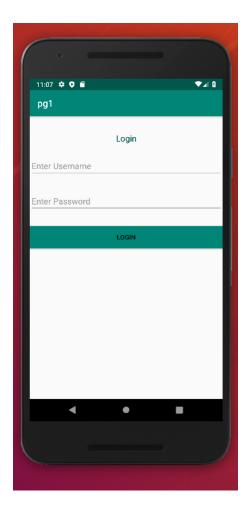
MAD LAB - CYCLE_1

1.Design a login page

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:tools="http://schemas.android.com/tools"</pre>
 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

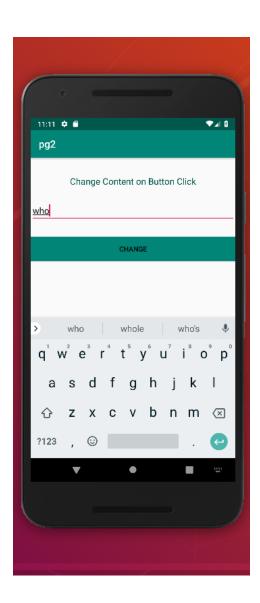
```
package com.example.sjcet.pg1;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.LinearLayout;
public class MainActivity extends AppCompatActivity {
 EditText username,password;
 Button Ignbtn;
 @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=findViewByld(R.id.lgnbtn);
 public void Click(View view) {
    String user = username.getText().toString();
 }
}
```

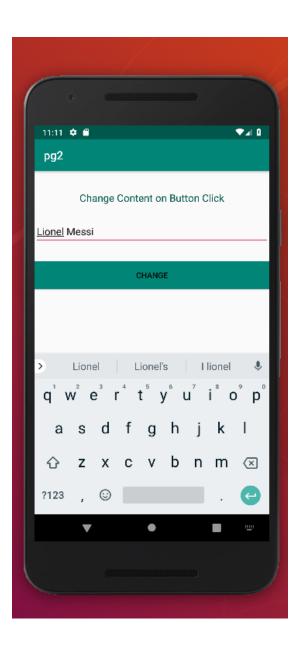


2. Change the content in textview on a button click

```
<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"</pre>
```

```
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.sicet.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");
 }
}
```





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

```
<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);
}
```







4. Change the background color on a button click

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:id="@+id/I1"
 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 = findViewByld(R.id. 11);
    button1 = findViewById(R.id.button);
    button1.setOnClickListener(new View.OnClickListener() {
      @Override
      public void onClick(View view) {
        Layout.setBackgroundResource(R.color.colorPrimaryDark);
   });
 }
```





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) findViewByld(R.id.button3);
    button4 = (Button) findViewByld(R.id.button4);
    button5 = (Button) findViewByld(R.id.button5);
    button6 = (Button) findViewById(R.id.button6);
    button7 = (Button) findViewById(R.id.button7);
    button8 = (Button) findViewById(R.id.button8);
    button9 = (Button) findViewByld(R.id.button9);
    button10 = (Button) findViewByld(R.id.button10);
    buttonAdd = (Button) findViewByld(R.id.buttonadd);
    buttonSub = (Button) findViewById(R.id.buttonsub);
    buttonMul = (Button) findViewById(R.id.buttonmul);
    buttonDivision = (Button) findViewByld(R.id.buttondiv);
    buttonC = (Button) findViewById(R.id.buttonC);
    buttonEqual = (Button) findViewByld(R.id.buttonegl);
    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() + ".");
}});
}
```

