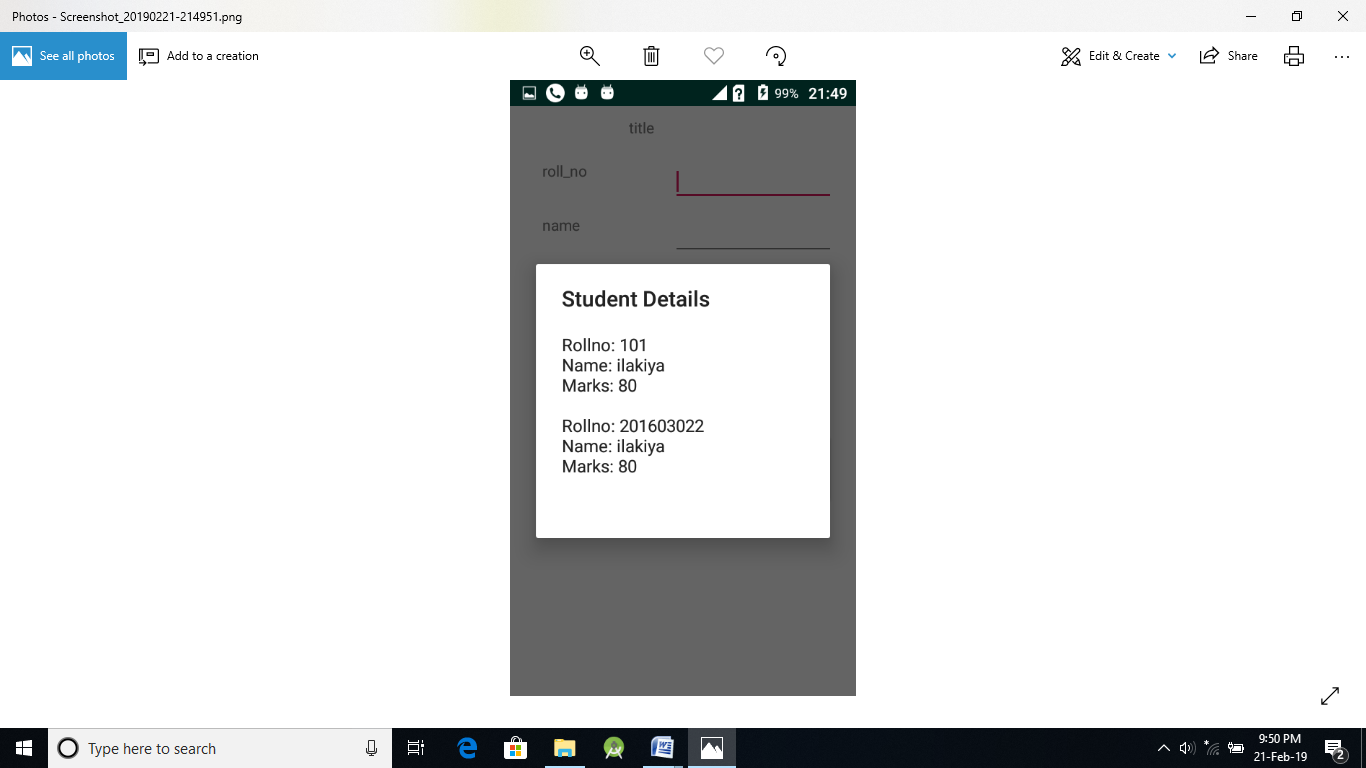
**android:layout\_width="150dp"**

**android:layout\_height="70dp"**/>

</**AbsoluteLayout**>

**OUTPUT:**

****

****

**RESULT:**

**EX.NO: MULTITHREADING**

**DATE:**

**AIM:**

**PROGRAM:**

**Activity\_main:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="fill\_parent"** >  
 <**RelativeLayout  
 android:id="@+id/firstlayout"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="center"  
 android:layout\_marginTop="80dp"**>  
 <**TextView  
 android:id="@+id/display"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Button will appear after 10 seconds"** />  
 </**RelativeLayout**>  
 <**RelativeLayout  
 android:id="@+id/secondlayout"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/firstlayout"  
 android:gravity="center"**>  
 <**TextView  
 android:id="@+id/timer"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:gravity="center\_horizontal"  
 android:text="12"  
 android:layout\_marginTop="80dp"  
 android:textSize="36dp"**/>  
 </**RelativeLayout**>  
 <**RelativeLayout  
 android:id="@+id/thirdlayout"  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/secondlayout"  
 android:gravity="center"**>  
 <**Button  
 android:id="@+id/clickme"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Click\_me"  
 android:visibility="invisible"  
 android:layout\_marginTop="100dp"**/>  
 </**RelativeLayout**>  
</**RelativeLayout**>

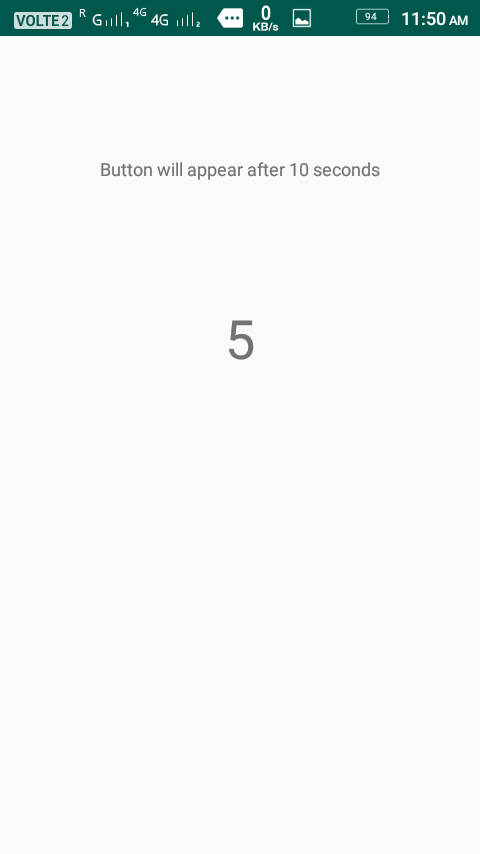
**MainActivity.java:**

**package** com.example.multithreadingapp;  
**import** android.app.Activity;  
**import** android.os.Bundle;  
**import** android.os.Handler;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**public class** MainActivity **extends** Activity {  
 Handler **hand**=**new** Handler();  
 Button **clickme**;  
 TextView **timer**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **timer**=(TextView)findViewById(R.id.***timer***);  
 **clickme**=(Button)findViewById(R.id.***clickme***);  
 **hand**.postDelayed(**run**,100);  
 }  
 Runnable **run**=**new** Runnable() {  
 @Override  
 **public void** run() {  
 updateTime();  
 }  
 };  
 **public void** updateTime()  
 {  
 **timer**.setText(**""** + (Integer.*parseInt*(**timer**.getText().toString()) -  
 1));  
 **if** (Integer.*parseInt*(**timer**.getText().toString()) == 0)  
 {  
 **clickme**.setVisibility(View.***VISIBLE***);  
 }  
 **else** {  
 **hand**.postDelayed(**run**, 100);  
 }  
 }  
}

**AndroidManifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.multithreadingapp"**>  
  
 <**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/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 </**application**>  
</**manifest**>

**OUTPUT:**

** **

**RESULT:**

**EX.NO: GPS APP**

**DATE:**

**AIM:**

**PROGRAM:**

**AndroidManifest.xml**

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

<**manifest**

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

**package="com.javapapers.android.androidgps"**

**android:versionCode="1"**

**android:versionName="1.0"**>

<**uses-sdk**

**android:minSdkVersion="8"**

**android:targetSdkVersion="18"**/>

*<!-- to get location using GPS -->*

<**uses-permission**

**android:name="android.permission.ACCESS\_FINE\_LOCATION"**/>

*<!-- to get location using NetworkProvider -->*

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

<**application**

**android:allowBackup="true"**

**android:icon="@drawable/ic\_launcher\_background"**

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

**android:theme="@style/AppTheme"**>

<**activity**

**android:name="com.example.gsp.AndroidLocationActivity"**

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

<**intent-filter**>

<**action android:name="android.intent.action.MAIN"**/>

<**category**

**android:name="android.intent.category.LAUNCHER"**/>

</**intent-filter**>

</**activity**>

</**application**>

</**manifest**>

**AndroidLocationActivity.java**

**package** com.example.gsp;

**import** android.app.Activity;

**import** android.app.AlertDialog;

**import** android.content.DialogInterface;

**import** android.content.Intent;

**import** android.location.Location;

**import** android.location.LocationManager;

**import** android.os.Bundle;

**import** android.provider.Settings;

**import** android.view.Menu;

**import** android.view.View;

**import** android.widget.Button;

**import** android.widget.Toast;

**import** com.javapapers.android.androidgps.R;

**public class** AndroidLocationActivity **extends** Activity {

Button **btnGPSShowLocation**;

Button **btnNWShowLocation**;

AppLocationService **appLocationService**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**appLocationService** = **new** AppLocationService(

AndroidLocationActivity.**this**);

**btnGPSShowLocation** = (Button)

findViewById(R.id.***btnGPSShowLocation***);

**btnGPSShowLocation**.setOnClickListener(**new**

View.OnClickListener() {

@Override

**public void** onClick(View arg0) {

Location gpsLocation = **appLocationService**

.getLocation(LocationManager.***GPS\_PROVIDER***);

**if** (gpsLocation != **null**) {

**double** latitude = gpsLocation.getLatitude();

**double** longitude = gpsLocation.getLongitude();

Toast.*makeText*(

getApplicationContext(),

**"Mobile Location (GPS): \nLatitude: "**+ latitude

+ **"\nLongitude: "**+ longitude,

Toast.***LENGTH\_LONG***).show();

} **else** {

showSettingsAlert(**"GPS"**);

}

}

});

**btnNWShowLocation** = (Button)

findViewById(R.id.***btnNWShowLocation***);

**btnNWShowLocation**.setOnClickListener(**new**

View.OnClickListener() {

@Override

**public void** onClick(View arg0) {

Location nwLocation = **appLocationService**

.getLocation(LocationManager.***NETWORK\_PROVIDER***);

**if** (nwLocation != **null**) {

**double** latitude = nwLocation.getLatitude();

**double** longitude = nwLocation.getLongitude();

Toast.*makeText*(

getApplicationContext(),

**"Mobile Location (NW): \nLatitude: "**+ latitude

+ **"\nLongitude: "**+ longitude,

Toast.***LENGTH\_LONG***).show();

} **else** {

showSettingsAlert(**"NETWORK"**);

}

}

});

}

**public void** showSettingsAlert(String provider) {

AlertDialog.Builder alertDialog = **new** AlertDialog.Builder(

AndroidLocationActivity.**this**);

alertDialog.setTitle(provider + **" SETTINGS"**);

alertDialog

.setMessage(provider + **" is not enabled! Want to go to settings menu?"**);

alertDialog.setPositiveButton(**"Settings"**,

**new** DialogInterface.OnClickListener() {

**public void** onClick(DialogInterface dialog, **int** which) {

Intent intent = **new** Intent(

Settings. ***ACTION\_LOCATION\_SOURCE\_SETTINGS***);

AndroidLocationActivity.**this**.startActivity(intent);

}

});

alertDialog.setNegativeButton(**"Cancel"**,

**new** DialogInterface.OnClickListener() {

**public void** onClick(DialogInterface dialog, **int** which) {

dialog.cancel();

}

});

alertDialog.show();

}

}

**AppLocationService.java**

**package** com.example.gsp;

**import** android.app.Service;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.location.Location;

**import** android.location.LocationListener;

**import** android.location.LocationManager;

**import** android.os.Bundle;

**import** android.os.IBinder;**public class** AppLocationService **extends** Service **implements**

LocationListener {

**protected** LocationManager **locationManager**;

Location **location**;

**private static final long *MIN\_DISTANCE\_FOR\_UPDATE*** = 10;

**private static final long *MIN\_TIME\_FOR\_UPDATE*** = 1000 \* 60 \* 2;

**public** AppLocationService(Context context) {

**locationManager** = (LocationManager) context

.getSystemService(***LOCATION\_SERVICE***);

}

**public** Location getLocation(String provider) {

**if** (**locationManager**.isProviderEnabled(provider)) {

**locationManager**.requestLocationUpdates(provider, ***MIN\_TIME\_FOR\_UPDATE***, ***MIN\_DISTANCE\_FOR\_UPDATE***, **this**);

**if** (**locationManager** != **null**)

{ **location** = **locationManager**.getLastKnownLocation(provider);

**return location**;

}

}

**return null**;

}

@Override

**public void** onLocationChanged(Location location) {

}

@Override

**public void** onProviderDisabled(String provider) {

}

@Override

**public void** onProviderEnabled(String provider) {

}

@Override

**public void** onStatusChanged(String provider, **int** status, Bundle

extras) {

}

@Override

**public** IBinder onBind(Intent arg0) {

**return null**;

}

}

**activity\_main.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:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:paddingBottom="5sp"**

