***TASK # 01***

*Create a new design of calculator using different graphics..*

***CODE***

***Activity\_main.xml***

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

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

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

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

*android:background="@drawable/background" tools:context=".MainActivity"*

*android:orientation="vertical">*

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

*android:layout\_height="match\_parent" android:background="@drawable/background"*

*android:clickable="true" android:layout\_margin="30dp" android:orientation="vertical">*

*<TextView android:id="@+id/result" android:layout\_width="341dp"*

*android:layout\_height="219dp" android:textColor="@android:color/white"*

*android:textStyle="bold" android:textAlignment="center"*

*android:hint="Result" android:textSize="30dp" />*

*<LinearLayout android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"*

*android:layout\_margin="10dp"> <Button android:id="@+id/btn7" android:layout\_width="59dp"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@android:color/darker\_gray" android:text="7" android:textSize="20dp" />*

*<Button android:id="@+id/btn8" android:layout\_width="59dp"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@android:color/darker\_gray" android:text="8" android:textSize="20dp" />*

*<Button android:id="@+id/btn9" android:layout\_width="59dp"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@android:color/darker\_gray" android:text="9" android:textSize="20dp" />*

*<Button android:id="@+id/btnDivide" android:layout\_width="wrap\_content"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@drawable/btn\_circle" android:text="/"*

*android:textColor="@android:color/white" android:textColorHighlight="?attr/colorBackgroundFloating"*

*android:textSize="30sp" android:textStyle="bold"/> </LinearLayout>*

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

*android:layout\_height="wrap\_content" android:layout\_margin="10dp">*

*<Button android:id="@+id/btn6" android:layout\_width="59dp" android:layout\_height="wrap\_content"*

*android:layout\_marginLeft="10dp" android:background="@android:color/darker\_gray"*

*android:text="6" android:textSize="20dp" />*

*<Button android:id="@+id/btn5" android:layout\_width="59dp" android:layout\_height="wrap\_content"*

*android:layout\_marginLeft="10dp" android:background="@android:color/darker\_gray"*

*android:text="5" android:textSize="20dp" />*

*<Button android:id="@+id/btn4" android:layout\_width="59dp" android:layout\_height="wrap\_content"*

*android:layout\_marginLeft="10dp" android:background="@android:color/darker\_gray"*

*android:text="4" android:textSize="20dp" />*

*<Button android:id="@+id/btnmultiply" android:layout\_width="wrap\_content"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@drawable/btn\_circle" android:text="\*"*

*android:textColor="@android:color/white" android:textColorHighlight="?attr/colorBackgroundFloating"*

*android:textSize="30sp" android:textStyle="bold"> </Button> </LinearLayout>*

*<LinearLayout android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"*

*android:layout\_margin="10dp">*

*<Button android:id="@+id/btn3" android:layout\_width="59dp" android:layout\_height="wrap\_content"*

*android:layout\_marginLeft="10dp" sandroid:background="@android:color/darker\_gray"*

*android:text="3" android:textSize="20dp" />*

*<Button android:id="@+id/btn2" android:layout\_width="59dp" android:layout\_height="wrap\_content"*

*android:layout\_marginLeft="10dp" android:background="@android:color/darker\_gray"*

*android:text="2" android:textSize="20dp" />*

*<Button android:id="@+id/btn1" android:layout\_width="59dp" android:layout\_height="wrap\_content"*

*android:layout\_marginLeft="10dp" android:background="@android:color/darker\_gray"*

*android:text="1" android:textSize="20dp" />*

*<Button android:id="@+id/btnsubtract" android:layout\_width="wrap\_content"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@drawable/btn\_circle" android:text="-"*

*android:textColor="@android:color/white" android:textColorHighlight="?attr/colorBackgroundFloating"*

*android:textSize="30sp" android:textStyle="bold" /> </LinearLayout>*

*<LinearLayout android:layout\_width="wrap\_content" android:layout\_height="wrap\_content"*

