

# MAD LAB - CYCLE\_1

## 1.Design a login page

Xml code

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android" >
    <TextView
        android:id="@+id/head"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:gravity="center_horizontal"
        android:padding="5dp"
        android:text="Login"
        android:textAlignment="center"
        android:textColor="@color/colorPrimaryDark"
        android:textSize="18sp" />

    <EditText
        android:id="@+id/usr"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Username"
        android:layout_marginTop="20dp"
        android:layout_marginBottom="10dp"/>

    <EditText
        android:id="@+id/pwd"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:layout_marginBottom="10dp"
        android:hint="Enter Password"/>

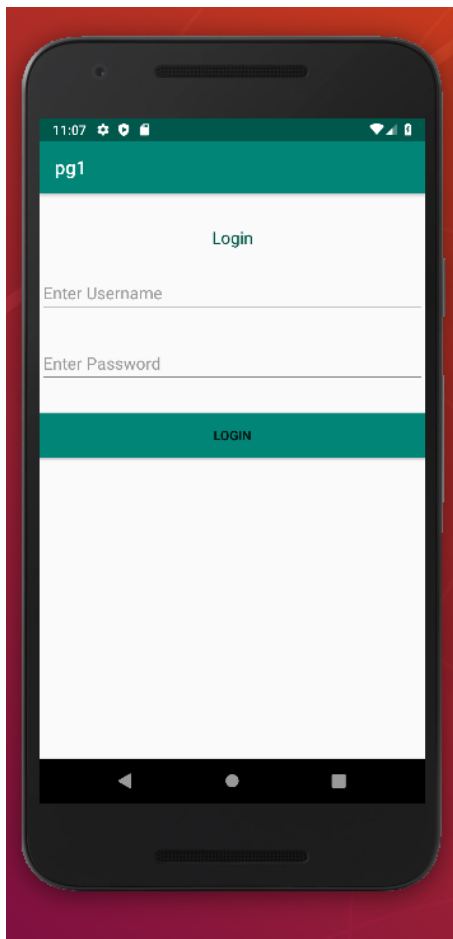
    <Button
        android:id="@+id/lgnbtn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:layout_marginBottom="10dp"
        android:background="@color/colorPrimary"
        android:onClick="Click"
        android:text="Login"
        tools:background="@android:color/holo_green_dark" />
</LinearLayout>
```

## Java code

```
package com.example.sjcet.pg1;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.LinearLayout;
public class MainActivity extends AppCompatActivity {
    EditText username,password;
    Button lgnbtn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        username=findViewById(R.id.usr);
        password=findViewById(R.id.pwd);
        lgnbtn=findViewById(R.id.lgnbtn);
    }
    public void Click(View view) {
        String user = username.getText().toString();
    }
}
```

## Output



2.Change the content in textview on a button click

Xml code

```
<LinearLayout
    android:layout_height="match_parent"
    android:layout_width="match_parent"
    android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android" >
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"
        android:gravity="center_horizontal"
        android:padding="5dp"
        android:text="Change Content on Button Click"
        android:textAlignment="center"
```

```

        android:textColor="@color/colorPrimaryDark"
        android:textSize="18sp"/>
<EditText
    android:id="@+id/txt"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:hint="Ask who win Ballon D'or 2021"
    android:layout_marginTop="20dp"
    android:layout_marginBottom="10dp"/>
<Button
    android:id="@+id/btn"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="20dp"
    android:layout_marginBottom="10dp"
    android:background="@color/colorPrimary"
    android:onClick="click"