**android:paddingLeft="5sp"**

**android:paddingRight="5sp"**

**android:paddingTop="5sp"**

**tools:context=".AndroidLocationActivity"**>

<**Button**

**android:id="@+id/btnGPSShowLocation"**

**android:layout\_width="fill\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignLeft="@+id/btnNWShowLocation"**

**android:layout\_alignParentTop="true"**

**android:layout\_marginTop="36dp"**

**android:minWidth="100dp"**

**android:text="Show Location\n(GPS)"**/>

<**Button**

**android:id="@+id/btnNWShowLocation"**

**android:layout\_width="fill\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_below="@+id/btnGPSShowLocation"**

**android:layout\_centerHorizontal="true"**

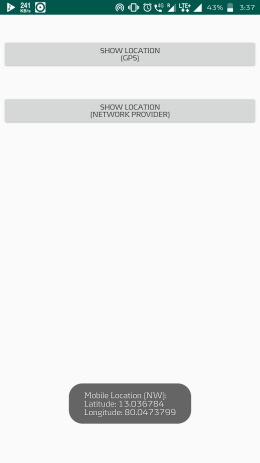
**android:layout\_marginTop="44dp"**

**android:minWidth="100dp"**

**android:text="Show Location\n(network provider)"**/>

</**RelativeLayout**>

**OUTPUT:**

****

**RESULT:**

**EX.NO: SD CARD APP  
  
DATE:**

**AIM:**

**PROGRAM:**

**AndroidManifest.xml**

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

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

**package="com.example.sdcard"**>

<**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/AppTheme"**>

<**activity android:name=".MainActivity"**>

<**intent-filter**>

<**action android:name="android.intent.action.MAIN"** />

<**category android:name="android.intent.category.LAUNCHER"** />

</**intent-filter**>

</**activity**>

</**application**>

</**manifest**>

**MainActivity.java**

**package** com.example.sdcard;

**import** java.io.\*;

**import** android.app.Activity;

**import** android.os.Bundle;

**import** android.os.Environment;

**import** android.view.\*;

**import** android.view.View.OnClickListener;

**import** android.widget.\*;

**public class** MainActivity **extends** Activity {

EditText txtData;

Button btnWriteSDFile;

Button btnReadSDFile;

Button btnClearScreen;

Button btnClose;

@Override

**public void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

txtData = (EditText) findViewById(R.id.txtData);

txtData.setHint(**"Enter some lines of data here..."**);

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

btnWriteSDFile.setOnClickListener(**new** OnClickListener() {

**public void** onClick(View v) {

StringbaseDir =Environment.getExternalStorageDirectory().getAbsolutePath();

String fileName = **"myFile.txt"**;

**try** {

File myFile = **new** File(baseDir + **"/"** + fileName);

myFile.createNewFile();

FileOutputStream fOut = **new** FileOutputStream(myFile);

OutputStreamWriter myOutWriter =

**new** OutputStreamWriter(fOut);

myOutWriter.append(txtData.getText());

myOutWriter.close();

fOut.close();

Toast.makeText(getBaseContext(),

**"Done writing SD 'myfile.txt'"**,

Toast.LENGTH\_SHORT).show();

} **catch** (Exception e) {

Toast.makeText(getBaseContext(), e.getMessage(),

Toast.LENGTH\_SHORT).show();

}

}

});

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

btnReadSDFile.setOnClickListener(**new** OnClickListener() {

**public void** onClick(View v) {

StringbaseDir=Environment.getExternalStorageDirectory().getAbsolutePath();

String fileName = **"myFile.txt"**;

**try** {

File myFile = **new** File(baseDir + **"/"** + fileName);

FileInputStream fIn = **new** FileInputStream(myFile);

BufferedReader myReader = **new** BufferedReader(

**new** InputStreamReader(fIn));

String aDataRow = **""**;

String aBuffer = **""**;

**while** ((aDataRow = myReader.readLine()) != **null**) {

aBuffer += aDataRow + **"\n"**;

}

txtData.setText(aBuffer);

myReader.close();

Toast.makeText(getBaseContext(),

**"Done reading SD 'myfile.txt'"**,

Toast.LENGTH\_SHORT).show();

} **catch** (Exception e) {

Toast.makeText(getBaseContext(), e.getMessage(),

Toast.LENGTH\_SHORT).show();

}

}

});

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

btnClearScreen.setOnClickListener(**new** OnClickListener() {

**public void** onClick(View v) {

txtData.setText(**""**);

}

}); *// btnClearScreen*

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

btnClose.setOnClickListener(**new** OnClickListener() {

**public void** onClick(View v) {

finish();

}

});

}

}

**activitymain.xml**

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

<**LinearLayout**

**android:id="@+id/widget28"**

**android:layout\_width="fill\_parent"**

**android:layout\_height="fill\_parent"**

**android:background="#fff6fdff"**

**android:orientation="vertical"**

**xmlns:android="http://schemas.android.com/apk/res/android"**>

<**EditText**

**android:id="@+id/txtData"**

**android:layout\_width="fill\_parent"**

**android:layout\_height="180px"**

**android:textSize="18sp"** />

<**Button**

**android:id="@+id/btnWriteSDFile"**

**android:layout\_width="353dp"**

**android:layout\_height="wrap\_content"**

**android:text="1. Write SD File"** />

<**Button**

**android:id="@+id/btnClearScreen"**

**android:layout\_width="353dp"**

**android:layout\_height="wrap\_content"**

**android:text="2. Clear Screen"** />

<**Button**

**android:id="@+id/btnReadSDFile"**

**android:layout\_width="350dp"**

**android:layout\_height="wrap\_content"**

**android:text="3. Read SD File"** />

<**Button**

**android:id="@+id/btnClose"**

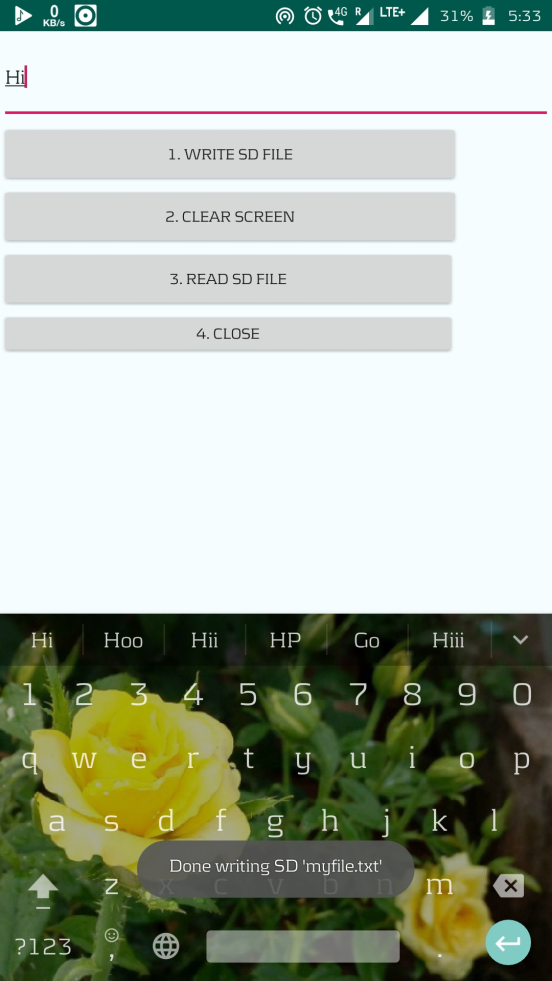
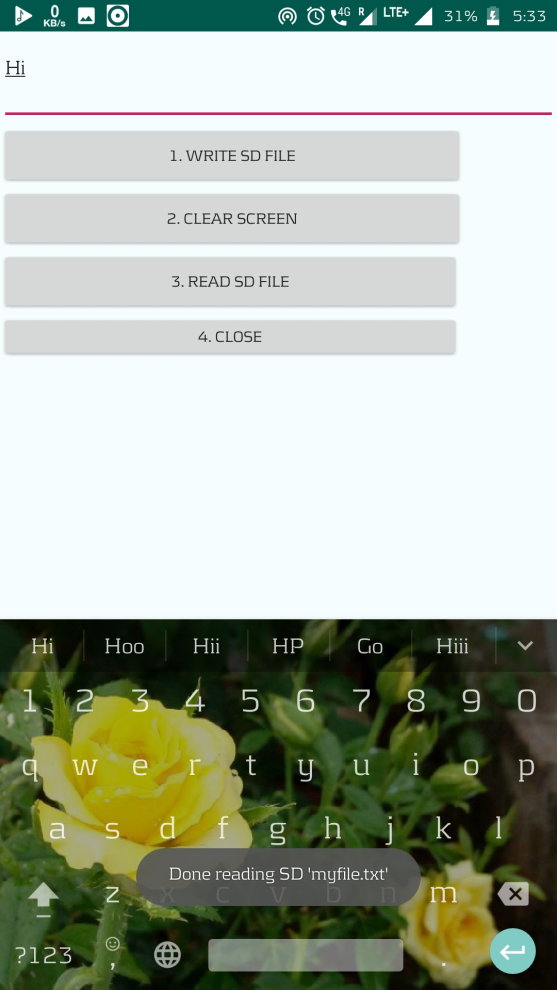
**android:layout\_width="350dp"**

**android:layout\_height="36dp"**

**android:text="4. Close"** />

</**LinearLayout**>

**OUTPUT:**



**RESULT:**

**EX.NO: NOTIFICATION APP**

**DATE:**

**AIM:**

**PROGRAM:**

**Activity\_main.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity"**>  
  
 <**TextView  
 android:id="@+id/textView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="45dp"  
 android:text="information"  
 android:textAppearance="@style/TextAppearance.AppCompat.Large"** />  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/textView1"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="127dp"  
 android:text="send notification"** />  
 <**EditText  
 android:id="@+id/editText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/textView1"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="39dp"  
 android:ems="10"  
 android:inputType="text"** />  
</**RelativeLayout**>

**Activity\_notif\_detai.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**android.support.constraint.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=".NotifDetailActivity"**>  
</**android.support.constraint.ConstraintLayout**>

**MainActivity.java:**

**package** com.example.notificationapp;  
  
**import** android.app.Activity;  
**import** android.app.Notification;  
**import** android.app.NotificationManager;  
**import** android.app.PendingIntent;  
**import** android.content.Context;  
**import** android.content.Intent;  
**import** android.graphics.Bitmap;  
**import** android.graphics.BitmapFactory;  
**import** android.net.Uri;  
**import** android.support.v4.app.NotificationCompat;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** java.util.Calendar;  
**public class** MainActivity **extends** Activity {  
 EditText **txtInfo**;  
 Button **btnSend**;  
 **public final static** String ***NOTIFICATION\_DATA*** =  
 **"NOTIFICATION\_DATA"**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **txtInfo** = (EditText) **this**.findViewById(R.id.***editText***);  
 **btnSend** = (Button) **this**.findViewById(R.id.***button***);  
 **btnSend**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 createNotification(Calendar.*getInstance*().getTimeInMillis(),  
 **txtInfo**.getText().toString());  
 } }); }  
 **private void** createNotification(**long** time, String text){  
 String notificationContent = **"Detail : Press to show detail !"**;  
 String notificationTitle = **"Notification"**;  
 Bitmap largeicon =  
 BitmapFactory.*decodeResource*(getResources(),  
 R.drawable.***ic\_launcher\_background***);  
 **int** smallicon = R.drawable.***ic\_launcher\_background***;  
 Intent intent = **new** Intent(getApplicationContext(),  
 NotifDetailActivity.**class**);  
 intent.putExtra(***NOTIFICATION\_DATA***, **"Detail : "** + text);  
 intent.setData(Uri.*parse*(**"content://"**+time));  
 PendingIntent pendingIntent =  
 PendingIntent.*getActivity*(getApplicationContext(), 0, intent, Intent.***FLAG\_ACTIVITY\_NEW\_TASK***);  
 NotificationManager notificationManager  
 = (NotificationManager) getSystemService(Context.***NOTIFICATION\_SERVICE***);  
 NotificationCompat.Builder builder;  
 builder = **new** NotificationCompat.Builder(getApplicationContext());  
 builder.setWhen(time)  
 .setContentText(notificationContent)  
 .setContentTitle(notificationTitle)  
 .setSmallIcon(smallicon)  
 .setAutoCancel(**true**)  
 .setTicker(notificationTitle)  
 .setLargeIcon(largeicon)  
 .setDefaults(Notification.***DEFAULT\_LIGHTS*** |  
 Notification.***DEFAULT\_SOUND***|  
 Notification.***DEFAULT\_VIBRATE***)  
 .setContentIntent(pendingIntent);  
 Notification notification = builder.build();  
 notificationManager.notify((**int**)time, notification);  
 }  
}

