MAD - CYCLE 1

1. Design Login page

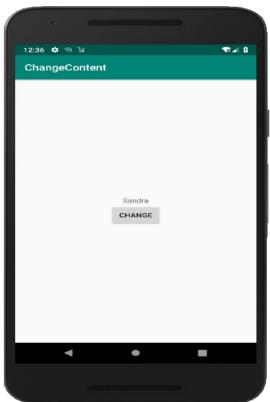
```
Code:
       XMI:
<LinearLayout
    android:layout width="match parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <TextView
        android:id="@+id/tv1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="USER NAME"/>
    <EditText
        android:id="@+id/et1"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:hint="Enter Your Username"/>
    <TextView
        android:id="@+id/tv2"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="PASSWORD"/>
    <EditText
        android:id="@+id/et2"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:hint="Enter Your Password"/>
    <Button
        android:id="@+id/btn1"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="LOGIN"
        android:onClick="login"/>
    <Button
        android:id="@+id/btn2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="CANCEL"
</LinearLayout>
```



2. Change the content in the textview on a button click.

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <TextView
         android:id="@+id/tv"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="Sandra"/>
    <Button
         android:id="@+id/btn1"
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:text="Change"
         android:onClick="change"/>
</LinearLayout>
      Code: JAVA
      public class MainActivity extends AppCompatActivity {
TextView tv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
         super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_main);
    tv = findViewById(R.id.tv);
}
public void change(View view) {
    tv.setText("Essa");
}
```



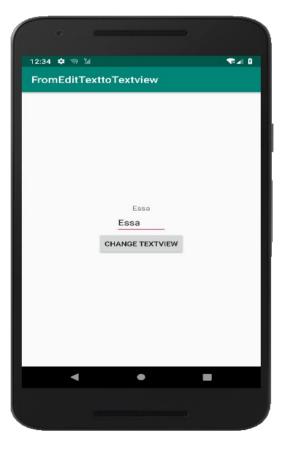


3. Read a content from edittext and print it in a textview.

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    xmlns:android="http://schemas.android.com/apk/res/android">
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/tv"
    android:text="Sandra"/>
    <EditText
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:id="@+id/et"
         android:hint="Enter Text"/>
    <Button
```

```
android:layout width="wrap content"
         android:layout height="wrap content"
         android:id="@+id/btn"
         android:text="Change TextView"
         android:onClick="click"/>
</LinearLayout>
JAVA:
public class MainActivity extends AppCompatActivity {
TextView tv;
EditText et;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
         super.onCreate(savedInstanceState);
         setContentView(R.layout.activity_main);
    public void click(View view) {
         tv = findViewById(R.id.tv);
         et = findViewById(R.id.et);
         tv.setText(et.getText());
    }
}
```





4. Change the background color on a button click.

```
<LinearLavout
    android:layout_height="match_parent"
    android:layout_width="match_parent"
    android:gravity="center"
    android:orientation="vertical"
    android:id="@+id/ll1"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <Button
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:id="@+id/btn"
         android:text="Change Color"
        android:onClick="ChangeColor"/>
      </LinearLayout>
      Code:Java
      public class MainActivity extends AppCompatActivity {
    Button btn:
    View v:
    boolean isColor = true;
    LinearLayout linearLayout;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
         super.onCreate(savedInstanceState);
         setContentView(R.layout.activity_main);
         v = this.getWindow().getDecorView();
         //btn = (Button) findViewById(R.id.btn);
         btn = findViewById(R.id.btn);
         linearLayout = findViewById(R.id.ll1);
btn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
         linearLayout.setBackgroundResource(android.R.color.holo_blue_dark);
});
```





5. Create a sample Calculator.

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    android:layout width="match parent"
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout height="match parent"
    android:orientation="vertical"
    android:gravity="center">
    <TextView
         android:layout width="wrap content"
         android:layout_height="wrap_content"
         android:text="CALCULATOR"
         android:textSize="25sp"
         android:layout_marginBottom="16dp"
         android:textColor="@android:color/black" />
    <LinearLayout
         android:layout_width="match_parent"
         android:layout_height="wrap_content"
         android:orientation="horizontal">
         <EditText
             android:layout_width="102dp"
             android:layout height="59dp"
             android:id="@+id/et1"
             android:hint="Value 1"
             android:layout_marginHorizontal="50dp" />
         <EditText
             android:layout width="102dp"
             android:layout height="59dp"
```

```
android:id="@+id/et2"
         android:hint="Value 2"
         android:layout marginHorizontal="50dp"/>
</LinearLayout>
<LinearLayout
    android:layout width="wrap content"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:layout marginBottom="20dp">
    <EditText
         android:textSize="40sp"
         android:id="@+id/answer"
         android:layout width="wrap content"
         android:layout_height="wrap_content"
         android:layout_marginHorizontal="50dp"
         android:text="Result" />
</LinearLayout>
<LinearLayout
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:orientation="horizontal">
    <Button
         android:layout width="wrap content"
         android:layout_height="wrap_content"
         android:id="@+id/sub"
         android:text="-"
         android:textSize="25sp"
         android:layout marginBottom="16dp"
         android:onClick="add"/>
    <Button
         android:layout width="wrap content"
         android:layout height="wrap content"
         android:id="@+id/add"
         android:text="+"
         android:textSize="25sp"
         android:layout_marginBottom="16dp"
         android:onClick="sum"/>
    <Button
         android:layout width="wrap content"
         android:layout height="wrap content"
         android:id="@+id/mul"
         android:text="*"
         android:textSize="25sp"
         android:layout marginBottom="16dp"
         android:onClick="mult"/>
    <Button
         android:layout width="wrap content"
         android:layout height="wrap content"
         android:id="@+id/div"
         android:text="/"
         android:textSize="25sp"
         android:layout marginBottom="16dp"
         android:onClick="divi"/>
    <Button
         android:layout width="wrap content"
         android:layout_height="wrap_content"
         android:id="@+id/equlas"
         android:text="="
         android:textSize="25sp"
         android:layout_marginBottom="16dp"
         android:onClick="Eql"/>
</LinearLayout>
```

```
</LinearLayout>
      Code: Java
      public class MainActivity extends AppCompatActivity {
    EditText e1:
    EditText e2:
    Button add;
    Button sub, mul, div, equal;
   EditText ans;
    double res = 0:
    @Override
    protected void onCreate(Bundle savedInstanceState) {
         super.onCreate(savedInstanceState);
         setContentView(R.layout.activity main);
         e1 = findViewById(R.id.et1);
         e2 = findViewById(R.id.et2);
         add = findViewById(R.id.add);
         sub = findViewById(R.id.sub);
         div = findViewById(R.id.div);
         mul = findViewById(R.id.mul);
        ans = findViewById(R.id.answer);
    public void add(View view) {
         double a = Double.parseDouble(e1.getText().toString());
         double b = Double.parseDouble(e2.getText().toString());
         res = a - b:
    public void Eql(View view) {
         String ans1 = String.valueOf(res);
         ans.setText(ans1);
         res= 0;
    public void sum(View view) {
         double a = Double.parseDouble(e1.getText().toString());
         double b = Double.parseDouble(e2.getText().toString());
         res = a + b;
    public void mult(View view) {
         double a = Double.parseDouble(e1.getText().toString());
         double b = Double.parseDouble(e2.getText().toString());
         res = a * b;
    public void divi(View view) {
         double a = Double.parseDouble(e1.getText().toString());
         double b = Double.parseDouble(e2.getText().toString());
         res = a / b;
    }
}
```



