

Android Calculator code

XML code:-

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:background="#F4E4E4"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="70dp"
        android:text="Caluculator"
        android:textSize="30dp"
        android:textAlignment="center"
        android:gravity="center"/>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="160dp"
        android:gravity="center">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="120dp"
            android:hint="0"
            android:textSize="40dp"
            android:id="@+id/edit1"

            android:textAlignment="center"
            android:gravity="center"/>

    </LinearLayout>
    <LinearLayout
        android:layout_width="400dp"
        android:layout_height="60dp"
        android:textAlignment="center"
        >
    <TextView
        android:layout_width="match_parent"
        android:layout_height="40dp"
        android:id="@+id/ans"
        android:text="answer"
        android:textSize="30dp"
        android:gravity="center"

        />
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
```

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android:layout_height="450dp"
android:layout_marginTop="20dp"
android:layout_marginLeft="10dp"

android:layout_marginRight="10dp"
android:layout_marginBottom="10dp"
android:orientation="vertical">
<LinearLayout
    android:layout_width="match_parent"
    android:gravity="center"
    android:orientation="horizontal"
    android:layout_height="80dp">
<TextView
    android:layout_width="80dp"
    android:layout_height="50dp"
    android:background="#DC373637"
    android:textSize="30dp"
    android:id="@+id/tvc"
    style="?android:attr/borderlessButtonStyle"
    android:textAlignment="center"

    android:text="c"
/>
<TextView
    android:layout_width="80dp"
    android:layout_height="50dp"
    android:background="#DC373637"
    android:textSize="30dp"
    android:layout_marginLeft="15dp"
    android:textAlignment="center"

    style="?android:attr/borderlessButtonStyle"
    android:id="@+id/tvx"
    android:text="X"
/>
<TextView
    android:layout_width="80dp"
    android:layout_height="50dp"
    android:background="#DC373637"
    android:id="@+id/tvmod"
    style="?android:attr/borderlessButtonStyle"
    android:layout_marginLeft="15dp"
    android:textSize="30dp"
    android:textAlignment="center"

    android:text="%"
/>
<TextView
    android:layout_width="80dp"
    android:layout_height="50dp"
    android:background="#DC373637"
    android:textSize="30dp"
    android:layout_marginLeft="15dp"
    android:id="@+id/tvdiv"
    style="?android:attr/borderlessButtonStyle"
    android:textAlignment="center"

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        android:text="/"
    />
</LinearLayout>
<LinearLayout
    android:layout_width="match_parent"
    android:gravity="center"
    android:layout_height="80dp">
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#CDCDCA"
        android:textSize="35dp"
        android:textAlignment="center"
        android:id="@+id/tv7"

        android:text="7"
    />
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#CDCDCA"
        android:textSize="35dp"
        android:layout_marginLeft="15dp"
        android:textAlignment="center"

        android:text="8"
        android:id="@+id/tv8"
    />
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#CDCDCA"
        android:layout_marginLeft="15dp"
        android:textSize="35dp"
        android:textAlignment="center"

        android:id="@+id/tv9"
        android:text="9"
    />
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#DC373637"
        android:textSize="30dp"
        android:layout_marginLeft="15dp"
        android:textAlignment="center"
        style="?android:attr/borderlessButtonStyle"
        android:id="@+id/tvmul"
        android:text="*"
    />
</LinearLayout>
<LinearLayout
    android:layout_width="match_parent"
    android:gravity="center"
    android:layout_height="80dp">
    <TextView
        android:layout_width="80dp"

```

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        android:layout_height="50dp"
        android:background="#CDCDCA"
        android:textSize="35dp"
        android:textAlignment="center"

        android:id="@+id/tv4"

        android:text="4"
    />
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#CDCDCA"
        android:textSize="35dp"
        android:layout_marginLeft="15dp"
        android:textAlignment="center"
        android:text="5"
        android:id="@+id/tv5"

