

# MAD – CYCLE 1

## 1. Design Login page

### Code:XML

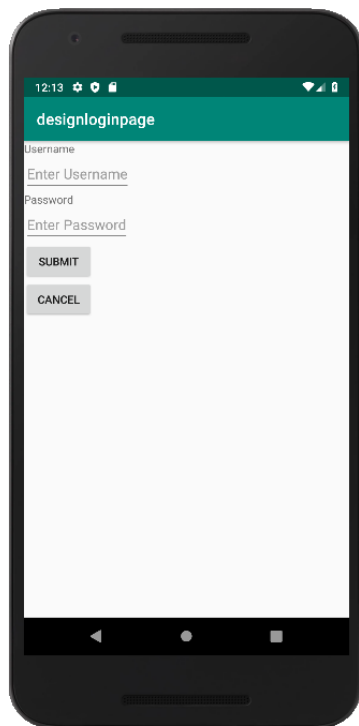
```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <TextView
        android:id="@+id/tv1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        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>
```

### Code:Java

```
package com.example.sjcet.designloginpage;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void Submit(View view) {
    }
}
```

}

## Output:



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

### Code:XML

```
<LinearLayout android:layout_height="match_parent"
    android:layout_width="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/tv1"
        android:text="Label1"/>
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/b1"
        android:text="ChangeContent"
        android:onClick="Chnage"/>
</LinearLayout>
```

### Code:JAVA

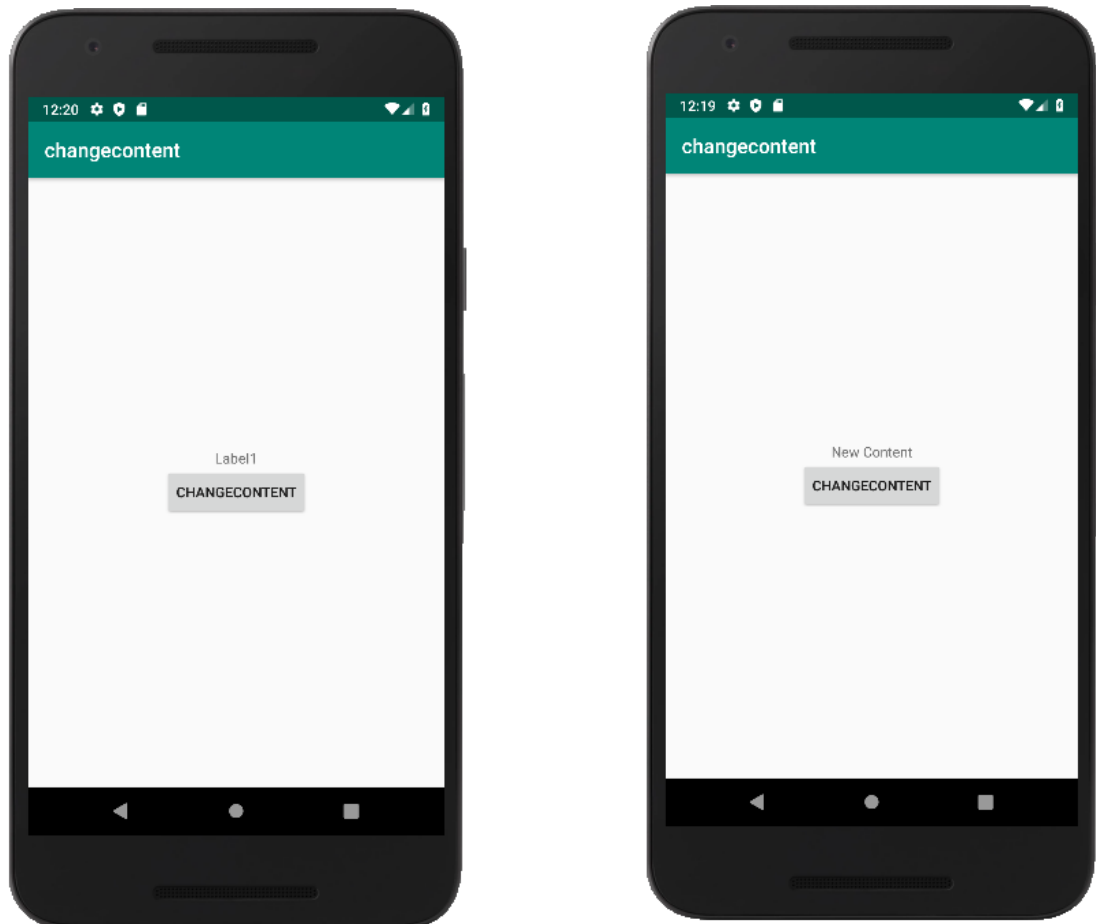
```
package com.example.sjcet.changecontent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
```

```

public class MainActivity extends AppCompatActivity {
    TextView tv1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void Chnage(View view) {
        tv1=(TextView) findViewById(R.id.tv1);
        tv1.setText("New Content");
    }
}