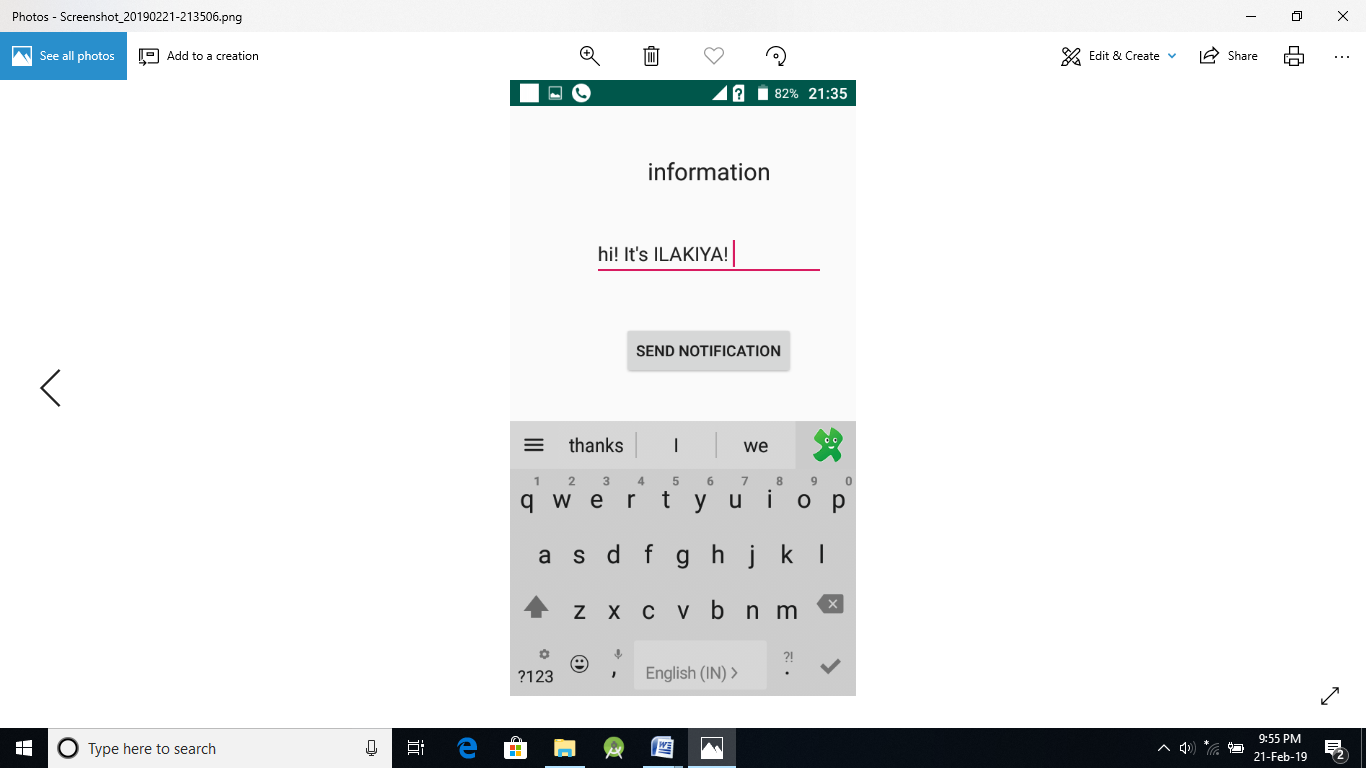
**NotifDetailActivity.java:**

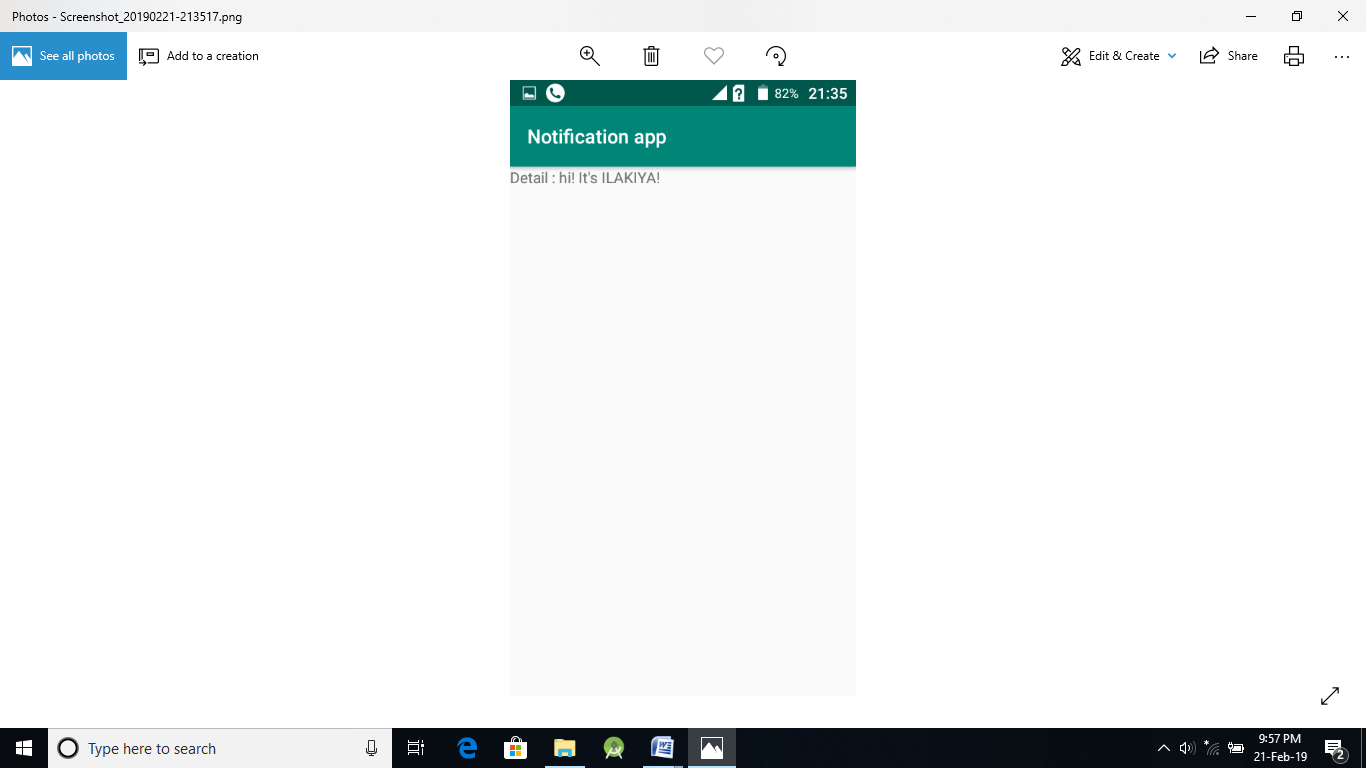
**package** com.example.notificationapp;  
  
**import** android.content.Intent;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.widget.TextView;  
**public class** NotifDetailActivity **extends** AppCompatActivity {  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_notif\_detail***);  
 TextView tv = **new** TextView(**this**);  
 setContentView(tv);  
 Intent intent = getIntent();  
 String data =  
 intent.getExtras().getString(MainActivity.***NOTIFICATION\_DATA***);  
 tv.setText(data); } }

**AndroidManifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.notificationapp"**>  
  
 <**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/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
  
 </**activity**>  
 <**activity android:name=".NotifDetailActivity"**></**activity**>  
  
 </**application**>  
  
</**manifest**>

**OUTPUT:**





**RESULT:**

**EX.NO: ALARM CLOCK**

**DATE:**

**AIM:**

**PROGRAM:**

**AndroidManifest.xml**

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

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

**package="com.example.clock"**>

<**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/AppTheme"**>

<**activity android:name=".MainActivity"**>

<**intent-filter**>

<**action android:name="android.intent.action.MAIN"**/>

<**category android:name="android.intent.category.LAUNCHER"**/>

</**intent-filter**>

</**activity**>

<**receiver android:name=".AlarmReceiver"**/>

<**service android:name=".RingtonePlayingService"**

**android:enabled="true"**>

</**service**>

</**application**>

</**manifest**>

**AlarmReciever.java**

**package** com.example.clock;

**import** android.content.BroadcastReceiver;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.util.Log;

**public class** AlarmReceiver **extends** BroadcastReceiver {

@Override

**public void** onReceive(Context context, Intent intent) {

String state = intent.getExtras().getString(**"extra"**);

Log.*e*(**"MyActivity"**, **"In the receiver with "**+ state);

Intent serviceIntent = **new** Intent(context,RingtonePlayingService.**class**);

serviceIntent.putExtra(**"extra"**, state);

context.startService(serviceIntent);

}

}

**MainActivity.java**

**package** com.example.clock;

**import** android.annotation.TargetApi;

**import** android.app.AlarmManager;

**import** android.app.PendingIntent;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.os.Build;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.util.Log;

**import** android.view.Menu;

**import** android.view.MenuItem;

**import** android.view.View;

**import** android.widget.Button;

**import** android.widget.TextView;

**import** android.widget.TimePicker;

**import** java.util.Calendar;

**import** java.util.Random;

**public class** MainActivity **extends** AppCompatActivity {

AlarmManager **alarmManager**;

**private** PendingIntent **pending\_intent**;

**private** TimePicker **alarmTimePicker**;

**private** TextView **alarmTextView**;

**private** AlarmReceiver **alarm**;

MainActivity **inst**;

Context **context**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**this**.**context** = **this**;

*//alarm = new AlarmReceiver();*

**alarmTextView** = (TextView) findViewById(R.id.***alarmText***);

**final** Intent myIntent = **new** Intent(**this**.**context**, AlarmReceiver.**class**);

*// Get the alarm manager service*

**alarmManager** = (AlarmManager) getSystemService(***ALARM\_SERVICE***);

*// set the alarm to the time that you picked*

**final** Calendar calendar = Calendar.*getInstance*();

**alarmTimePicker** = (TimePicker) findViewById(R.id.***alarmTimePicker***);

Button start\_alarm= (Button) findViewById(R.id.***start\_alarm***);

start\_alarm.setOnClickListener(**new** View.OnClickListener() {

@TargetApi(Build.VERSION\_CODES.***M***)

@Override

**public void** onClick(View v) {

calendar.add(Calendar.***SECOND***, 3);

*//setAlarmText("You clicked a button");*

**final int** hour = **alarmTimePicker**.getCurrentHour();

**final int** minute = **alarmTimePicker**.getCurrentMinute();;

Log.*e*(**"MyActivity"**, **"In the receiver with "**+ hour + **" and "**+ minute);

setAlarmText(**"You clicked a "**+ hour + **" and "**+ minute);

calendar.set(Calendar.***HOUR\_OF\_DAY***, **alarmTimePicker**.getCurrentHour());

calendar.set(Calendar.***MINUTE***, **alarmTimePicker**.getCurrentMinute());

myIntent.putExtra(**"extra"**, **"yes"**);

**pending\_intent** = PendingIntent.*getBroadcast*(MainActivity.**this**, 0, myIntent, PendingIntent.***FLAG\_UPDATE\_CURRENT***);

**alarmManager**.set(AlarmManager.***RTC\_WAKEUP***, calendar.getTimeInMillis(), **pending\_intent**);

*// now you should change the set Alarm text so it says something nice*

setAlarmText(**"Alarm set to "**+ hour + **":"**+ minute);

*//Toast.makeText(getApplicationContext(), "You set the alarm", Toast.LENGTH\_SHORT).show();*

}

});

Button stop\_alarm= (Button) findViewById(R.id.***stop\_alarm***);

stop\_alarm.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View v) {

**int** min = 1;

**int** max = 9;

Random r = **new** Random();

**int** random\_number = r.nextInt(max - min + 1) + min;

Log.*e*(**"random number is "**, String.*valueOf*(random\_number));

myIntent.putExtra(**"extra"**, **"no"**);

sendBroadcast(myIntent);

**alarmManager**.cancel(**pending\_intent**);

setAlarmText(**"Alarm canceled"**);

*//setAlarmText("You clicked a " + " canceled");*

}

});

}

**public void** setAlarmText(String alarmText) {

**alarmTextView**.setText(alarmText);

}

@Override

**public void** onStart() {

**super**.onStart();

**inst** = **this**;

}

@Override

**public void** onDestroy() {

**super**.onDestroy();

Log.*e*(**"MyActivity"**, **"on Destroy"**);

}

}

**RingtonePlayingService.java**

**package** com.example.clock;

**import** android.app.Notification;

**import** android.app.NotificationManager;

**import** android.app.PendingIntent;

**import** android.app.Service;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.media.MediaPlayer;

**import** android.os.Build;

**import** android.os.IBinder;

**import** android.support.annotation.Nullable;

**import** android.support.annotation.RequiresApi;

**import** android.util.Log;

**import** java.util.Random;

**public class** RingtonePlayingService **extends** Service {

**private boolean isRunning**;

**private** Context **context**;

MediaPlayer **mMediaPlayer**;

**private int startId**;

@Nullable

@Override

**public** IBinder onBind(Intent intent) {

Log.*e*(**"MyActivity"**, **"In the Richard service"**);

**return null**;

}

@RequiresApi(api = Build.VERSION\_CODES.***JELLY\_BEAN***)

@Override

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

{

**final** NotificationManager mNM = (NotificationManager)

getSystemService(***NOTIFICATION\_SERVICE***);

Intent intent1 = **new** Intent(**this**.getApplicationContext(), MainActivity.**class**);

PendingIntent pIntent = PendingIntent.*getActivity*(**this**, 0, intent1, 0);

Notification mNotify = **new** Notification.Builder(**this**)

.setContentTitle(**"Richard Dawkins is talking"**+ **"!"**)

.setContentText(**"Click me!"**)

.setSmallIcon(R.drawable.***ic\_action\_call***)

.setContentIntent(pIntent)

.setAutoCancel(**true**)

.build();

String state = intent.getExtras().getString(**"extra"**);

Log.*e*(**"what is going on here "**, state);

**assert** state != **null**;

**switch** (state) {

**case "no"**:

startId = 0;

**break**;

**case "yes"**:

startId = 1;

**break**;

**default**:

startId = 0;