    />
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#CDCDCA"
        android:layout_marginLeft="15dp"
        android:textSize="35dp"
        android:id="@+id/tv6"

        android:textAlignment="center"
        android:text="6"
    />
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#DC373637"
        android:textSize="30dp"
        android:layout_marginLeft="15dp"
        android:id="@+id/tvminus"
        android:textAlignment="center"
        style="?android:attr/borderlessButtonStyle"
        android:text="-"
    />
</LinearLayout>
<LinearLayout
    android:layout_width="match_parent"
    android:gravity="center"
    android:layout_height="80dp">
    <TextView
        android:layout_width="80dp"
        android:layout_height="50dp"
        android:background="#CDCDCA"
        android:textSize="35dp"
        android:textAlignment="center"
        android:id="@+id/tv1"

        android:text="1"
    />

```

```

        <TextView
            android:layout_width="80dp"
            android:layout_height="50dp"
            android:background="#CDCDCA"
            android:textSize="35dp"
            android:layout_marginLeft="15dp"
            android:textAlignment="center"

            android:id="@+id/tv2"
            android:text="2"
        />
        <TextView
            android:layout_width="80dp"
            android:layout_height="50dp"
            android:background="#CDCDCA"
            android:layout_marginLeft="15dp"
            android:textSize="35dp"
            android:textAlignment="center"

            android:id="@+id/tv3"
            android:text="3"
        />
        <TextView
            android:layout_width="80dp"
            android:layout_height="50dp"
            android:background="#DC373637"
            android:textSize="30dp"
            android:layout_marginLeft="15dp"
            style="?android:attr/borderlessButtonStyle"
            android:textAlignment="center"
            android:id="@+id/tvadd"
            android:text="+"
        />
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:gravity="center"
        android:layout_height="80dp">
        <TextView
            android:layout_width="170dp"
            android:layout_height="50dp"
            android:background="#CDCDCA"
            android:textSize="30dp"
            android:textAlignment="center"
            android:id="@+id/tv0"
            android:text="0"
            style="?android:attr/borderlessButtonStyle"

            />

        <TextView
            android:layout_width="170dp"
            android:layout_height="50dp"
            android:background="#DC373637"
            android:textSize="30dp"
            android:layout_marginLeft="15dp"
            android:id="@+id/equ"

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                android:textAlignment="center"

                style="?android:attr/borderlessButtonStyle"
                android:text="="
            />
        </LinearLayout>
    </LinearLayout>
</LinearLayout>

```

Java code:-

```

package com.example.caluculator;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    TextView t1,t2,t3,t4,t5,t6,t7,t8,t9,t0;
    TextView clc,back,eql,ansr,edi;
    TextView add,sub,mul,div,mod;
    int a,b,c,n,an;
    char sym;
    double d;
    String str,temp,str1;
    @SuppressLint("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        t1=findViewById(R.id.tv1);
        t2=findViewById(R.id.tv2);
        t3=findViewById(R.id.tv3);
        t4=findViewById(R.id.tv4);
        t5=findViewById(R.id.tv5);
        t6=findViewById(R.id.tv6);
        t7=findViewById(R.id.tv7);
        t8=findViewById(R.id.tv8);
        t9=findViewById(R.id.tv9);
        t0=findViewById(R.id.tv0);
        add=findViewById(R.id.tvadd);
        sub=findViewById(R.id.tvminus);
        mul=findViewById(R.id.tvmul);
        div=findViewById(R.id.tvdiv);
        mod=findViewById(R.id.tvmod);
        clc=findViewById(R.id.tvc);
        back=findViewById(R.id.tvx);
        eql=findViewById(R.id.equ);
        ansr=findViewById(R.id.ans);
        edi=findViewById(R.id.edit1);
    }
}

```

```
str=String.valueOf(edi.getText());
n=str.length();
t1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"1";
        edi.setText(str+" ");
    }
});
t2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"2";
        edi.setText(str+" ");
    }
});
t3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"3";
        edi.setText(str+" ");
    }
});
t4.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"4";
        edi.setText(str+" ");
    }
});
t5.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"5";
        edi.setText(str+" ");
    }
});
t6.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"6";
        edi.setText(str+" ");
    }
});
t7.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"7";
        edi.setText(str+" ");
    }
});
t8.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        str=str+"8";
        edi.setText(str+" ");
    }
});
```

```

    });
    t9.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            str=str+"9";
            edi.setText(str+" ");
        }
    });
    t0.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            str=str+"0";
            edi.setText(str+" ");
        }
    });
    add.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            try {
                // Toast.makeText(MainActivity.this, "the num "+str,
                Toast.LENGTH_SHORT).show();

                a = Integer.parseInt(String.valueOf(str));
                //Toast.makeText(MainActivity.this, "the number is "+a,
                Toast.LENGTH_SHORT).show();
                c=str.length();
            }
            catch (Exception e)
            {
                Toast.makeText(MainActivity.this, "in valid...",
                Toast.LENGTH_SHORT).show();
            }
            sym='+';
            str=str+" ";
            edi.setText(str+" ");
        }
    });
    sub.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            try {

                a = Integer.parseInt(String.valueOf(str));
                c=str.length();
            }
            catch (Exception e)
            {
                Toast.makeText(MainActivity.this, "in valid...",
                Toast.LENGTH_SHORT).show();
            }
            sym='-';

            str=str+"-";
            edi.setText(str+" ");
        }
    });

```



```

mul.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        try {

            a = Integer.parseInt(String.valueOf(str));
            c=str.length();

        }
        catch (Exception e)
        {
            Toast.makeText(MainActivity.this, "in valid...",
Toast.LENGTH_SHORT).show();
        }
        sym='*';
        str=str+"*";
        edi.setText(str+" ");
    }
});
div.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        try {

            a = Integer.parseInt(String.valueOf(str));
            c=str.length();

        }
        catch (Exception e)
        {
            Toast.makeText(MainActivity.this, "in valid...",
Toast.LENGTH_SHORT).show();
        }
        sym='/';
        str=str+"/";
        edi.setText(str+" ");
    }
});
mod.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        try {

            a = Integer.parseInt(String.valueOf(str));
            c=str.length();

        }
        catch (Exception e)
        {
            Toast.makeText(MainActivity.this, "in valid...",
Toast.LENGTH_SHORT).show();
        }
        sym='%';
        str=str+"%";
        edi.setText(str+" ");
    }
});
equi.setOnClickListener(new View.OnClickListener() {
    @Override

```

```

        public void onClick(View view) {
            // Toast.makeText(MainActivity.this, "value of str "+str,
            Toast.LENGTH_SHORT).show();
            n=str.length();
            //Toast.makeText(MainActivity.this, "value of c "+c+" and n
            is "+n, Toast.LENGTH_SHORT).show();
            temp=str.substring(c+1,n);
            // Toast.makeText(MainActivity.this, "the remaining num
            "+temp, Toast.LENGTH_SHORT).show();
            try {
                b = Integer.parseInt(temp);
            }
            catch (Exception e)
            {
                Toast.makeText(MainActivity.this, "only two inputs are
                allowed ....", Toast.LENGTH_SHORT).show();
            }
            if(sym=='+')
            {
                an=a+b;
                ansr.setText(an+" ");
            }
            else if(sym=='-')
            {
                an=a-b;
                ansr.setText(an+" ");
            }
            else if(sym=='*')
            {
                an=a*b;
                ansr.setText(an+" ");
            }
            else if(sym=='/')
            {
                d=a/(b*1.0);
                ansr.setText(d+" ");
            }
            else if(sym=='%')
            {
                an=a%b;
                ansr.setText(an+" ");
            }
            else{
                Toast.makeText(MainActivity.this, "invalid symbol....",
                Toast.LENGTH_SHORT).show();
            }
        }
    });
    clc.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            edi.setText("");
            str="";
            temp="";
            ansr.setText("answer");
        }
    });
}

```

```

        back.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                //Toast.makeText(MainActivity.this, "num "+n,
                Toast.LENGTH_SHORT).show();

                str=String.valueOf(edi.getText());
                n=str.length();
                if(n>2) {
                    //Toast.makeText(MainActivity.this, "num "+n,
                    Toast.LENGTH_SHORT).show();
                    temp = str.substring(0, n - 2);
                    // Toast.makeText(MainActivity.this, "num 1 is"+temp,
                    Toast.LENGTH_SHORT).show();
                    edi.setText(temp + " ");
                    str = temp;
                }
                else{
                    str="";
                    temp="";
                    edi.setText("");
                }
            }
        });
    }
}

```