    android:text="Change"/>
</LinearLayout>

```

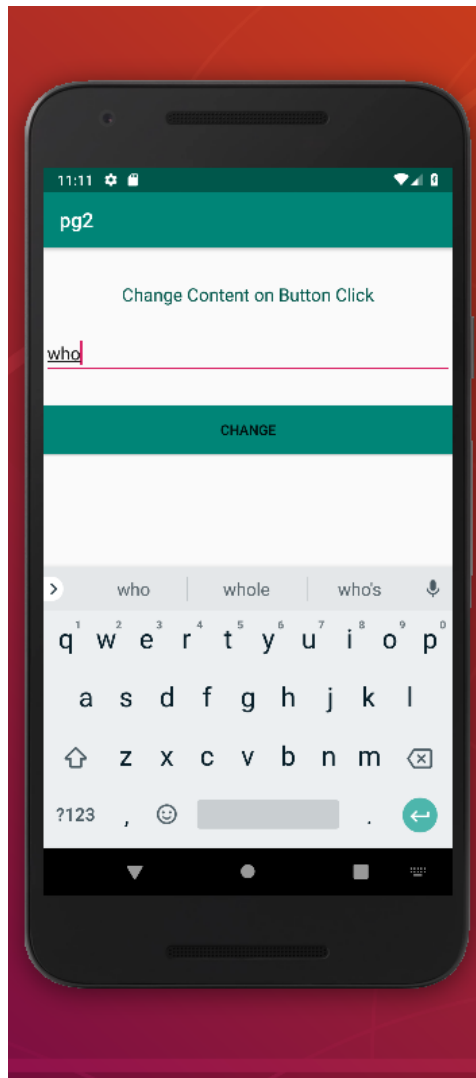
## Java code

```

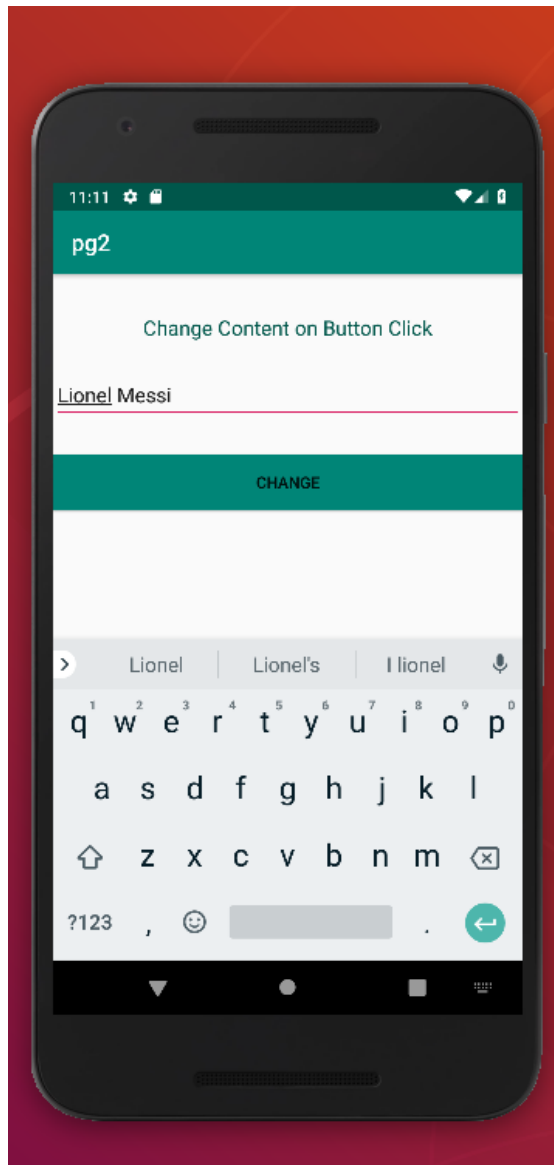
package com.example.sjcet.pg2;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
    EditText txt;
    Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        txt= findViewById(R.id.txt);
        btn= findViewById(R.id.btn);
    }
    public void click(View view) {
        txt.setText("Lionel Messi");
    }
}

```

Output\_1



output\_2



### 3.Read a content from edittext and print it in A TEXTVIEW

Xml code