**break**;

}

**if**(!**this**.**isRunning** && startId == 1) {

Log.*e*(**"if there was not sound "**, **" and you want start"**);

**int** min = 1;

**int** max = 9;

Random r = **new** Random();

**int** random\_number = r.nextInt(max - min + 1) + min;

Log.*e*(**"random number is "**, String.*valueOf*(random\_number));

mNM.notify(0, mNotify);

**this**.**isRunning** = **true**;

**this**.**startId** = 0;

}

**else if** (!**this**.**isRunning** && startId == 0){

Log.*e*(**"if there was not sound "**, **" and you want end"**);

**this**.**isRunning** = **false**;

**this**.**startId** = 0;

}

**else if** (**this**.**isRunning** && startId == 1){

Log.*e*(**"if there is sound "**, **" and you want start"**);

**this**.**isRunning** = **true**;

**this**.**startId** = 0;

}

**else** {

Log.*e*(**"if there is sound "**, **" and you want end"**);

**mMediaPlayer**.stop();

**mMediaPlayer**.reset();

**this**.**isRunning** = **false**;

**this**.**startId** = 0;

}

Log.*e*(**"MyActivity"**, **"In the service"**);

**return *START\_NOT\_STICKY***;

}

@Override

**public void** onDestroy() {

Log.*e*(**"JSLog"**, **"on destroy called"**);

**super**.onDestroy();

**this**.**isRunning** = **false**;

}

}

**activity\_main.xml**

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

<**android.support.constraint.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="com.example.clock.MainActivity"**

**tools:layout\_editor\_absoluteY="81dp"**

**tools:layout\_editor\_absoluteX="0dp"**>

<**TimePicker**

**android:id="@+id/alarmTimePicker"**

**android:layout\_width="350dp"**

**android:layout\_height="372dp"**

**app:layout\_constraintTop\_toTopOf="parent"**

**android:layout\_marginTop="8dp"**

**android:layout\_marginLeft="8dp"**

**app:layout\_constraintLeft\_toLeftOf="parent"**

**android:layout\_marginRight="8dp"**

**app:layout\_constraintRight\_toRightOf="parent"**

**app:layout\_constraintHorizontal\_bias="0.518"**/>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="Set alarm"**

**android:id="@+id/start\_alarm"**

**android:layout\_alignParentLeft="true"**

**android:layout\_alignParentStart="true"**

**android:onClick="startTimer"**

**android:layout\_marginTop="8dp"**

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

**android:layout\_marginLeft="63dp"**

**app:layout\_constraintLeft\_toLeftOf="parent"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**android:layout\_marginBottom="8dp"**

**tools:ignore="OnClick"**/>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="Unset alarm"**

**android:id="@+id/stop\_alarm"**

**android:layout\_alignParentRight="true"**

**android:layout\_alignParentEnd="true"**

**android:onClick="cancelTimer"**

**android:layout\_marginTop="8dp"**

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

**android:layout\_marginRight="8dp"**

**app:layout\_constraintRight\_toRightOf="parent"**

**app:layout\_constraintLeft\_toRightOf="@+id/start\_alarm"**

**android:layout\_marginLeft="8dp"**

**app:layout\_constraintHorizontal\_bias="0.705"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**android:layout\_marginBottom="8dp"**

**tools:ignore="OnClick"**/>

<**TextView**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:textAppearance="?android:attr/textAppearanceLarge"**

**android:text="Set the alarm clock!"**

**android:id="@+id/alarmText"**

**android:layout\_alignParentBottom="true"**

**android:layout\_centerHorizontal="true"**

**android:layout\_below="@+id/start\_alarm"**

**android:layout\_marginTop="8dp"**

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

**android:layout\_marginRight="8dp"**

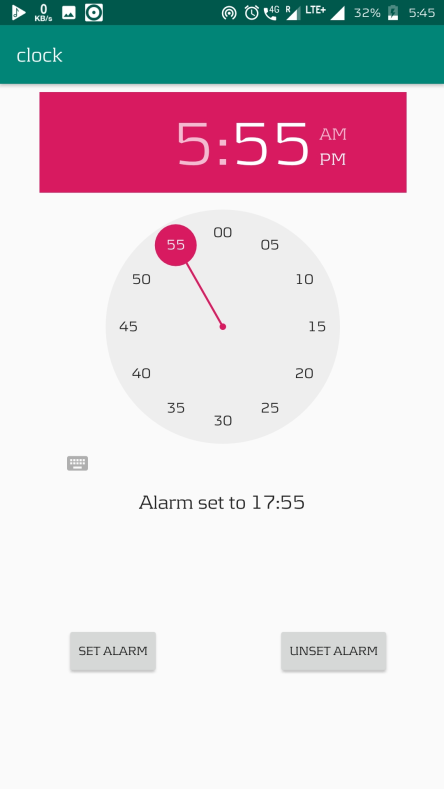
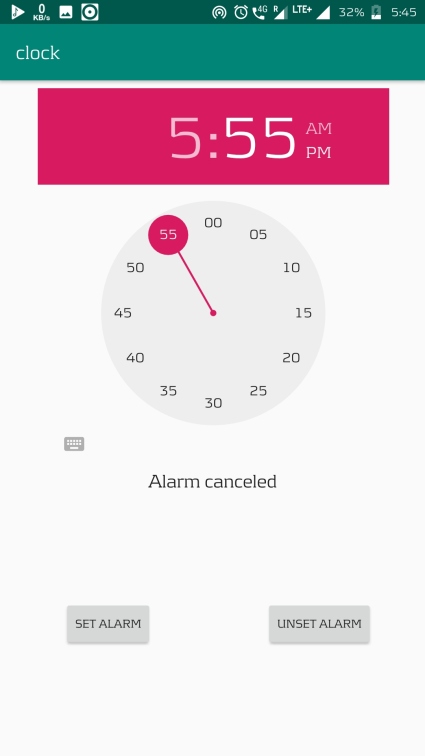
**app:layout\_constraintRight\_toRightOf="parent"**

**android:layout\_marginLeft="8dp"**

**app:layout\_constraintLeft\_toLeftOf="parent"**/>

</**android.support.constraint.ConstraintLayout**>

**OUTPUT**:



**RESULT:**

**EX.N0: TORCH LIGHT**

**DATE:**

**AIM:**

**PROGRAM:**

**AndroidManifest.xml**

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

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

**package="com.example.torchlight"**

**android:versionCode="1"**

**android:versionName="1.0"** >

<**uses-sdk**

**android:minSdkVersion="14"**

**android:targetSdkVersion="19"** />

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

<**uses-feature android:name="android.hardware.camera"** />

<**application**

**android:allowBackup="true"**

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

**android:theme="@style/AppTheme"** >

<**activity**

**android:name=".MainActivity"**

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

<**intent-filter**>

<**action android:name="android.intent.action.MAIN"** />

<**category android:name="android.intent.category.LAUNCHER"** />

</**intent-filter**>

</**activity**>

</**application**>

</**manifest**>

**MainActivity.java**

**package** com.example.torchlight;

**import** android.app.Activity;

**import** android.app.AlertDialog;

**import** android.content.DialogInterface;

**import** android.content.DialogInterface.OnClickListener;

**import** android.content.pm.PackageManager;

**import** android.hardware.Camera;

**import** android.hardware.Camera.Parameters;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.ImageButton;

**public class** MainActivity **extends** Activity {

**private** Camera **camera**;

**private** Camera.Parameters **parameters**;

**private** ImageButton **flashLightButton**;

**boolean isFlashLightOn** = **false**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**flashLightButton** = (ImageButton) findViewById(R.id.***flashlight\_button***);

**flashLightButton**.setOnClickListener(**new** FlashOnOffListener());

**if** (isFlashSupported()) {

**camera** = Camera.*open*();

**parameters** = **camera**.getParameters();

} **else** {

showNoFlashAlert();

}

}

**private class** FlashOnOffListener **implements** View.OnClickListener {

@Override

**public void** onClick(View v) {

**if** (**isFlashLightOn**) {

**flashLightButton**.setImageResource(R.drawable.off);

parameters.setFlashMode(Parameters.FLASH\_MODE\_OFF);

camera.setParameters(parameters);

camera.stopPreview();

isFlashLightOn = **false**;

} **else** {

flashLightButton.setImageResource(R.drawable.on);

parameters.setFlashMode(Parameters.FLASH\_MODE\_TORCH);

camera.setParameters(parameters);

camera.startPreview();

isFlashLightOn = **true**;

}

}

}

**private void** showNoFlashAlert() {

**new** AlertDialog.Builder(**this**)

.setMessage(**"Your device hardware does not support flashlight!"**)

.setIcon(android.R.drawable.ic\_dialog\_alert).setTitle(**"Error"**)

.setPositiveButton(**"Ok"**, **new** OnClickListener() {

@Override

**public void** onClick(DialogInterface dialog, **int** which) {

dialog.dismiss();

finish();

}

}).show();

}

**private boolean** isFlashSupported() {

PackageManager pm = getPackageManager();

**return** pm.hasSystemFeature(PackageManager.FEATURE\_CAMERA\_FLASH);

}

@Override

**protected void** onDestroy() {

**if** (camera != **null**) {

camera.stopPreview();

camera.release();

camera = **null**;

}

**super**.onDestroy();

}

}

**activity\_main.xml**

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

**xmlns:tools="http://schemas.android.com/tools"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context="com.example.torchlight.MainActivity"** >

<**ImageButton**

**android:id="@+id/flashlight\_button"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:background="@null"**

**android:contentDescription="@null"**

**android:cropToPadding="true"**

**android:src="@drawable/off"** />

<**TextView**

**android:id="@+id/info"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignParentBottom="true"**

**android:layout\_centerHorizontal="true"**

**android:layout\_marginBottom="20dp"**

**android:textColor="@android:color/holo\_blue\_dark"** />

</**RelativeLayout**>

**OUTPUT:**

****

**RESULT:**

**EXNO:  
DATE: RSS FEED APP**

**AIM:**

**PROGRAM:**

**AndroidManifest.xml**

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

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

package="com.example.rssfeedapp">

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

<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/AppTheme">

<activity android:name=".MainActivity">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

</application>

</manifest>

**MainActivity.java**

package com.example.rssfeedapp;

import android.app.ListActivity;

import android.content.Intent;

import android.net.Uri;

import android.os.AsyncTask;

import android.os.Bundle;

import android.view.View;

import android.widget.ArrayAdapter;

import android.widget.ListView;

import org.xmlpull.v1.XmlPullParser;

import org.xmlpull.v1.XmlPullParserException;

import org.xmlpull.v1.XmlPullParserFactory;

import java.io.IOException;

import java.io.InputStream;

import java.net.MalformedURLException;

import java.net.URL;

import java.util.ArrayList;

import java.util.List;

public class MainActivity extends ListActivity

{

List headlines;

List links;

@Override

protected void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState);

new MyAsyncTask().execute();

}

class MyAsyncTask extends AsyncTask<Object,Void,ArrayAdapter>

{

@Override

protected ArrayAdapter doInBackground(Object[] params)

{

headlines = new ArrayList();

links = new ArrayList();

try

{

URL url = new URL("https://codingconnect.net/feed");

XmlPullParserFactory factory = XmlPullParserFactory.newInstance();

factory.setNamespaceAware(false);

XmlPullParser xpp = factory.newPullParser();

// We will get the XML from an input stream

xpp.setInput(getInputStream(url), "UTF\_8");

boolean insideItem = false;

// Returns the type of current event: START\_TAG, END\_TAG, etc..

int eventType = xpp.getEventType();

while (eventType != XmlPullParser.END\_DOCUMENT)

{

if (eventType == XmlPullParser.START\_TAG)

{

if (xpp.getName().equalsIgnoreCase("item"))

{

insideItem = true;

}

else if (xpp.getName().equalsIgnoreCase("title"))

{

if (insideItem)

headlines.add(xpp.nextText()); //extract the headline

}

else if (xpp.getName().equalsIgnoreCase("link"))

{

if (insideItem)

links.add(xpp.nextText()); //extract the link of article

}

}

else if(eventType==XmlPullParser.END\_TAG && xpp.getName().equalsIgnoreCase("item"))

{

insideItem=false;

}

eventType = xpp.next(); //move to next element

}

}

catch (MalformedURLException e)

{

e.printStackTrace();

}

catch (XmlPullParserException e)

{

e.printStackTrace();

}

catch (IOException e)

{

e.printStackTrace();

}

return null;

}

protected void onPostExecute(ArrayAdapter adapter)

{

adapter = new ArrayAdapter(MainActivity.this, android.R.layout.simple\_list\_item\_1, headlines);

setListAdapter(adapter);

}

}

@Override

protected void onListItemClick(ListView l, View v, int position, long id)

{

Uri uri = Uri.parse((links.get(position)).toString());

Intent intent = new Intent(Intent.ACTION\_VIEW, uri);

startActivity(intent);

}

public InputStream getInputStream(URL url)

{

try

{

return url.openConnection().getInputStream();

}

catch (IOException e)

{

return null;

}

}

}

**activity\_main.xml**

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

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

android:layout\_width="fill\_parent"

android:layout\_height="fill\_parent"

android:orientation="vertical">

<ListView

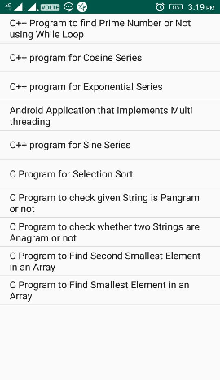
android:id="@+id/listView"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content" />

</LinearLayout

**OUTPUT:**



**RESULT:**

**EX.NO: SPIN BOTTLE**

**DATE:**

**AndroidManifest.xml**

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

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

**package="com.example.myapplication"**>

<**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/AppTheme"**>

<**activity android:name=".MainActivity"**>

<**intent-filter**>

<**action android:name="android.intent.action.MAIN"**/>

<**category android:name="android.intent.category.LAUNCHER"**/>

</**intent-filter**>

</**activity**>

</**application**>

</**manifest**>

**MainActivity.java**

**package** com.example.myapplication;

**import** android.app.Activity;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.view.animation.AccelerateDecelerateInterpolator;

**import** android.view.animation.RotateAnimation;

**import** android.widget.Button;

**import** android.widget.ImageView;

**import** java.util.Random;

**public class** MainActivity **extends** Activity {

ImageView **iv\_bottle**;

Button **b\_go**;

Random **r**;

**int angle**;

**boolean restart** = **false**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**iv\_bottle** = (ImageView) findViewById(R.id.***imageButton***);

**b\_go** = (Button) findViewById(R.id.***button***);

**r** = **new** Random();

**b\_go**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**if**(**restart**) {

**angle** = **angle** % 360;

RotateAnimation rotate = **new** RotateAnimation(**angle**,

360,

RotateAnimation. ***RELATIVE\_TO\_SELF***, 0.5f,

RotateAnimation.***RELATIVE\_TO\_SELF***, 0.5f);

rotate.setFillAfter(**true**);

rotate.setDuration(1000);

rotate.setInterpolator(**new**

AccelerateDecelerateInterpolator());

**iv\_bottle**.startAnimation(rotate);

**b\_go**.setText(**"GO"**);

**restart** = **false**;

} **else** {

**angle** = **r**.nextInt(3600) + 360;

RotateAnimation rotate = **new** RotateAnimation(0, **angle**,

RotateAnimation. ***RELATIVE\_TO\_SELF***, 0.5f,

RotateAnimation.***RELATIVE\_TO\_SELF***, 0.5f);

rotate.setFillAfter(**true**);

rotate.setDuration(3600);

rotate.setInterpolator(**new**

AccelerateDecelerateInterpolator());

**iv\_bottle**.startAnimation(rotate);

**restart** = **true**;

**b\_go**.setText(**"RESET"**);

}

}

});

}

}

**activity\_main.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:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity"**>

<**ImageButton**

**android:layout\_width="200dp"**

**android:layout\_height="200dp"**

**android:id="@+id/imageButton"**

**android:scaleType="centerInside"**

**android:src="@drawable/green\_bottle"**

**android:layout\_centerVertical="true"**

**android:layout\_centerHorizontal="true"**/>

<**Button**

**android:id="@+id/button"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_centerHorizontal="true"**

**android:layout\_alignParentBottom="true"**

**android:text="GO"**/>

</**RelativeLayout**>

**OUTPUT:**



**RESULT:**

**EX.NO: CALENDER APP**

**DATE:**

**AIM:**

**PROGRAM:**

**Activity\_main.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**android.support.constraint.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"**>  
 <**TextView  
 android:id="@+id/myDate"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="105dp"  
 android:layout\_marginTop="48dp"  
 android:text="Mark Your Date"  
 android:textAlignment="center"  
 android:textColor="#000000"  
 android:textSize="23sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.147"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.026"** />  
 <**CalendarView  
 android:id="@+id/calendarView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="320dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.262"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.306"**></**CalendarView**>  
 <**Button  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="120dp"  
 android:layout\_marginTop="34dp"  
 android:background="#000000"  
 android:paddingLeft="20dp"  
 android:paddingRight="20dp"  
 android:text="save My date"  
 android:textColor="#FFF"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.105"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.847"** />  
</**android.support.constraint.ConstraintLayout**>

**MainActivity.java:**

**package** com.example.calenderapp;  
**import** android.os.ConditionVariable;  
**import** android.support.annotation.NonNull;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.widget.CalendarView;  
**import** android.widget.TextView;  
**public class** MainActivity **extends** AppCompatActivity {  
 CalendarView **calendarView**;  
 TextView **myDate**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **calendarView** = (CalendarView) findViewById(R.id.***calendarView***);  
 **myDate** = (TextView) findViewById(R.id.***myDate***);  
 **calendarView**.setOnDateChangeListener(**new** CalendarView.OnDateChangeListener() {  
 @Override

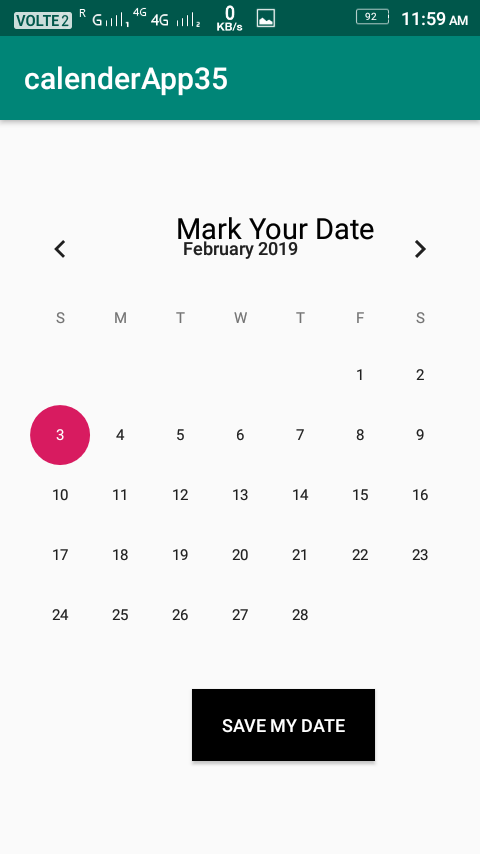
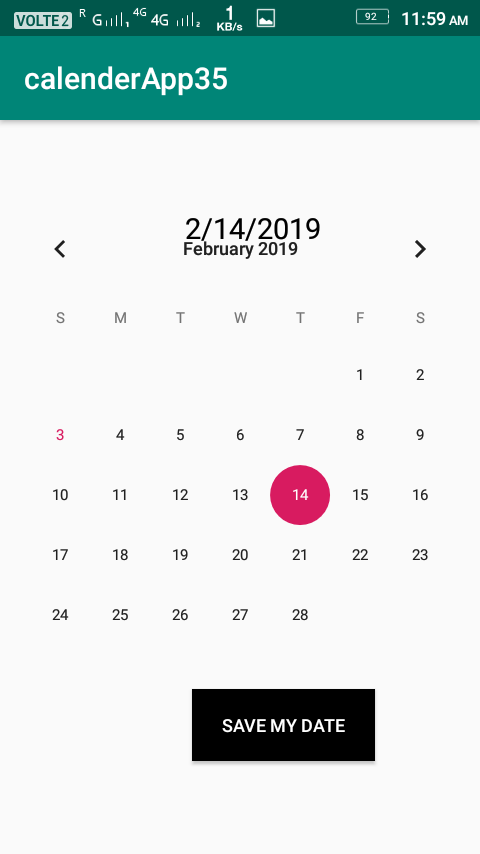
**public void** onSelectedDayChange(@NonNull CalendarView calendarView,**int** i,**int** i1,**int**i2) {

String date = (i1 + 1) + **"/"** +i2 + **"/"** + i;  
**myDate**.setText(date);  
 }  
});  
 }  
}

**AndroidManifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.calenderapp"**>  
 <**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/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 </**application**>  
  
</**manifest**>

**OUTPUT:**

** **

**RESULT:**

**EX.NO: DATA FETCH APP**

**DATE:**

**AIM:**

**PROGRAM:**

**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:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Click Me!"  
 android:gravity="center"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginBottom="10dp"  
 android:id="@+id/button"**/>  
 <**ScrollView  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_below="@id/button"**>  
 <**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:padding="5dp"  
 android:textSize="24sp"  
 android:id="@+id/fetcheddata"  
 android:gravity="center"  
 android:hint="Fetched Text Here!!!"**/>  
 </**ScrollView**>  
</**RelativeLayout**>

**MainActivity.java:**

**package** com.example.datafetchapp;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**public class** MainActivity **extends** AppCompatActivity {  
 Button **click**;  
 **public static** TextView *data*;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **click** = (Button) findViewById(R.id.***button***);  
 *data* = (TextView) findViewById(R.id.***fetcheddata***);  
 **click**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 FetchData process = **new** FetchData();  
 process.execute();  
 }  
 });  
 }  
}

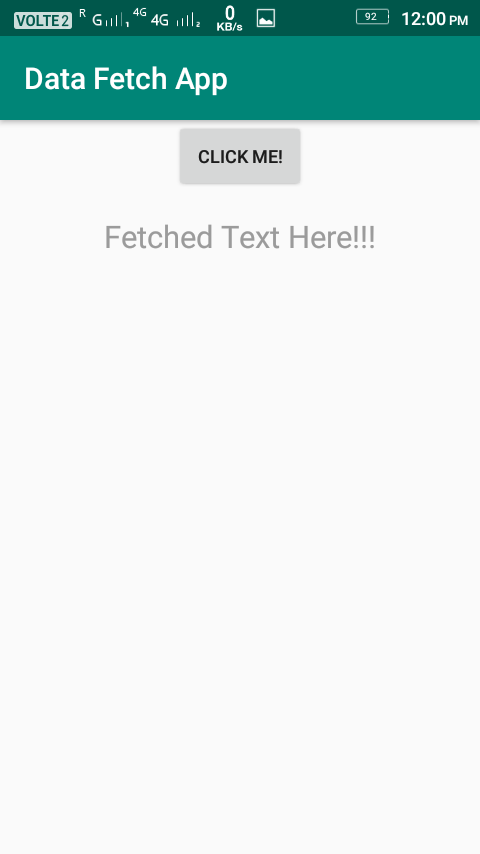
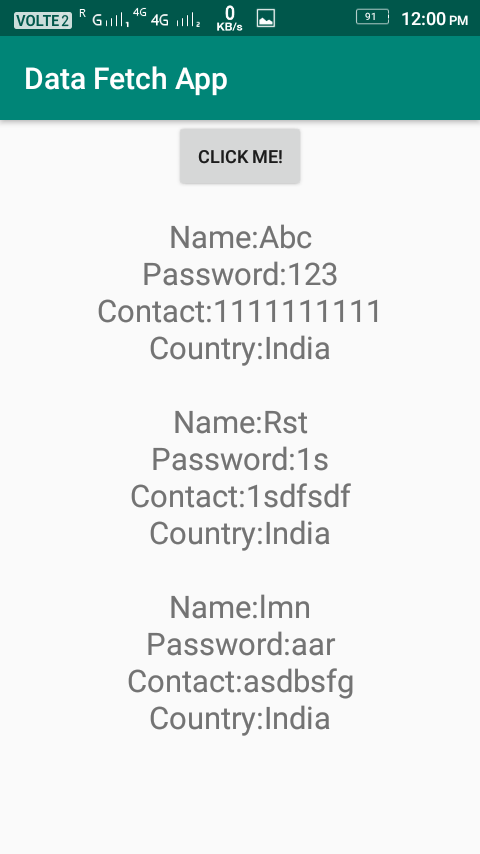
**FetchData.java:**

**package** com.example.datafetchapp;  
  
**import** android.os.AsyncTask;  
  
**import** org.json.JSONArray;  
**import** org.json.JSONException;  
**import** org.json.JSONObject;  
**import** java.io.BufferedReader;  
**import** java.io.IOException;  
**import** java.io.InputStream;  
**import** java.io.InputStreamReader;  
**import** java.net.HttpURLConnection;  
**import** java.net.MalformedURLException;  
**import** java.net.URL;  
**public class** FetchData **extends** AsyncTask<Void,Void,Void> {  
 String **data** =**""**;  
 String **dataParsed** = **""**;  
 String **singleParsed** =**""**;  
 @Override  
 **protected** Void doInBackground(Void... voids) {  
 **try** {  
 URL url = **new** URL(**"https://api.myjson.com/bins/12eu63"**);  
 HttpURLConnection httpURLConnection = (HttpURLConnection)  
 url.openConnection();  
 InputStream inputStream =  
 httpURLConnection.getInputStream();  
 BufferedReader bufferedReader = **new** BufferedReader(**new** InputStreamReader(inputStream));  
 String line = **""**;  
 **while**(line != **null**){  
 line = bufferedReader.readLine();  
 **data** = **data** + line;  
 }  
 JSONArray JA = **new** JSONArray(**data**);  
 **for**(**int** i =0 ;i <JA.length(); i++){  
 JSONObject JO = (JSONObject) JA.get(i);  
 **singleParsed** = **"Name:"** + JO.get(**"name"**) + **"\n"**+  
 **"Password:"** + JO.get(**"password"**) + **"\n"**+  
 **"Contact:"** + JO.get(**"contact"**) + **"\n"**+  
 **"Country:"** + JO.get(**"country"**) + **"\n"**;  
 **dataParsed** = **dataParsed** + **singleParsed** +**"\n"** ;  
 }  
 } **catch** (MalformedURLException e) {  
 e.printStackTrace();  
 } **catch** (IOException e) {  
 e.printStackTrace();  
 } **catch** (JSONException e) {  
 e.printStackTrace();  
 }  
 **return null**;  
 }  
 @Override  
 **protected void** onPostExecute(Void aVoid) {  
 **super**.onPostExecute(aVoid);  
 MainActivity.*data*.setText(**this**.**dataParsed**);  
 }  
}

**AndroidManifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.datafetchapp"**>  
 <**uses-permission android:name="android.permission.INTERNET"**/>  
 <**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/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 </**application**>  
  
</**manifest**>

**OUTPUT:**

** **

**RESULT:**

**EX.NO: TV CHANNEL APP**

**DATE:**

**AIM:**

**PROGRAM:**

**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:id="@+id/bn"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:paddingBottom="16dp"  
 android:paddingLeft="16dp"  
 android:paddingRight="16dp"  
 android:paddingTop="16dp"  
 tools:context=".MainActivity"**>  
 <**com.google.android.youtube.player.YouTubePlayerView  
 android:id="@+id/yotube\_player\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"** />  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/yotube\_player\_view"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="141dp"  
 android:text="play video"** />  
</**RelativeLayout**>

**MainActivity.java:**

**package** com.example.tvchannelapp;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** com.google.android.youtube.player.YouTubeBaseActivity;  
**import** com.google.android.youtube.player.YouTubeInitializationResult;  
**import** com.google.android.youtube.player.YouTubePlayer;  
**import** com.google.android.youtube.player.YouTubePlayerView;  
**public class** MainActivity **extends** YouTubeBaseActivity {  
 YouTubePlayerView **youTubePlayerView**;  
 Button **button**;  
 YouTubePlayer.OnInitializedListener **onInitializedListener**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **button** = (Button)findViewById(R.id.***button***);  
 **youTubePlayerView** =  
 (YouTubePlayerView)findViewById(R.id.***yotube\_player\_view***);  
 **onInitializedListener** = **new** YouTubePlayer.OnInitializedListener() {  
 @Override  
 **public void** onInitializationSuccess(YouTubePlayer.Provider provider,  
 YouTubePlayer youTubePlayer, **boolean** b) {  
 youTubePlayer.loadVideo(**"AVYE2OKB1uA"**);  
 }  
 @Override  
 **public void** onInitializationFailure(YouTubePlayer.Provider provider,  
 YouTubeInitializationResult youTubeInitializationResult) {  
 }  
 };  
 **button**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 **youTubePlayerView**.initialize(playerconfig.***API\_KEY***,**onInitializedListener**);  
 }  
 });  
 }  
}

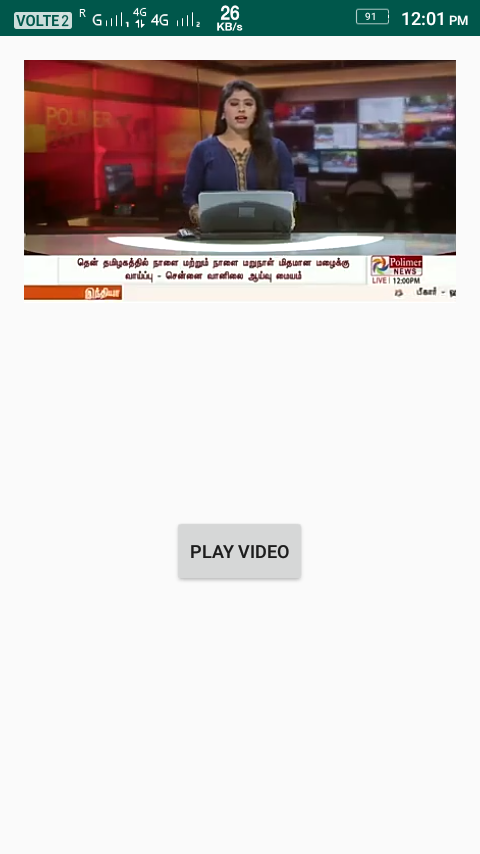
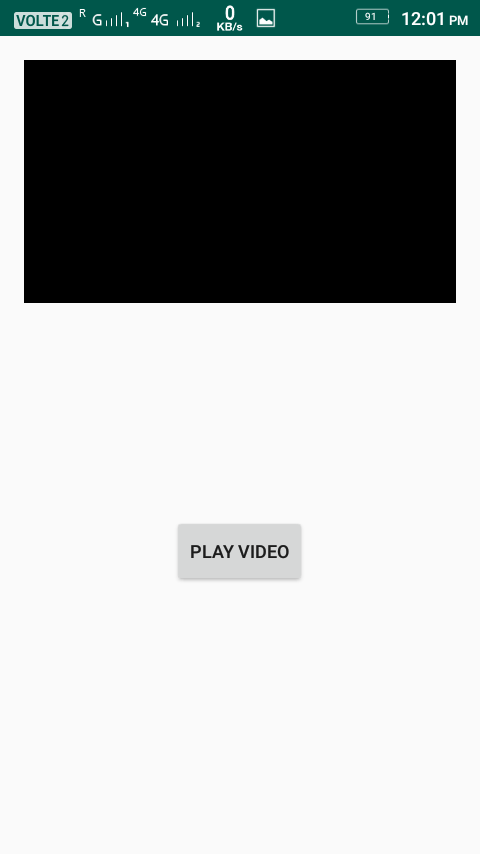
**playerconfig.java:**

**package** com.example.tvchannelapp;  
**public class** playerconfig {  
 playerconfig()  
 {  
 }  
 **public static final** String  
 ***API\_KEY***=**"AIzaSyCBMfw7l2n0uyXRPjmp\_TpeDsGGpyFdwUs"**;  
}

**AndroidManifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.tvchannelapp"**>  
 <**uses-permission android:name="android.permission.INTERNET"**/>  
 <**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/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 </**application**>  
</**manifest**>

**OUTPUT:**

****

**RESULT:**

**EX.NO: GOOGLE SHEET APP**

**DATE:**

**AIM:**

**PROGRAM:**

**Activity\_main.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity"**>  
 <**ListView  
 android:layout\_below="@+id/btnDownload"  
 android:id="@+id/listview"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"** />  
 <**Button  
 android:id="@+id/btnDownload" android:enabled="false"  
 android:onClick="buttonClickHandler"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="download table"** />  
</**RelativeLayout**>

**Team.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
 <**TextView  
 android:id="@+id/position"  
 android:text="1"  
 android:layout\_width="0dp"  
 android:layout\_weight=".10"  
 android:layout\_height="wrap\_content"** />  
 <**TextView  
 android:id="@+id/name"  
 android:text="Preston North End"  
 android:layout\_width="0dp"  
 android:layout\_weight=".50"  
 android:layout\_height="wrap\_content"** />  
 <**TextView  
 android:id="@+id/wins"  
 android:text="18"  
 android:layout\_width="0dp"  
 android:layout\_weight=".10"  
 android:layout\_height="wrap\_content"** />  
 <**TextView  
 android:id="@+id/draws"  
 android:text="4"  
 android:layout\_width="0dp"  
 android:layout\_weight=".10"  
 android:layout\_height="wrap\_content"** />  
 <**TextView  
 android:id="@+id/losses"  
 android:text="0"  
 android:layout\_width="0dp"  
 android:layout\_weight=".10"  
 android:layout\_height="wrap\_content"** />  
 <**TextView  
 android:id="@+id/points"  
 android:text="40"  
 android:layout\_width="0dp"  
 android:layout\_weight=".10"  
 android:layout\_height="wrap\_content"** />  
</**LinearLayout**>

**MainActivity.java:**

**package** com.example.googlesheet;  
  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.net.ConnectivityManager;  
**import** android.net.NetworkInfo;  
**import** android.os.AsyncTask;  
  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.Menu;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.ListView;  
**import** android.widget.TextView;  
  
**import** org.json.JSONArray;  
**import** org.json.JSONException;  
**import** org.json.JSONObject;  
  
**import** java.io.BufferedReader;  
**import** java.io.IOException;  
**import** java.io.InputStream;  
**import** java.io.InputStreamReader;  
**import** java.io.Reader;  
**import** java.io.UnsupportedEncodingException;  
**import** java.net.HttpURLConnection;  
**import** java.net.URL;  
**import** java.util.ArrayList;  
**import** java.util.List;  
  
**public class** MainActivity **extends** Activity {  
 **private static final** String ***DEBUG\_TAG*** = **"HttpExample"**;  
 ArrayList<Team> **teams** = **new** ArrayList<Team>();  
 ListView **listview**;  
 Button **btnDownload**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **listview** = (ListView) findViewById(R.id.***listview***);  
 **btnDownload** = (Button) findViewById(R.id.***btnDownload***);  
 ConnectivityManager connMgr = (ConnectivityManager) getSystemService(Context.***CONNECTIVITY\_SERVICE***);  
 NetworkInfo networkInfo = connMgr.getActiveNetworkInfo();  
 **if** (networkInfo != **null** && networkInfo.isConnected()) {  
 **btnDownload**.setEnabled(**true**);  
 } **else** {  
 **btnDownload**.setEnabled(**false**);  
 }  
 }  
  
 **public void** buttonClickHandler(View view) {  
 **new** DownloadWebpageTask(**new** AsyncResult() {  
 @Override  
 **public void** onResult(JSONObject object) {  
 processJson(object);  
 }  
 }).execute(**"https://spreadsheets.google.com/tq?key=1yyTcjWA6RAUwkI7sKOevWXAJfpITs\_\_Zb0TwilihDCw"**);  
  
 }  
  
 **private void** processJson(JSONObject object) {  
  
 **try** {  
 JSONArray rows = object.getJSONArray(**"rows"**);  
  
 **for** (**int** r = 0; r < rows.length(); ++r) {  
 JSONObject row = rows.getJSONObject(r);  
 JSONArray columns = row.getJSONArray(**"c"**);  
  
 **int** position = columns.getJSONObject(0).getInt(**"v"**);  
 String name = columns.getJSONObject(1).getString(**"v"**);  
 **int** wins = columns.getJSONObject(3).getInt(**"v"**);  
 **int** draws = columns.getJSONObject(4).getInt(**"v"**);  
 **int** losses = columns.getJSONObject(5).getInt(**"v"**);  
 **int** points = columns.getJSONObject(19).getInt(**"v"**);  
 Team team = **new** Team(position, name, wins, draws, losses, points);  
 **teams**.add(team);  
 }  
  
 **final** TeamsAdapter adapter = **new** TeamsAdapter(**this**, R.layout.***team***, **teams**);  
 **listview**.setAdapter(adapter);  
  
 } **catch** (JSONException e) {  
 e.printStackTrace();  
 }  
 }  
}

**Team.java:**

**package** com.example.googlesheet;  
**public class** Team {  
 **private int position**;  
 **private** String **name**;  
 **private int wins**, **draws**, **losses**;  
 **private int points**;  
  
 **public** Team(**int** position, String name, **int** wins, **int** draws, **int** losses, **int** points)  
 {  
 **this**.setPosition(position);  
 **this**.setName(name);  
 **this**.setWins(wins);  
 **this**.setDraws(draws);  
 **this**.setLosses(losses);  
 **this**.setPoints(points);  
 }  
  
 **public int** getPosition() {  
 **return position**;  
 }  
  
 **public void** setPosition(**int** position) {  
 **this**.**position** = position;  
 }  
  
 **public** String getName() {  
 **return name**;  
 }  
  
 **public void** setName(String name) {  
 **this**.**name** = name;  
 }  
  
 **public int** getWins() {  
 **return wins**;  
 }  
  
 **public void** setWins(**int** wins) {  
 **this**.**wins** = wins;  
 }  
  
 **public int** getDraws() {  
 **return draws**;  
 }  
  
 **public void** setDraws(**int** draws) {  
 **this**.**draws** = draws;  
 }  
  
 **public int** getLosses() {  
 **return losses**;  
 }  
  
 **public void** setLosses(**int** losses) {  
 **this**.**losses** = losses;  
 }  
  
 **public int** getPoints() {  
 **return points**;  
 }  
  
 **public void** setPoints(**int** points) {  
 **this**.**points** = points;  
 }  
}

**DownloadWebpageTask.java:**

**package** com.example.googlesheet;  
**import** android.os.AsyncTask;  
**import** org.json.JSONException;  
**import** org.json.JSONObject;  
  
**import** java.io.BufferedReader;  
**import** java.io.IOException;  
**import** java.io.InputStream;  
**import** java.io.InputStreamReader;  
**import** java.net.HttpURLConnection;  
**import** java.net.URL;  
  
**public class** DownloadWebpageTask **extends** AsyncTask<String, Void, String> {  
 AsyncResult **callback**;  
  
 **public** DownloadWebpageTask(AsyncResult callback) {  
 **this**.**callback** = callback;  
 }  
  
 @Override  
 **protected** String doInBackground(String... urls) {  
  
 *// params comes from the execute() call: params[0] is the url.* **try** {  
 **return** downloadUrl(urls[0]);  
 } **catch** (IOException e) {  
 **return "Unable to download the requested page."**;  
 }  
 }  
  
 *// onPostExecute displays the results of the AsyncTask.* @Override  
 **protected void** onPostExecute(String result) {  
 *// remove the unnecessary parts from the response and construct a JSON* **int** start = result.indexOf(**"{"**, result.indexOf(**"{"**) + 1);  
 **int** end = result.lastIndexOf(**"}"**);  
 String jsonResponse = result.substring(start, end);  
 **try** {  
 JSONObject table = **new** JSONObject(jsonResponse);  
 **callback**.onResult(table);  
 } **catch** (JSONException e) {  
 e.printStackTrace();  
 }  
 }  
  