```

**Output:**



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

**Code:XML**

```

<LinearLayout
    android:layout_height="match_parent"
    android:layout_width="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/tv1"
        android:text="Text1"/>
<EditText
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/et1"
    android:hint="Enter the content"/>
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/b1"
    android:text="ChangeText"
    android:onClick="changeLabelContent"/>
</LinearLayout>

```

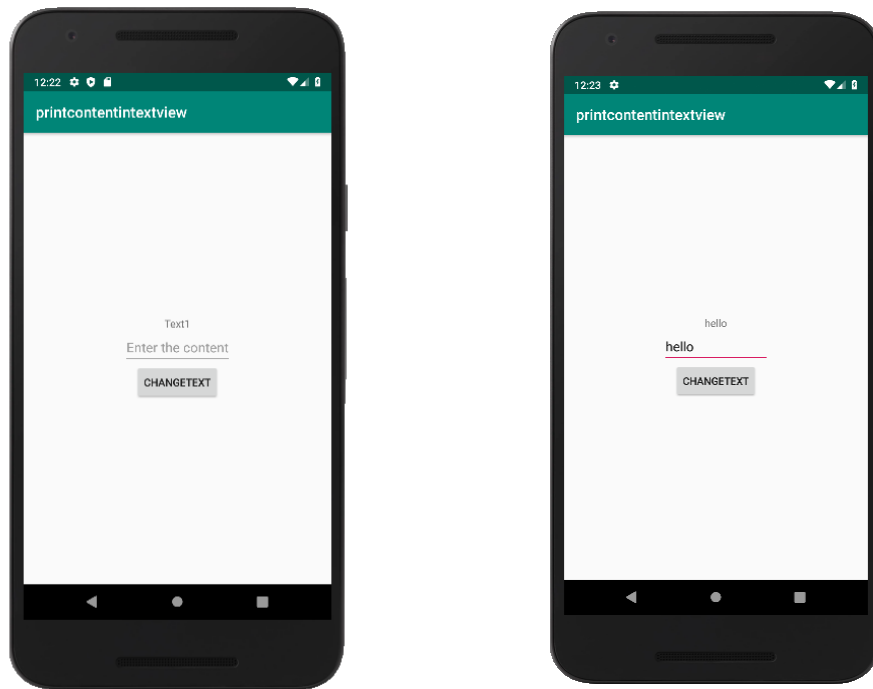
**code:JAVA**

```

package com.example.sjcet.printcontentintextview;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    TextView tv1;
    EditText et1;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void changeLabelContent(View view) {
        tv1=(TextView)findViewById(R.id.tv1);
        et1=(EditText)findViewById(R.id.et1);
        tv1.setText(et1.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:orientation="vertical"
    android:gravity="center"
    android:id="@+id/l1"
    xmlns:android="http://schemas.android.com/apk/res/android" >
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/b1"
        android:text="Change Color"
        android:onClick="Change"/>
</LinearLayout>
```

