

MAD – CYCLE 1

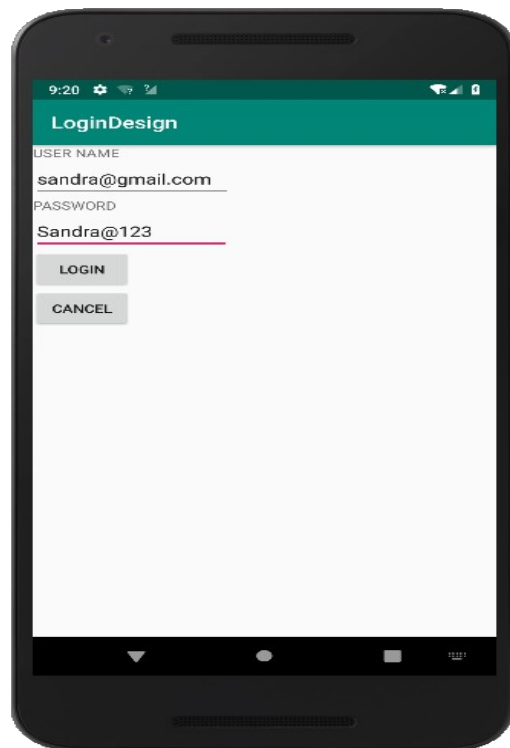
1. Design Login page

Code:

XML:

```
<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>
```

Output:



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

Code:XML

```
<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

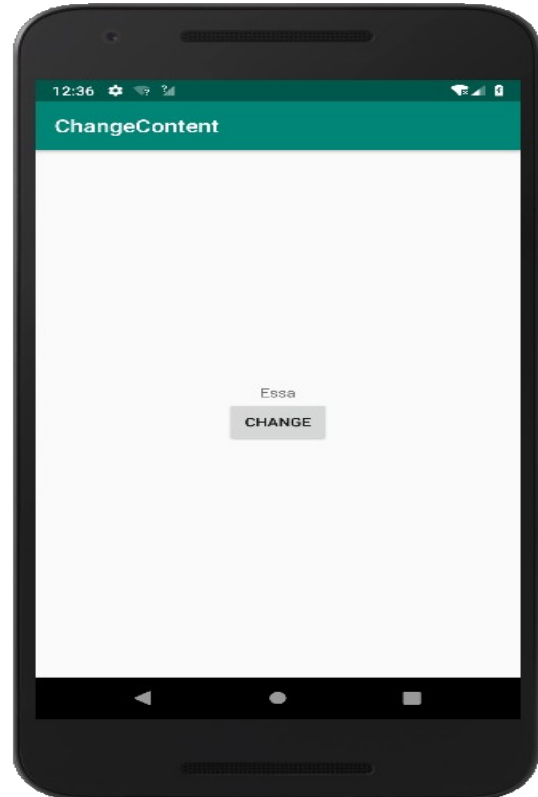
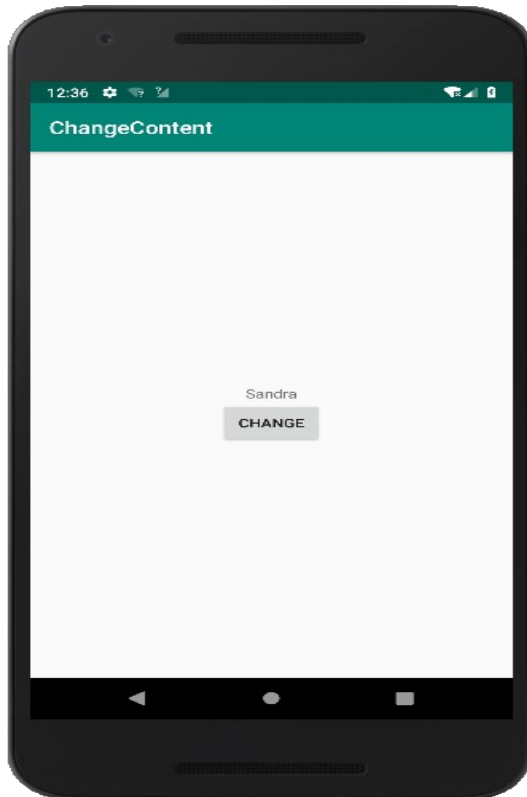
```
public class MainActivity extends AppCompatActivity {
    TextView tv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```

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

```

Output:



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

Code:XML