 **private** String downloadUrl(String urlString) **throws** IOException {  
 InputStream is = **null**;  
  
 **try** {  
 URL url = **new** URL(urlString);  
 HttpURLConnection conn = (HttpURLConnection) url.openConnection();  
 conn.setReadTimeout(10000 */\* milliseconds \*/*);  
 conn.setConnectTimeout(15000 */\* milliseconds \*/*);  
 conn.setRequestMethod(**"GET"**);  
 conn.setDoInput(**true**);  
 *// Starts the query* conn.connect();  
 **int** responseCode = conn.getResponseCode();  
 is = conn.getInputStream();  
  
 String contentAsString = convertStreamToString(is);  
 **return** contentAsString;  
 } **finally** {  
 **if** (is != **null**) {  
 is.close();  
 }  
 }  
 }  
  
 **private** String convertStreamToString(InputStream is) {  
 BufferedReader reader = **new** BufferedReader(**new** InputStreamReader(is));  
 StringBuilder sb = **new** StringBuilder();  
  
 String line = **null**;  
 **try** {  
 **while** ((line = reader.readLine()) != **null**) {  
 sb.append(line + **"\n"**);  
 }  
 } **catch** (IOException e) {  
 e.printStackTrace();  
 } **finally** {  
 **try** {  
 is.close();  
 } **catch** (IOException e) {  
 e.printStackTrace();  
 }  
 }  
 **return** sb.toString();  
 }  
}

**TeamAdapter.java:**

**package** com.example.googlesheet;  
**import** android.content.Context;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.TextView;  
  
**import** java.util.ArrayList;  
  
*/\*\*  
 \* Created by kstanoev on 1/14/2015.  
 \*/***public class** TeamsAdapter **extends** ArrayAdapter<Team> {  
  
 Context **context**;  
 **private** ArrayList<Team> **teams**;  
  
 **public** TeamsAdapter(Context context, **int** textViewResourceId, ArrayList<Team> items) {  
 **super**(context, textViewResourceId, items);  
 **this**.**context** = context;  
 **this**.**teams** = items;  
 }  
  
 @Override  
 **public** View getView(**int** position, View convertView, ViewGroup parent) {  
 View v = convertView;  
 **if** (v == **null**) {  
 LayoutInflater vi = (LayoutInflater) **context**.getSystemService(Context.***LAYOUT\_INFLATER\_SERVICE***);  
 v = vi.inflate(R.layout.***team***, **null**);  
 }  
 Team o = **teams**.get(position);  
 **if** (o != **null**) {  
 TextView pos = (TextView) v.findViewById(R.id.***position***);  
 TextView name = (TextView) v.findViewById(R.id.***name***);  
 TextView wins = (TextView) v.findViewById(R.id.***wins***);  
 TextView draws = (TextView) v.findViewById(R.id.***draws***);  
 TextView losses = (TextView) v.findViewById(R.id.***losses***);  
 TextView points = (TextView) v.findViewById(R.id.***points***);  
  
 pos.setText(String.*valueOf*(o.getPosition()));  
 name.setText(String.*valueOf*(o.getName()));  
 wins.setText(String.*valueOf*(o.getWins()));  
 draws.setText(String.*valueOf*(o.getDraws()));  
 losses.setText(String.*valueOf*(o.getLosses()));  
 points.setText(String.*valueOf*(o.getPoints()));  
 }  
 **return** v;  
 }  
}

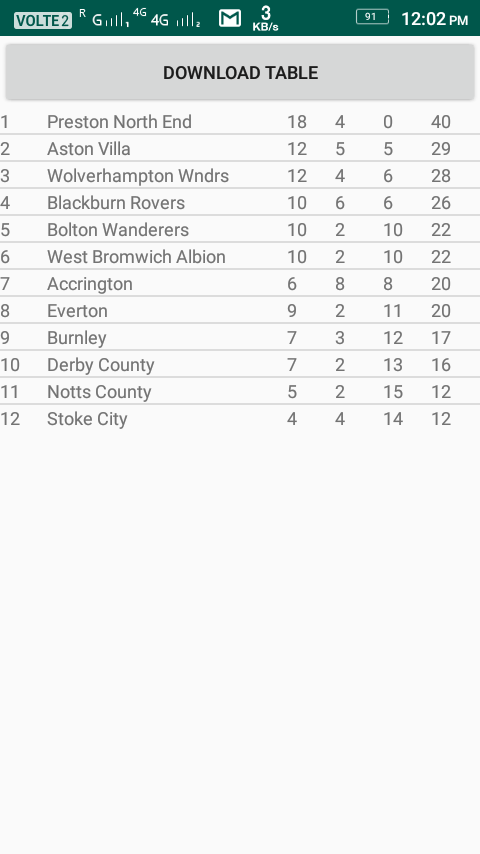
**AsyncResult.java:**

**package** com.example.googlesheet;  
**import** org.json.JSONObject;  
  
  
**interface** AsyncResult  
{  
 **void** onResult(JSONObject object);  
}

**AndroidManifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.googlesheet"**>  
 <**uses-permission android:name="android.permission.INTERNET"** />  
 <**uses-permission android:name="android.permission.ACCESS\_NETWORK\_STATE"** />  
  
 <**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/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 </**application**>  
  
</**manifest**>

**OUTPUT:**

** **

**RESULT:**

**EXPNO: SMS APP**

**DATE:**

**AIM:**

**PROGRAM:**

**Activity\_main.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"** >  
 <**EditText  
 android:id="@+id/editText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:inputType="phone"  
 android:ems="10"  
 android:hint="number"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"**/>  
 <**EditText  
 android:id="@+id/editText2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="200dp"  
 android:inputType="textPersonName"  
 android:ems="10"  
 android:hint="text"  
 android:layout\_below="@id/editText"  
 android:layout\_centerHorizontal="true"  
 android:gravity="left"** />  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/editText2"  
 android:layout\_centerHorizontal="true"  
 android:text="Send"** />  
</**LinearLayout**>

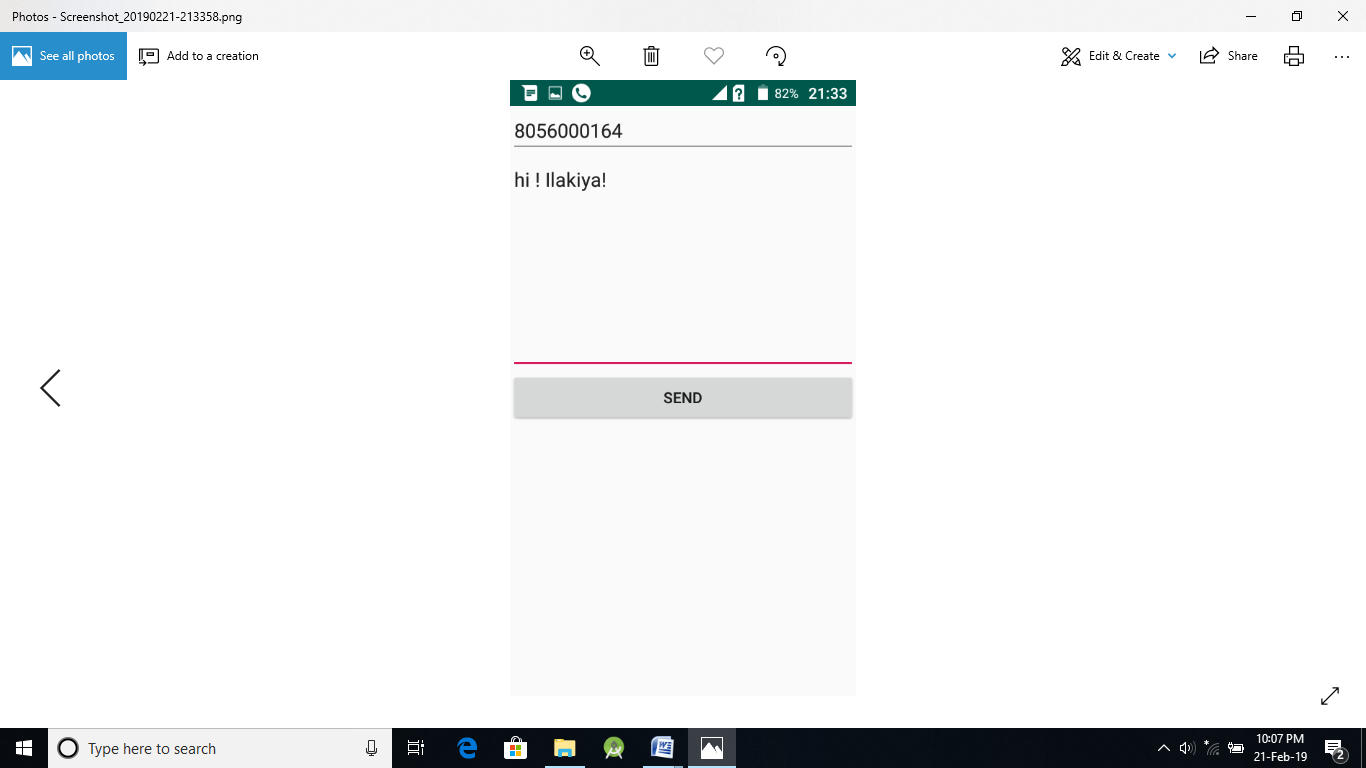
**MainActivity.java:**

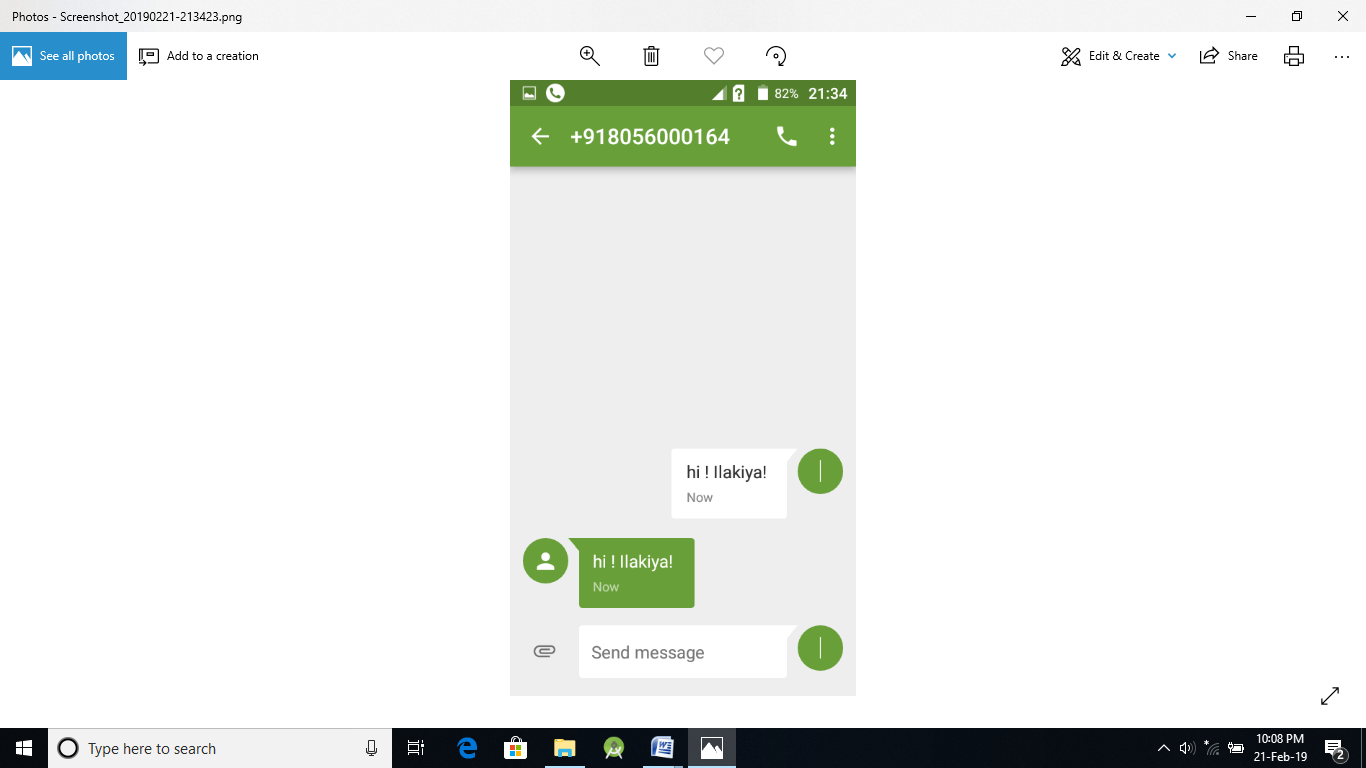
**package** com.example.smsapp;  
  