```
<LinearLayout
    android:layout_height="match_parent"
    android:layout_width="match_parent"
    android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <EditText
        android:id="@+id/text1"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Text"/>
    <Button
        android:id="@+id/btn"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Change"
        android:onClick="Click"
    />
    <TextView
        android:id="@+id/text2"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
    />
</LinearLayout>
```

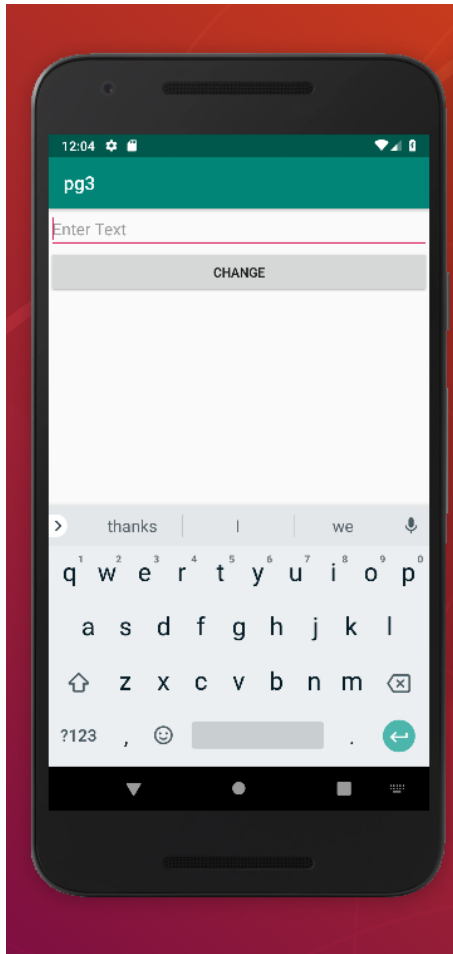
Java code

```
package com.example.sjcet.pg3;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    EditText text1;
    TextView text2;
    Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        text1=(EditText)findViewById(R.id.text1);
        btn=(Button)findViewById(R.id.btn);