```

<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>

```

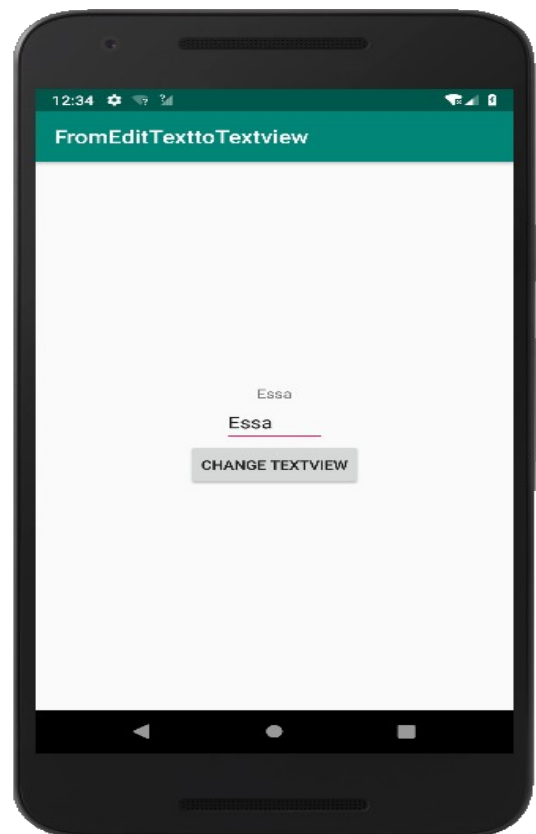
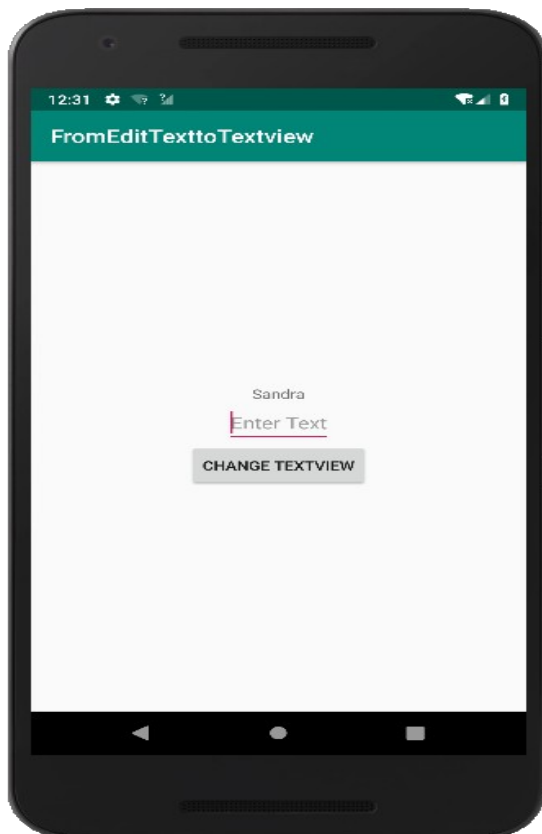
JAVA:

```

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());
    }
}

```

Output:



4. Change the background color on a button click.

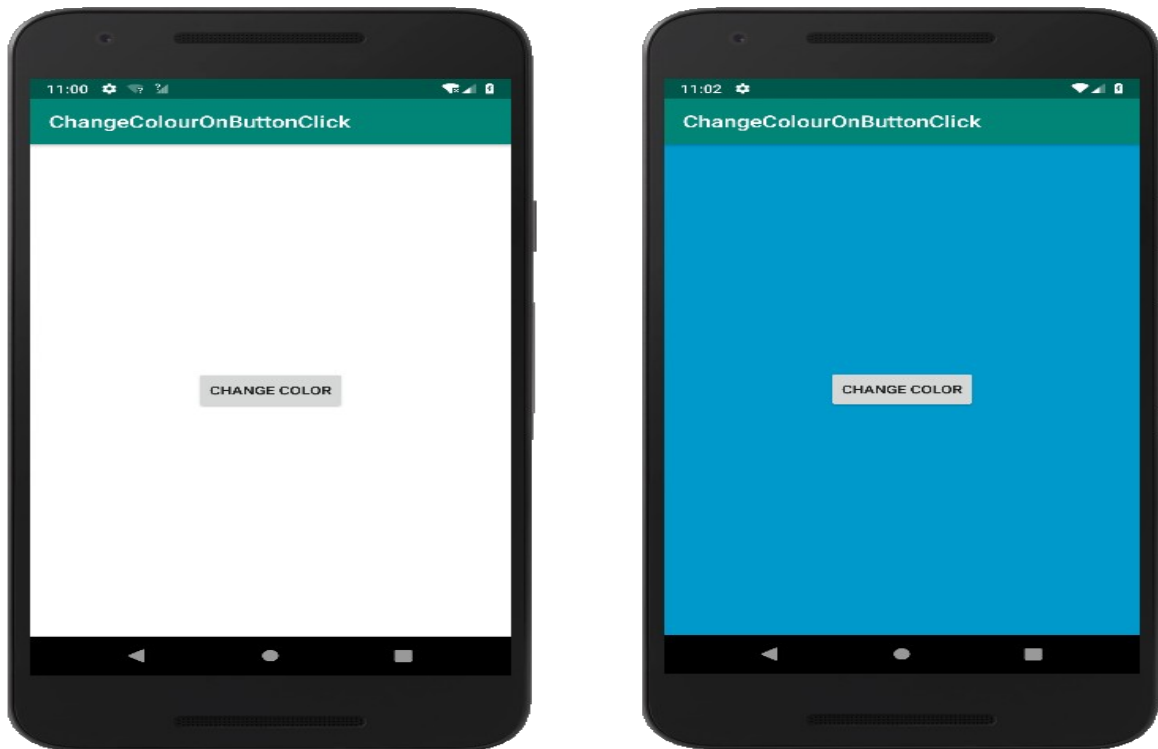
Code:XML

```
<LinearLayout
    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);
            }
        });
    }
}
```

Output:



5. Create a sample Calculator.

Code:XML

```
<?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/eqlas"
        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;
    }
}
```

Output:

