*<?***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"**

**android:id="@+id/clayout"**>

<**TextView**

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

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

**android:text="Hello World!"**

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

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

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

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

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

**package** com.example.archana.a28\_1\_touchsensor;

**import** android.support.constraint.ConstraintLayout;

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

**import** android.os.Bundle;

**import** android.util.Log;

**import** android.view.MotionEvent;

**import** android.view.View;

**import** android.widget.Toast;

**public class** MainActivity **extends** AppCompatActivity **implements**

View.OnTouchListener{

*//private String TAG = GestureActivity.class.getSimpleName();*

**private** String **TAG** = **"message"**;

**float initialX**, **initialY**;

ConstraintLayout **cl**;

@Override

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

**super**.onCreate(savedInstanceState);

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

**cl**=findViewById(R.id.***clayout***);

**cl**.setOnTouchListener(**this**);

}

@Override

**public boolean** onTouch(View v, MotionEvent event) {

**int** action = event.getAction();

**if**(action==MotionEvent.***ACTION\_DOWN***)

{

**initialX** = event.getX();

**initialY** = event.getY();

Log.*d*(**TAG**, **"initial "**+**initialX**+**""**+**initialY**);

Toast.*makeText*(**this**,**""**+**initialX**+**""**+**initialY**,Toast.***LENGTH\_SHORT***).show();

}

**if**(action==MotionEvent.***ACTION\_UP***)

{

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

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

Log.*d*(**TAG**, **"final"**+finalX+**""**+finalY);

*// Toast.makeText(this,""+finalX+""+finalY,Toast.LENGTH\_SHORT).show();*

**if** (**initialX** < finalX) {

Log.*d*(**TAG**, **"Left to Right swipe performed"**);

}

**if** (**initialX** > finalX) {

Log.*d*(**TAG**, **"Right to Left swipe performed"**);

}

**if** (**initialY** < finalY) {

Log.*d*(**TAG**, **"Up to Down swipe performed"**);

}

**if** (**initialY** > finalY) {

Log.*d*(**TAG**, **"Down to Up swipe performed"**);

}

}

**if**(action==MotionEvent.***ACTION\_MOVE***)

Log.*d*(**TAG**, **"Action was MOVE"**);

**if**(action==MotionEvent.***ACTION\_CANCEL***)

Log.*d*(**TAG**,**"Action was CANCEL"**);

**if**(action==MotionEvent.***ACTION\_OUTSIDE***)

Log.*d*(**TAG**, **"Movement occurred outside bounds of current screen element"**);

*// return super.onTouchEvent(event);*

**return true**;

}

}