        text2=(TextView)findViewById(R.id.text2);
    }
    public void Click(View view) {
```

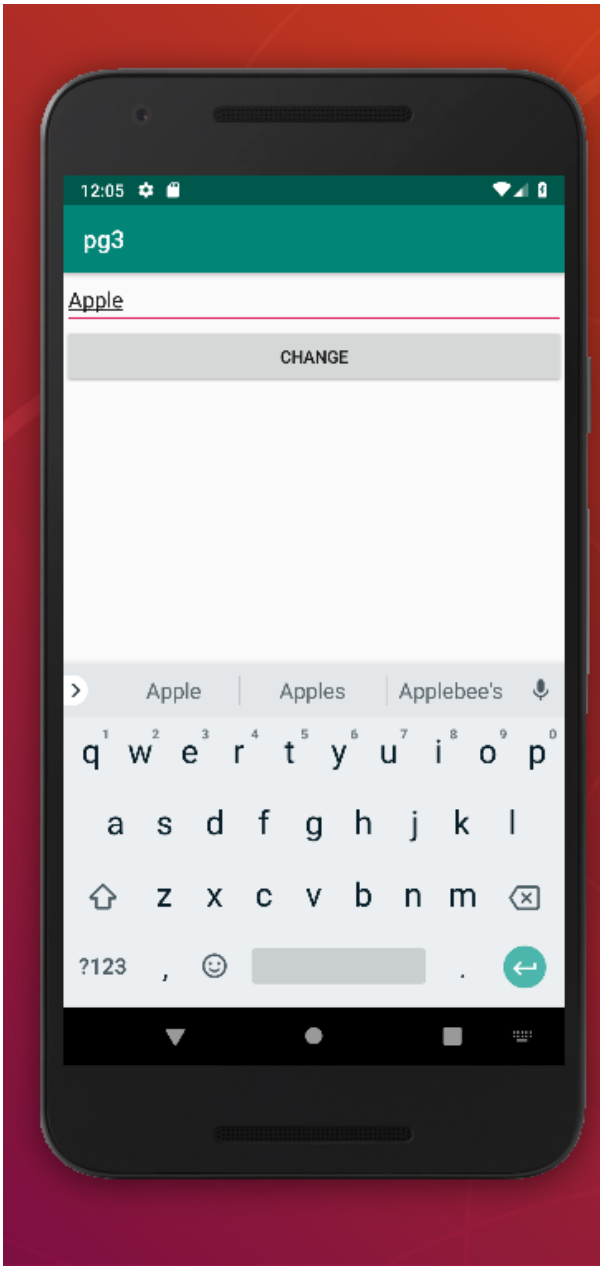
```
String content= text1.getText().toString();
text2.setText(content);
}
}
```

Output\_1

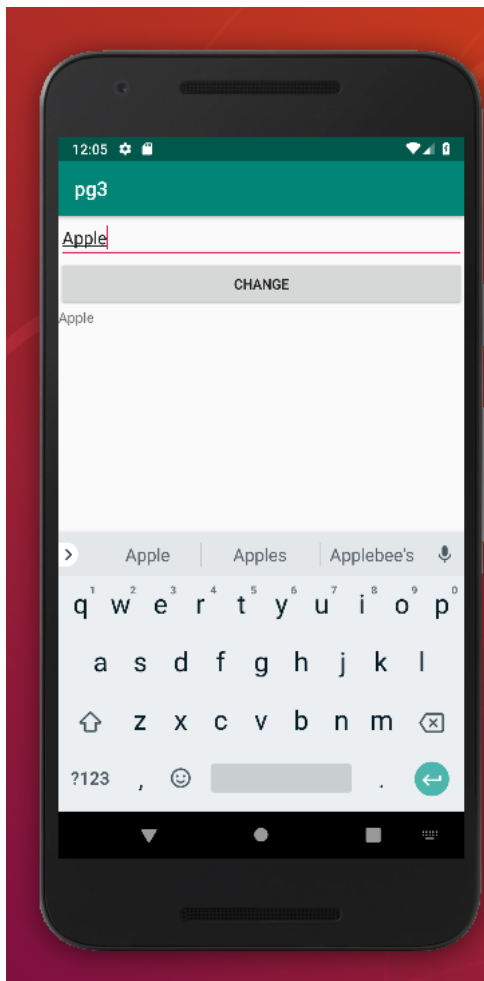




Output\_2



## Output\_3



#### 4.Change the background color on a button click

Xml code

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:id="@+id/l1"
    android:layout_height="match_parent"
    android:layout_width="match_parent"
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <Button
        android:id="@+id/button"
        android:layout_width="250dp"
        android:layout_height="wrap_content"
        android:padding="20dp"
        android:layout_marginLeft="70dp"
        android:layout_marginTop="190dp"
        android:text="Click here to change color"/>

</LinearLayout>
```