*android:layout\_margin="10dp">*

*<Button android:id="@+id/btnClear" android:layout\_width="59dp"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@android:color/darker\_gray" android:text="C"*

*android:textSize="20dp" />*

*<Button android:id="@+id/btn0" android:layout\_width="59dp"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@android:color/darker\_gray" android:text="0"*

*android:textSize="20dp" />*

*<Button android:id="@+id/btnequals" android:layout\_width="59dp"*

*android:layout\_height="wrap\_content" android:layout\_marginLeft="10dp"*

*android:background="@drawable/equal"*

*android:text="="*

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

*android:textSize="30sp" />*

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

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

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

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

*android:background="@drawable/btn\_circle"*

*android:text="+"*

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

*android:textSize="30sp"*

*android:textStyle="bold" />*

*</LinearLayout>*

*</LinearLayout>*

*</LinearLayout>*

***OUTPUT***

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***TASK # 02***

*Implement the complete functionality of Calculator designed in task one.*

***CODE***

***MainActivity.java***

*package com.example.myapplication;*

*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 b0,b1,b2,b3,b4,b5,b6,b7,b8,b9,badd,bdiv,bsub,bmul,bequal,bclear;*

*TextView ans; double var1,var2; boolean add,sub,mul,div;*

*protected void onCreate(Bundle savedInstanceState) {*

*super.onCreate(savedInstanceState);*

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

*bclear=(Button)findViewById(R.id.btnClear) ;*

*b0=(Button)findViewById(R.id.btn0);*

*b1=(Button)findViewById(R.id.btn1);*

*b2=(Button)findViewById(R.id.btn2);*

*b3=(Button)findViewById(R.id.btn3);*

*b4=(Button)findViewById(R.id.btn4);*

*b5=(Button)findViewById(R.id.btn5);*

*b6=(Button)findViewById(R.id.btn6);*

*b7=(Button)findViewById(R.id.btn7);*

*b8=(Button)findViewById(R.id.btn8);*

*b9=(Button)findViewById(R.id.btn9);*

*badd=(Button)findViewById(R.id.btnsum);*

*bsub=(Button)findViewById(R.id.btnsubtract);*

*bmul=(Button)findViewById(R.id.btnmultiply);*

*bdiv=(Button)findViewById(R.id.btnDivide);*

*ans=(TextView)findViewById(R.id.result);*

*bequal=(Button)findViewById(R.id.btnequals);*

*b0.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"0"); } });*

*b1.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"1"); } });*

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

*public void onClick(View view) { ans.setText(null); } });*

*b1.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"1"); } });*

*b2.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"2"); } });*

*b3.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"3"); } });*

*b4.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"4"); } });*

*b5.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"5"); } });*

*b6.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"6"); } });*

*b7.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"7"); } });*

*b8.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"8"); } });*

*b9.setOnClickListener(new View.OnClickListener() {*

*public void onClick(View view) { ans.setText(ans.getText()+"9"); } });*

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

*public void onClick(View view) { ans.setText(ans.getText()+"="); } });*

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

*public void onClick(View view) { var1=Double.parseDouble(ans.getText()+"");*

*add=true; ans.setText(null); } });*

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

*public void onClick(View view) { var1=Double.parseDouble(ans.getText()+"");*

*sub=true; ans.setText(null); } });*

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

*public void onClick(View view) {*

*var1=Double.parseDouble(ans.getText()+""); div=true; ans.setText(null); } } );*

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

*public void onClick(View view) {*

*var2=Double.parseDouble(ans.getText()+"");*

*if(add==true) { ans.setText(var1+var2+""); add=false; }*

*if(mul==true){*

*ans.setText(var1+var2+"");*

*mul=false; }*

*if(div==true){*

*ans.setText(var1+var2+"");*

*div=false; }*

*if(sub==true){*

*ans.setText(var1+var2+"");*

*sub=false;}});}}*

***OUTPUT***

*Summation of 2 and 3 gives 5*

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