#### Code:Java

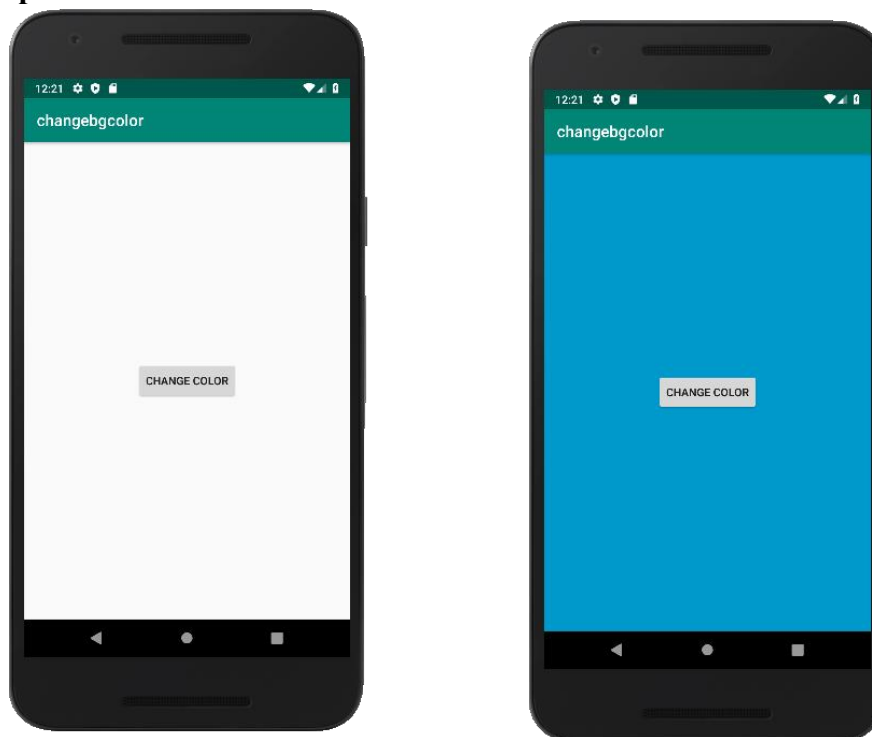
```
package com.example.sjcet.changebgcolor;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.LinearLayout;
public class MainActivity extends AppCompatActivity {
    Button btn;
    View v;
    boolean isColor = true;
    LinearLayout linearLayout;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
```

```

super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
v = this.getWindow().getDecorView();
btn = findViewById(R.id.b1);
linearLayout = findViewById(R.id.l1);
btn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        linearLayout.setBackgroundResource(android.R.color.holo_blue_dark);
    }
});
}
public void ChangeColor(View view) {
    linearLayout.setBackgroundResource(R.color.colorPrimary);
}
}

```

Output:



5. Create a sample Calculator.

Code:XML

```

<RelativeLayout android:layout_height="match_parent"
    android:layout_width="match_parent"
    android:orientation="vertical"
    android:gravity="center"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <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_alignTop="@+id/button3"
    android:layout_alignEnd="@+id/edt1"
    android:layout_alignRight="@+id/edt1"
    android:layout_marginStart="46dp"
    android:layout_marginLeft="3dp"
    android:layout_marginTop="5dp"
    android:layout_marginEnd="43dp"
    android:layout_marginRight="43dp"
    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_alignEnd="@+id/buttonsub"
    android:layout_alignLeft="@+id/buttonsub"
    android:layout_alignRight="@+id/buttonsub"
    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>

```

### Code:Java

```

package com.example.sjcet.samplecalculator;
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 = findViewById(R.id.button0);