Java code

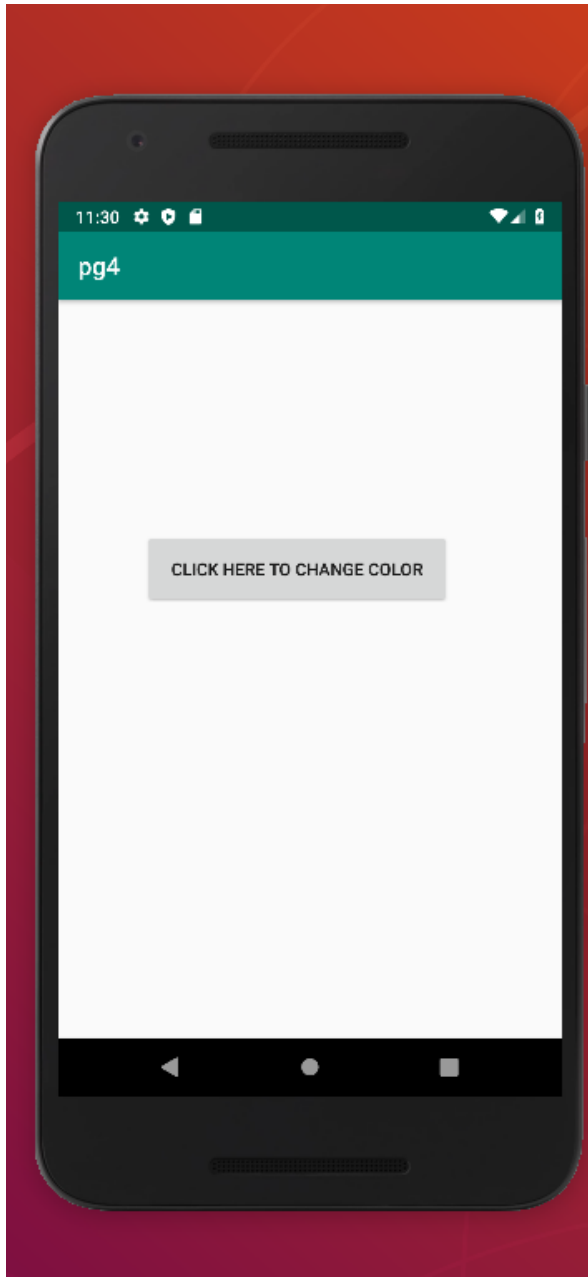
```
package com.example.sjcet.pg4;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.LinearLayout;

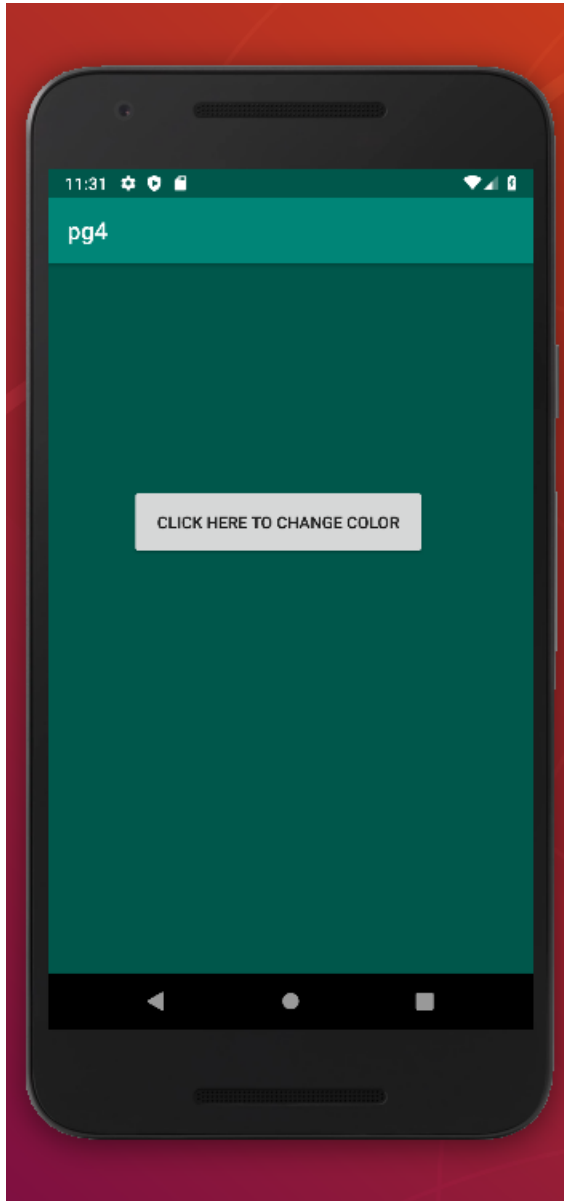
public class MainActivity extends AppCompatActivity {

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Button button1;
        final LinearLayout Layout;
        Layout = findViewById(R.id.l1);
        button1 = findViewById(R.id.button);
        button1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Layout.setBackgroundResource(R.color.colorPrimaryDark);
            }
        });
    }
}
```