**import** android.Manifest;  
**import** android.app.Activity;  
**import** android.content.pm.PackageManager;  
**import** android.provider.Telephony;  
**import** android.support.annotation.NonNull;  
**import** android.support.v4.app.ActivityCompat;  
**import** android.support.v4.content.ContextCompat;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.telephony.SmsManager;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
**public class** MainActivity **extends** Activity {  
 EditText **editText**;  
 EditText **editText2**;  
 Button **button**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **if**(ContextCompat.*checkSelfPermission*(MainActivity.**this**,  
 Manifest.permission.***SEND\_SMS***) !=  
 PackageManager.***PERMISSION\_GRANTED***) {  
 **if** (ActivityCompat.*shouldShowRequestPermissionRationale*(MainActivity.**this**,  
 Manifest.permission.***SEND\_SMS***)) {  
 ActivityCompat.*requestPermissions*(MainActivity.**this**,  
 **new** String[]{Manifest.permission.***SEND\_SMS***}, 1);  
 } **else** {  
 ActivityCompat.*requestPermissions*(MainActivity.**this**,  
 **new** String[]{Manifest.permission.***SEND\_SMS***}, 1);  
 }  
 } **else** {  
*//do nothing* }  
 **button** = (Button) findViewById(R.id.***button***);  
 **editText** = (EditText) findViewById(R.id.***editText***);  
 **editText2** = (EditText) findViewById(R.id.***editText2***);  
 **button**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String number = **editText**.getText().toString();  
 String sms = **editText2**.getText().toString();  
 **try** {  
 SmsManager smsManager = SmsManager.*getDefault*();  
 smsManager.sendTextMessage(number, **null**, sms, **null**,  
 **null**);  
 Toast.*makeText*(MainActivity.**this**, **"Sent"**,  
 Toast.***LENGTH\_SHORT***).show();  
 } **catch** (Exception e) {  
 Toast.*makeText*(MainActivity.**this**, **"Failed"**,  
 Toast.***LENGTH\_SHORT***).show();  
 }  
 }  
 });  
 }  
 @Override  
 **public void** onRequestPermissionsResult(**int** requestCode, @NonNull  
 String[] permissions, @NonNull **int** [] grantResults) {  
 **switch** (requestCode) {  
 **case** 1: {  
 **if**(grantResults.**length**>0 && grantResults[0] ==  
 PackageManager.***PERMISSION\_GRANTED***) {  
 **if**(ContextCompat.*checkSelfPermission*(MainActivity.**this**,  
 Manifest.permission.***SEND\_SMS***) ==  
 PackageManager.***PERMISSION\_GRANTED***) {  
 Toast.*makeText*(**this**, **"Permission granted"**,  
 Toast.***LENGTH\_SHORT***).show();  
 }  
 } **else** {  
 Toast.*makeText*(**this**, **"Permission not granted"**,  
 Toast.***LENGTH\_SHORT***).show();  
 }  
 **return**;  
 }  
 }  
 }  
 *// Function send message sms* **private void** sendMessage(String phoneNo, String message){  
 **try** {  
 SmsManager smsManager = SmsManager.*getDefault*();  
 smsManager.sendTextMessage(phoneNo, **null**, message, **null**,  
 **null**);  
 Toast.*makeText*(getApplicationContext(), **"SMS Sent."**,  
 Toast.***LENGTH\_LONG***).show();  
 } **catch** (Exception e) {  
 Toast.*makeText*(getApplicationContext(), **"SMS Fail. Please try again!"**, Toast.***LENGTH\_LONG***).show();  
 e.printStackTrace();  
 }  
 }  
}

**Androidmanifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.smsapp"**>  
 <**uses-permission android:name="android.permission.SEND\_SMS"**/>  
 <**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/AppTheme"**>  
 <**activity android:name=".MainActivity"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 </**application**>  
  
</**manifest**>

**OUTPUT:**

****

****

**RESULT:**

**EXPNO: SPLASH SCREEN**

**DATE:**

**AIM:**

**PROGRAM:**

**Activity\_main.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity"**>  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Welcome to To splash Screen App!"** />  
</**RelativeLayout**>

**Splash.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical" android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/splash"**>  
  
</**LinearLayout**>

**MainActivity.java:**

**package** com.example.splashscreenapp;  
  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 }  
}

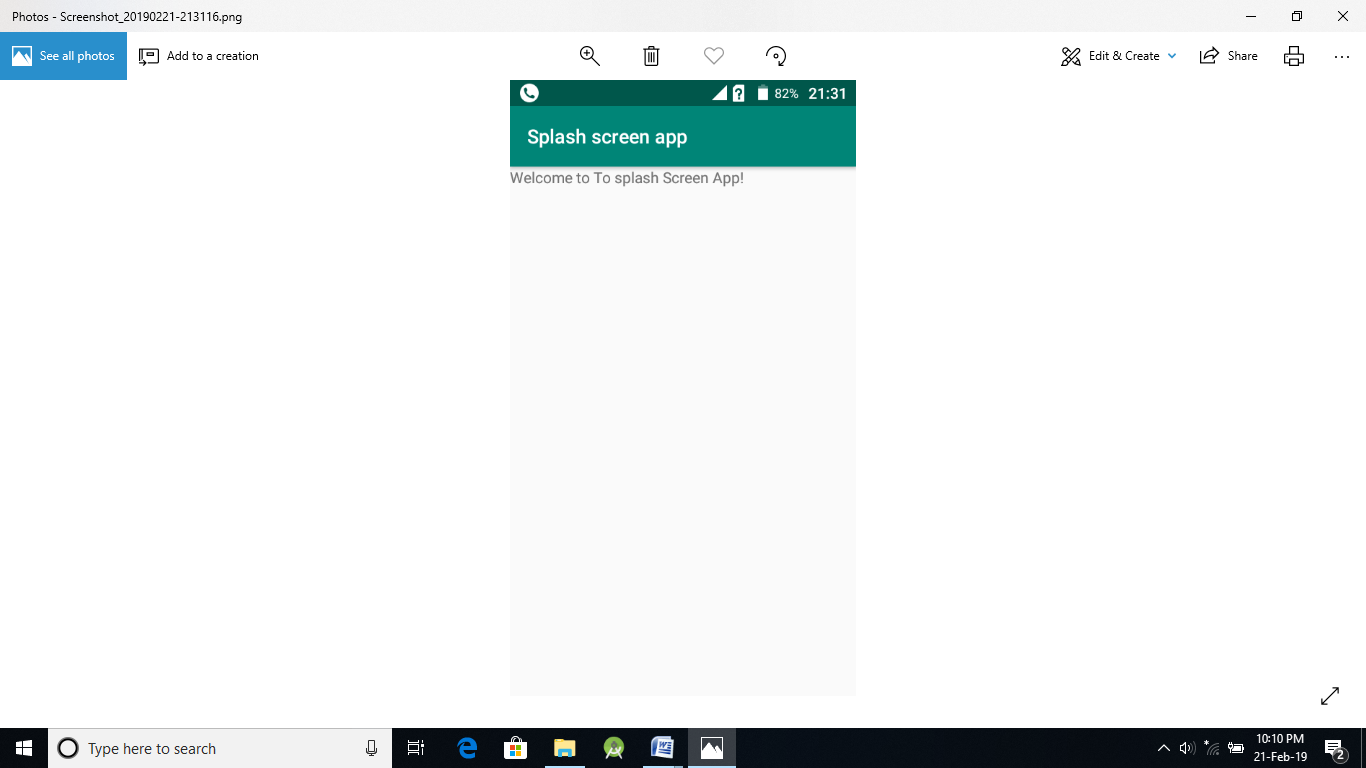
**Splash.java:**

**package** com.example.splashscreenapp;  
  
**import** android.app.Activity;  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.os.Handler;  
  
**public class** Splash **extends** Activity {  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***splash***);  
  
  
 **new** Handler().postDelayed(**new** Runnable() {  
  
 *// Using handler with postDelayed called runnable run method* @Override  
 **public void** run() {  
 Intent i = **new** Intent(Splash.**this**, MainActivity.**class**);  
 startActivity(i);  
  
 *// close this activity* finish();  
 }  
 }, 5\*1000); *// wait for 5 seconds* }  
  
 @Override  
 **protected void** onDestroy() {  
  
 **super**.onDestroy();  
  
 }  
}

**AndroidManifest.xml:**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.example.splashscreenapp"**>  
  
 <**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/AppTheme"**>  
 <**activity android:name=".Splash"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 <**activity android:name=".MainActivity"**/>  
 </**application**>  
</**manifest**>

**OUTPUT:**

****

**RESULT:**

**EXNO:**

**DATE: SCREENLOCK**

**AIM:**

**PROGRAM:**

**MainActivity.java**

package com.example.screenlock;

import android.app.Activity;

import android.app.ActivityManager;

import android.app.admin.DevicePolicyManager;

import android.content.ComponentName;

import android.content.Intent;

import android.os.Bundle;

import android.support.v7.app.AppCompatActivity;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements View.OnClickListener{

private Button lock, disable, enable;

public static final int RESULT\_ENABLE = 11;

private DevicePolicyManager devicePolicyManager;

private ActivityManager activityManager;

private ComponentName compName;

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

devicePolicyManager = (DevicePolicyManager) getSystemService(DEVICE\_POLICY\_SERVICE);

activityManager = (ActivityManager) getSystemService(ACTIVITY\_SERVICE);

compName = new ComponentName(this, MyAdmin.class);

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

enable = (Button) findViewById(R.id.enableBtn);

disable = (Button) findViewById(R.id.disableBtn);

lock.setOnClickListener(this);

enable.setOnClickListener(this);

disable.setOnClickListener(this);

}

@Override

protected void onResume() {

super.onResume();

boolean isActive = devicePolicyManager.isAdminActive(compName);

disable.setVisibility(isActive ? View.VISIBLE : View.GONE);

enable.setVisibility(isActive ? View.GONE : View.VISIBLE);

}

@Override

public void onClick(View view) {

if (view == lock) {

boolean active = devicePolicyManager.isAdminActive(compName);

if (active) {

devicePolicyManager.lockNow();

} else {

Toast.makeText(this, "You need to enable the Admin Device Features", Toast.LENGTH\_SHORT).show();

}

} else if (view == enable) {

Intent intent = new Intent(DevicePolicyManager.ACTION\_ADD\_DEVICE\_ADMIN);

intent.putExtra(DevicePolicyManager.EXTRA\_DEVICE\_ADMIN, compName);

intent.putExtra(DevicePolicyManager.EXTRA\_ADD\_EXPLANATION, "Additional text explaining why we need this permission");

startActivityForResult(intent, RESULT\_ENABLE);

} else if (view == disable) {

devicePolicyManager.removeActiveAdmin(compName);

disable.setVisibility(View.GONE);

enable.setVisibility(View.VISIBLE);

}

}

@Override

protected void onActivityResult(int requestCode, int resultCode, Intent data) {

switch(requestCode) {

case RESULT\_ENABLE :

if (resultCode == Activity.RESULT\_OK) {

Toast.makeText(MainActivity.this, "You have enabled the Admin Device features", Toast.LENGTH\_SHORT).show();

} else {

Toast.makeText(MainActivity.this, "Problem to enable the Admin Device features", Toast.LENGTH\_SHORT).show();

}

break;

}

super.onActivityResult(requestCode, resultCode, data);

}

}

**MyAdmin.java**

package com.example.screenlock;

import android.app.admin.DeviceAdminReceiver;

import android.content.Context;

import android.content.Intent;

import android.widget.Toast;

/\*\*

\* Created by ssaurel on 04/09/2017.

\*/

public class MyAdmin extends DeviceAdminReceiver {

@Override

public void onEnabled(Context context, Intent intent) {

Toast.makeText(context, "Device Admin : enabled", Toast.LENGTH\_SHORT).show();

}

@Override

public void onDisabled(Context context, Intent intent) {

Toast.makeText(context, "Device Admin : disabled", Toast.LENGTH\_SHORT).show();

}

}

**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="com.example.screenlock.MainActivity">

<Button

android:id="@+id/lock"

android:layout\_width="200dp"

android:layout\_height="wrap\_content"

android:layout\_marginTop="50dp"

android:text="Lock the Phone"

android:layout\_centerHorizontal="true"/>

<Button

android:id="@+id/enableBtn"

android:layout\_width="200dp"

android:layout\_height="wrap\_content"

android:layout\_marginTop="50dp"

android:text="Enable"

android:layout\_centerHorizontal="true"

android:layout\_below="@id/lock"/>

<Button

android:id="@+id/disableBtn"

android:layout\_width="200dp"

android:layout\_height="wrap\_content"

android:layout\_marginTop="50dp"

android:text="Disable"

android:layout\_centerHorizontal="true"

android:layout\_below="@id/enableBtn"/>

</RelativeLayout>

**AndroidManifest.xml**

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

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

package="com.example.screenlock">

<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/AppTheme">

<activity android:name=".MainActivity">

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

<receiver android:name=".MyAdmin" android:permission="android.permission.BIND\_DEVICE\_ADMIN">

<meta-data android:name="android.app.device\_admin"

android:resource="@xml/policies" />

<intent-filter>

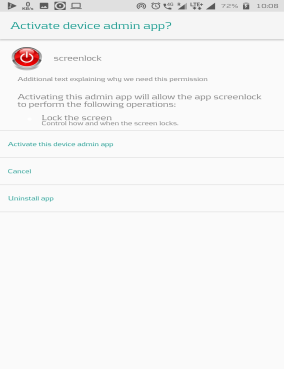
<action android:name="android.app.action.DEVICE\_ADMIN\_ENABLED"/>

</intent-filter>

</receiver>

</application>

</manifest>

**OUTPUT:**

**RESULT:**