```

```

button1 = findViewById(R.id.button1);
button2 = findViewById(R.id.button2);
button3 = findViewById(R.id.button3);
button4 = findViewById(R.id.button4);
button5 = findViewById(R.id.button5);
button6 = findViewById(R.id.button6);
button7 = findViewById(R.id.button7);
button8 = findViewById(R.id.button8);
button9 = findViewById(R.id.button9);
button10 = findViewById(R.id.button10);
buttonAdd = findViewById(R.id.buttonadd);
buttonSub = findViewById(R.id.buttonsub);
buttonMul = findViewById(R.id.buttonmul);
buttonDivision = findViewById(R.id.buttondiv);
buttonC = findViewById(R.id.buttonC);
buttonEqual = findViewById(R.id.buttoneql);
crunchifyEditText = 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) {

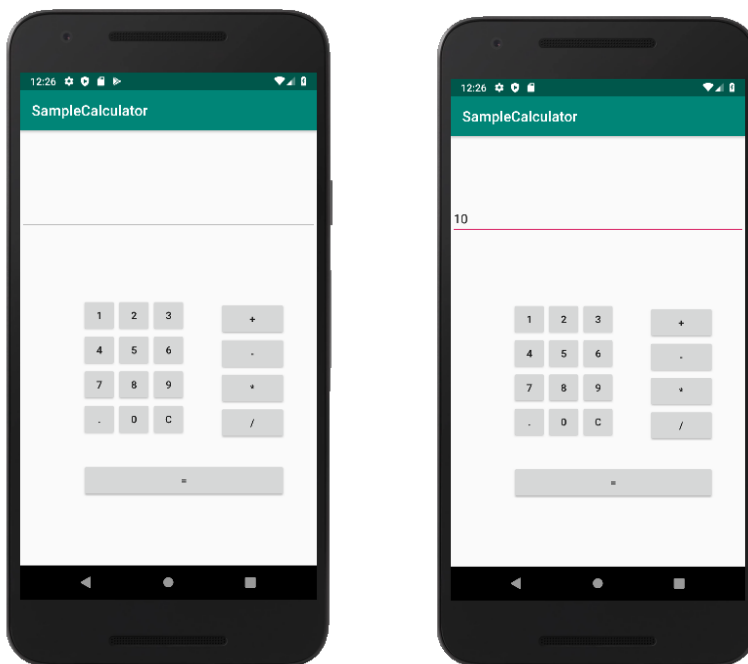
```

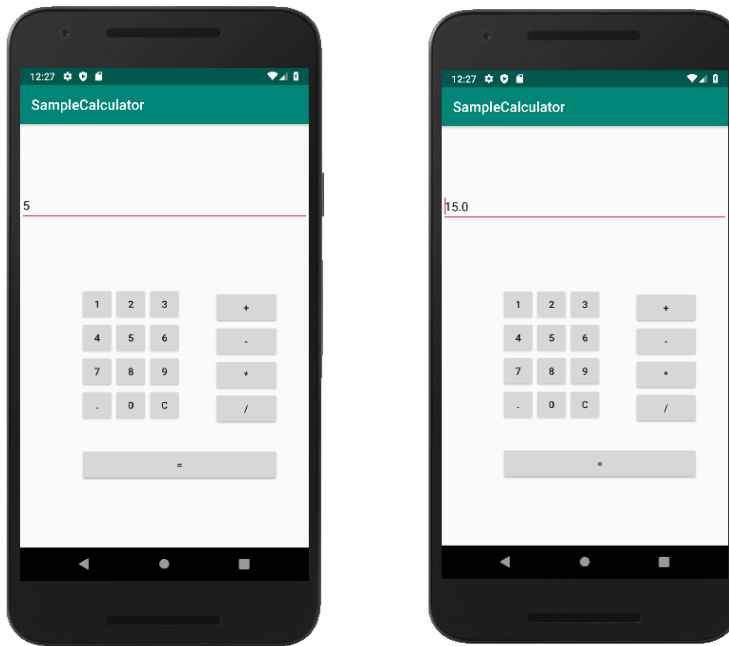
```

        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:





## MAD LAB CYCLE -2

1. Create 2 Activities from 1st Activity on click move to 2nd activity (Using Intent)

Program code:

Xml code

Activity\_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/activity_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="First Activity"
        android:textStyle="bold"
        android:layout_marginTop="10dp"
        android:textAlignment="center"
        style="@style/Animation.AppCompat.Dialog"
        android:textSize="30dp"/>
    <Button
        android:text="Click Me"
        android:layout_width="match_parent"
```

```

        android:layout_height="wrap_content"
        android:id="@+id/button"
        android:onClick="click"
        android:textStyle="bold"
        android:layout_marginTop="200dp"
        android:background="#34eb3a"
        android:textSize="30dp"/>
</LinearLayout>