Output\_1



Output\_2



5. Create a sample calculator

Xml code

```
<?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:id="@+id/relative1"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">
<EditText
    android:id="@+id/edt1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content" />
<Button
    android:id="@+id/button1"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/button4"
    android:layout_alignRight="@+id/button4"
    android:layout_below="@+id/edt1"
    android:layout_marginTop="94dp"
    android:text="1" />
<Button
    android:id="@+id/button2"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignTop="@+id/button1"
    android:layout_toLeftOf="@+id/button3"
    android:layout_toStartOf="@+id/button3"
    android:text="2" />
<Button
    android:id="@+id/button3"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignTop="@+id/button2"
    android:layout_centerHorizontal="true"
    android:text="3" />
<Button
    android:id="@+id/button4"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/button1"
    android:layout_toLeftOf="@+id/button2"
    android:text="4" />
<Button
    android:id="@+id/button5"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignBottom="@+id/button4"
    android:layout_alignLeft="@+id/button2"
    android:layout_alignStart="@+id/button2"
    android:text="5" />
<Button
```

```

        android:id="@+id/button6"
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignLeft="@+id/button3"
        android:layout_alignStart="@+id/button3"
        android:layout_below="@+id/button3"
        android:text="6" />
<Button
    android:id="@+id/button7"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/button4"
    android:layout_toLeftOf="@+id/button2"
    android:text="7" />
<Button
    android:id="@+id/button8"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/button5"
    android:layout_alignStart="@+id/button5"
    android:layout_below="@+id/button5"
    android:text="8" />
<Button
    android:id="@+id/button9"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/button6"
    android:layout_alignStart="@+id/button6"
    android:layout_below="@+id/button6"
    android:text="9" />
<Button
    android:id="@+id/buttonadd"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/edt1"
    android:layout_alignRight="@+id/edt1"
    android:layout_alignTop="@+id/button3"
    android:layout_marginLeft="46dp"
    android:layout_marginStart="46dp"
    android:layout_toRightOf="@+id/button3"
    android:text="+" />
<Button
    android:id="@+id/buttonsub"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/buttonadd"
    android:layout_alignLeft="@+id/buttonadd"
    android:layout_alignRight="@+id/buttonadd"

```

```

        android:layout_alignStart="@+id/buttonadd"
        android:layout_below="@+id/buttonadd"
        android:text="." />
<Button
    android:id="@+id/buttonmul"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/buttonsub"
    android:layout_alignParentEnd="true"
    android:layout_alignParentRight="true"
    android:layout_alignStart="@+id/buttonsub"
    android:layout_below="@+id/buttonsub"
    android:text="*" />
<Button
    android:id="@+id/button10"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/button7"
    android:layout_toLeftOf="@+id/button2"
    android:text="." />
<Button
    android:id="@+id/button0"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/button8"
    android:layout_alignStart="@+id/button8"
    android:layout_below="@+id/button8"
    android:text="0" />
<Button
    android:id="@+id/buttonC"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/button9"
    android:layout_alignStart="@+id/button9"
    android:layout_below="@+id/button9"
    android:text="C" />
<Button
    android:id="@+id/buttondiv"
    style="?android:attr/buttonStyleSmall"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignEnd="@+id/buttonmul"
    android:layout_alignLeft="@+id/buttonmul"
    android:layout_alignRight="@+id/buttonmul"
    android:layout_alignStart="@+id/buttonmul"
    android:layout_below="@+id/buttonmul"
    android:text="/" />
<Button
    android:id="@+id/buttoneql"
    android:layout_width="wrap_content"

```



```

        android:layout_height="wrap_content"
        android:layout_alignEnd="@+id/buttondiv"
        android:layout_alignLeft="@+id/button10"
        android:layout_alignRight="@+id/buttondiv"
        android:layout_alignStart="@+id/button10"
        android:layout_below="@+id/button0"
        android:layout_marginTop="37dp"
        android:text="" />
</RelativeLayout>

```

Java code

```

package com.example.sjcet.pg5;
import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
public class MainActivity extends AppCompatActivity {
    Button button0, button1, button2, button3, button4, button5, button6,
        button7, button8, button9, buttonAdd, buttonSub, buttonDivision,
        buttonMul, button10, buttonC, buttonEqual;
    EditText crunchifyEditText;
    float mValueOne, mValueTwo;
    boolean crunchifyAddition, mSubtract, crunchifyMultiplication, crunchifyDivision;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        button0 = (Button) findViewById(R.id.button0);
        button1 = (Button) findViewById(R.id.button1);
        button2 = (Button) findViewById(R.id.button2);
        button3 = (Button) findViewById(R.id.button3);
        button4 = (Button) findViewById(R.id.button4);
        button5 = (Button) findViewById(R.id.button5);
        button6 = (Button) findViewById(R.id.button6);
        button7 = (Button) findViewById(R.id.button7);
        button8 = (Button) findViewById(R.id.button8);
        button9 = (Button) findViewById(R.id.button9);
        button10 = (Button) findViewById(R.id.button10);
        buttonAdd = (Button) findViewById(R.id.buttonadd);
        buttonSub = (Button) findViewById(R.id.buttonsub);
        buttonMul = (Button) findViewById(R.id.buttonmul);
        buttonDivision = (Button) findViewById(R.id.buttondiv);
        buttonC = (Button) findViewById(R.id.buttonC);
        buttonEqual = (Button) findViewById(R.id.buttoneql);
        crunchifyEditText = (EditText) findViewById(R.id.edt1);
        button1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                crunchifyEditText.setText(crunchifyEditText.getText() + "1");
            }
        });
        button2.setOnClickListener(new View.OnClickListener() {

```

```

        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "2");
        }
    });
    button3.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "3");
        }
    });
    button4.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "4");
        }
    });
    button5.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "5");
        }
    });
    button6.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "6");
        }
    });
    button7.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "7");
        }
    });
    button8.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "8");
        }
    });
    button9.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "9");
        }
    });
    button0.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            crunchifyEditText.setText(crunchifyEditText.getText() + "0");
        }
    });
    buttonAdd.setOnClickListener(new View.OnClickListener() {

```

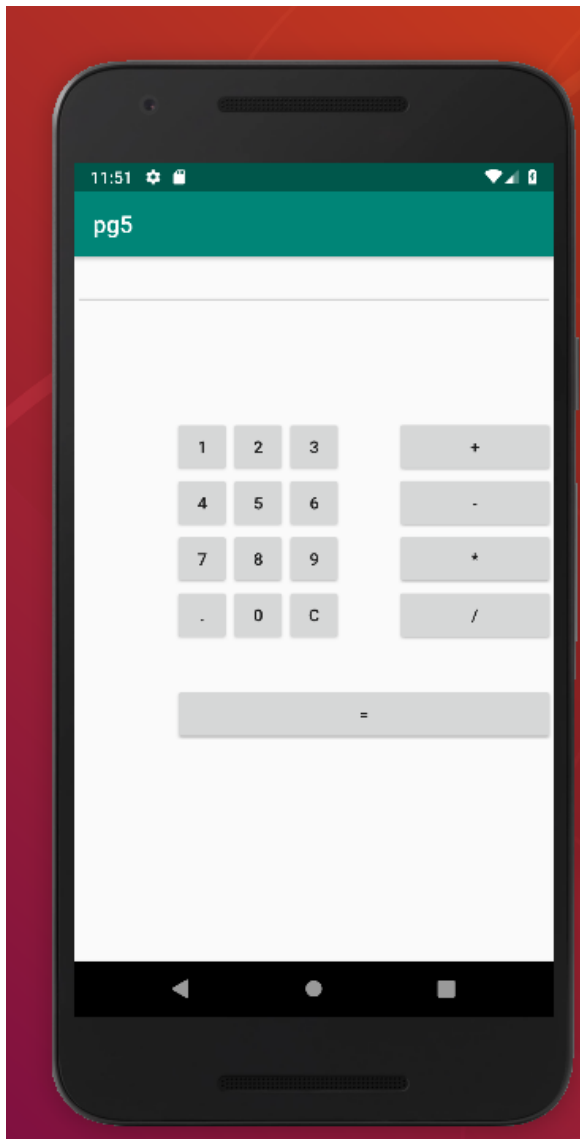
```

@Override
public void onClick(View v) {
    if (crunchifyEditText == null) {
        crunchifyEditText.setText("");
    } else {
        mValueOne = Float.parseFloat(crunchifyEditText.getText() + "");
        crunchifyAddition = true;
        crunchifyEditText.setText(null);
    }
}
});
buttonSub.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        mValueOne = Float.parseFloat(crunchifyEditText.getText() + "");
        mSubtract = true;
        crunchifyEditText.setText(null);
    }
});
buttonMul.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        mValueOne = Float.parseFloat(crunchifyEditText.getText() + "");
        crunchifyMultiplication = true;
        crunchifyEditText.setText(null);
    }
});
buttonDivision.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        mValueOne = Float.parseFloat(crunchifyEditText.getText() + "");
        crunchifyDivision = true;
        crunchifyEditText.setText(null);
    }
});
buttonEqual.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        mValueTwo = Float.parseFloat(crunchifyEditText.getText() + "");
        if (crunchifyAddition == true) {
            crunchifyEditText.setText(mValueOne + mValueTwo + "");
            crunchifyAddition = false;
        }
        if (mSubtract == true) {
            crunchifyEditText.setText(mValueOne - mValueTwo + "");
            mSubtract = false;
        }
        if (crunchifyMultiplication == true) {
            crunchifyEditText.setText(mValueOne * mValueTwo + "");
            crunchifyMultiplication = false;
        }
        if (crunchifyDivision == true) {
            crunchifyEditText.setText(mValueOne / mValueTwo + "");
            crunchifyDivision = false;
        }
    }
});

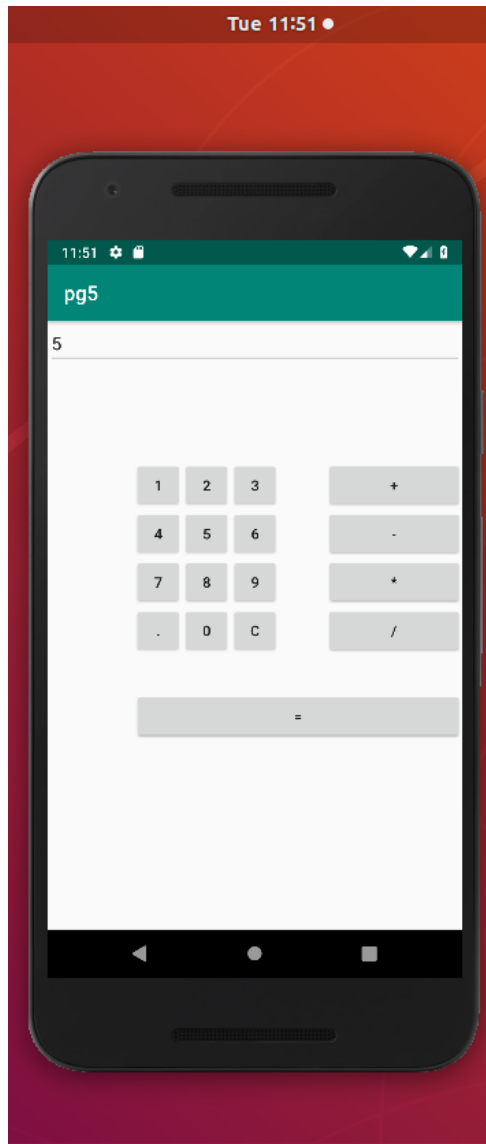
```