```

### Activity2 main.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/activity_main2"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Second Activity"
        android:textStyle="bold"
        android:layout_marginTop="10dp"
        android:textSize="30dp"
        android:textAlignment="center"/>
    <Button
        android:text="Go Back"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/button2"
        android:onClick="clickback"
        android:textSize="30dp"
        android:background="#34eb3a"
        android:layout_marginTop="200dp"/>
</LinearLayout>

```

## Java

### Activity main.java:

```

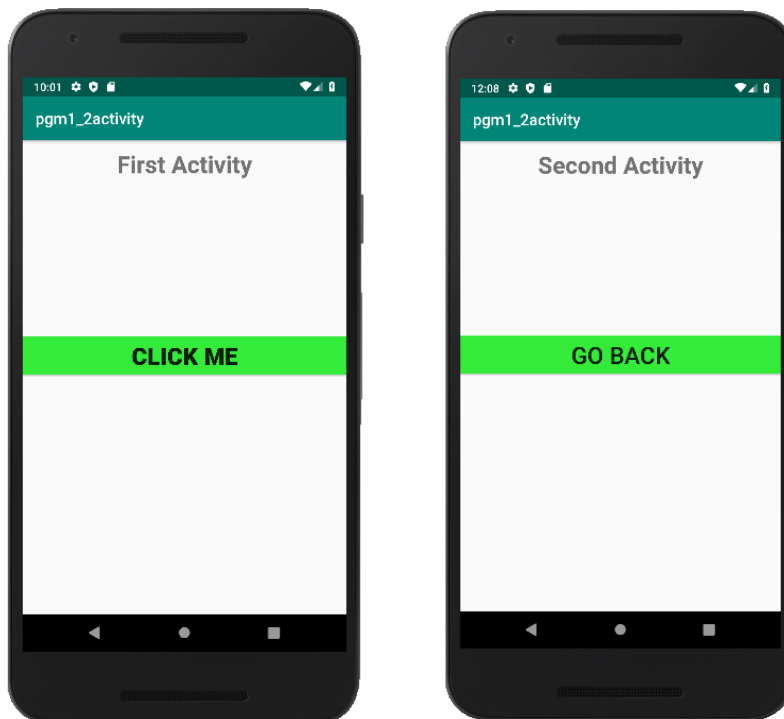
package com.example.sjcet.pgm1_2activity;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void click(View view) {
        Intent intent = new Intent(MainActivity.this, Main2Activity.class);
        startActivity(intent);
    }
}

```

### Activity2 main.java:

```
package com.example.sjcet.pgm1_2activity;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
public class Main2Activity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
    }
    public void clickback(View view) {
        Intent intent = new Intent(Main2Activity.this, MainActivity.class);
        startActivity(intent);
    }
}
```

### Output



2. Create an Activity and move to facebook login page on a button click (making use of Intent).

Program code:

#### Xml code

##### Activity\_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    xmlns:android="http://schemas.android.com/apk/res/android">
    <Button
        android:onClick="click"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Facebook login"
        android:layout_centerInParent="true"
        android:textAlignment="center"
        android:layout_gravity="center"
        android:background="#006aff"
        android:textColor="#fff"/>
</LinearLayout>
```