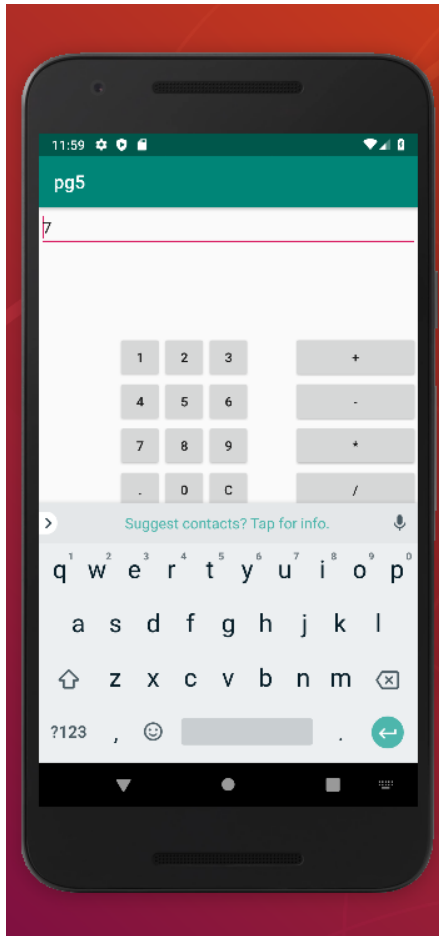
```
    }  
  }  
});  
buttonC.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        crunchifyEditText.setText("");  
    }  
});  
button10.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        crunchifyEditText.setText(crunchifyEditText.getText() + ".");  
    }  
});  
}});}}
```

Output\_1



Output\_2





Output\_3