#### Java

##### Activity\_main.java:

```
package com.example.sjcet.pgm2_fbpage;
import android.content.Intent;
import android.net.Uri;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

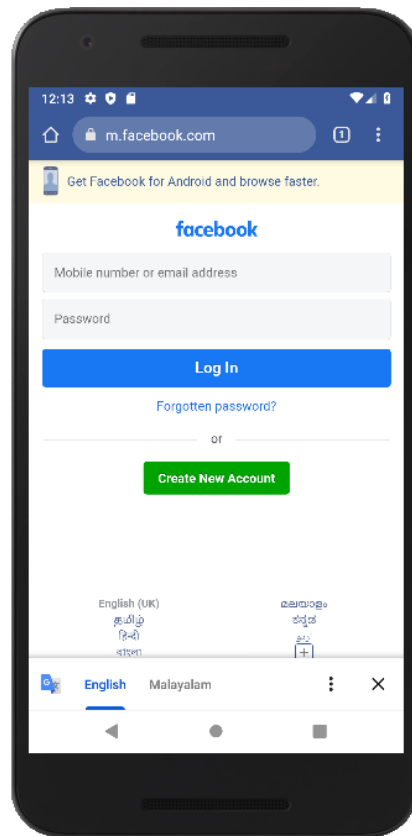
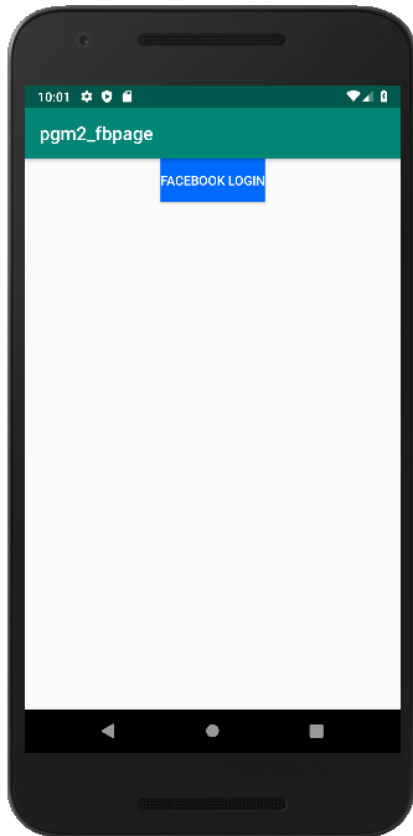


```

}
public void click(View view) {
    String url = "https://www.facebook.com";
    Intent i = new Intent(Intent.ACTION_VIEW);
    i.setData(Uri.parse(url));
    startActivity(i);
}
}

```

## Output



3. Read message from 1st Activity and pass it onto the 2nd Activity on a button click.

### Xml code

#### Activity main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/activity_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="First Activity"
        android:textStyle="bold"
        android:layout_marginTop="10dp"
        android:textAlignment="center"
        android:textSize="30dp"/>
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Text"
        android:textColor="#000000"
        android:textSize="20dp"
        android:textStyle="bold"
        android:id="@+id/text" />
    <Button
        android:text="Click here"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/button"
        android:onClick="click"
        android:textStyle="bold"
        android:textSize="30dp"
        android:background="#ff00ae"
        android:textColor="#fff"
        android:layout_gravity="center_vertical" />
</LinearLayout>
```

#### Activity2 main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/activity_main2"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
```

```

<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Second Activity"
    android:textStyle="bold"
    android:layout_marginTop="10dp"
    android:textAlignment="center"
    android:textSize="30dp"/>
<TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:textSize="30dp"
    android:textColor="#000000"
    android:id="@+id/textreceived"
/>
<Button
    android:text="Go Back"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/button2"
    android:textSize="30dp"
    android:background="#ff00ae"
    android:onClick="click"/>
</LinearLayout>

```

## Java

### Activity main.java:

```

package com.example.sjcet.pgm3_copymsg;
import android.content.Intent;
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 text;
    Button clickme;
    String Textthere;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        clickme = findViewById(R.id.button);
        text = findViewById(R.id.text);
        clickme.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Textthere = text.getText().toString();
                Intent intent = new Intent(MainActivity.this, Main2Activity.class);
                intent.putExtra("Text", Textthere);
                startActivity(intent);
            }
        });
    }
}

```

### Activity2 main.java:

```

package com.example.sjcet.pgm3_copymsg;
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;

```

```

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class Main2Activity extends AppCompatActivity {
    TextView textreceived;
    Button button2;
    String text;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        text = getIntent().getExtras().getString("Text");
        textreceived = findViewById(R.id.textreceived);
        textreceived.setText(text);
        button2 = findViewById(R.id.button2);
        button2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(Main2Activity.this, MainActivity.class);
                startActivity(intent);
            }
        });
    }
}

```

## Output

4.Create registration page with full validation and pass the information to the second activity (**using shared preference**)

Mandatory fields : fname,lname,gender,email,phone number,password,dob(date picker)

Program code:

### Xml code

#### Activity main.xml:

```
<ScrollView xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    xmlns:android="http://schemas.android.com/apk/res/android"
    tools:context=".MainActivity">
    <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:padding="10dp">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:background="@color/colorAccent"
            android:text="Register"
            android:textAlignment="center"
            android:textColor="#00ff7"
            android:textSize="15dp"
            android:textStyle="bold" />
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Firstname"
            android:textStyle="bold" />
        <EditText
            android:id="@+id/fname"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:background="#fff"
            android:hint="Enter Firstname" />
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Lastname"
            android:textStyle="bold" />
        <EditText
            android:id="@+id/lname"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:background="#fff"
            android:hint="Enter Lastname" />
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:text="Gender"
            android:textStyle="bold" />
```

```

<RadioGroup
    android:id="@+id/gender"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <RadioButton
        android:id="@+id/male"
        android:layout_width="139dp"
        android:layout_height="22dp"
        android:text="Male" />
    <RadioButton
        android:id="@+id/female"
        android:layout_width="107dp"
        android:layout_height="22dp"
        android:text="Female" />
</RadioGroup>
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Email"
    android:textStyle="bold" />
<EditText
    android:id="@+id/email"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="#fff"
    android:hint="Enter Email" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Phone Number"
    android:textStyle="bold" />
<EditText
    android:id="@+id/phoneno"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="#fff"
    android:hint="Enter Phone Number" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="password"
    android:textStyle="bold" />
<EditText
    android:id="@+id/password"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="#fff"
    android:hint="Enter password" />
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Date of Birth"
    android:textStyle="bold" />
<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <DatePicker
        android:id="@+id/dob"

```

```

        android:layout_width="match_parent"
        android:layout_height="273dp"
        android:datePickerMode="spinner">
    </DatePicker>
</ScrollView>
<Button
    android:id="@+id/btsubmit"
    android:layout_width="match_parent"
    android:layout_height="23dp"
    android:layout_marginTop="10sp"
    android:background="@color/colorAccent"
    android:text="submit"
    android:textColor="#00ff7"
    android:textSize="15dp"
    android:textStyle="bold" />
</LinearLayout>
</ScrollView>

```

### Activity2\_main.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout android:layout_width="match_parent"
    android:layout_height="match_parent"
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_gravity="center">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="25dp"
        android:textColor="#9eff0000"
        android:text="welcome"
        android:textAlignment="center"/>
    <TextView
        android:id="@+id/text_fullname"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="18dp"
        android:textColor="#9e001eff"
        android:text="full_name-"
        android:layout_gravity="center"
        android:textStyle="bold"
        android:layout_margin="20dp"/>
    <TextView
        android:id="@+id/text_email"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:textSize="18dp"
        android:textColor="#9e001eff"
        android:text="email-"
        android:layout_gravity="center"
        android:textStyle="bold"
        android:layout_margin="20dp"/>
    <Button
        android:id="@+id/logout"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Logout"
        android:layout_gravity="center"
        android:layout_margin="20dp"
        android:background="#00e6ff"/>

```

</LinearLayout>

## Java

### Activity main.java:

```
package com.example.sjcet.pgm4_regvalid;
import android.content.Intent;
import android.content.SharedPreferences;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.Toast;
public class MainActivity extends AppCompatActivity {
    EditText firstname, lastname, uemail, uphoneno, upassword;
    RadioGroup gender;
    DatePicker dob;
    Button btnsubmit;
    SharedPreferences sharedPreferences;
    private static final String SHARED_PREF_NAME = "mypref";
    private static final String KEY_NAME = "name";
    private static final String KEY_EMAIL = "email";
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        firstname = findViewById(R.id.fname);
        lastname = findViewById(R.id.lname);
        uemail = findViewById(R.id.email);
        uphoneno = findViewById(R.id.phoneno);
        upassword = findViewById(R.id.password);
        gender = findViewById(R.id.gender);
        dob = findViewById(R.id.dob);
        btnsubmit = findViewById(R.id.btnsubmit);
        sharedPreferences = getSharedPreferences(SHARED_PREF_NAME,MODE_PRIVATE);
        String name = sharedPreferences.getString(KEY_NAME,null);
        if (name != null) {
            Intent intent = new Intent(MainActivity.this,Main2Activity.class);
            startActivity(intent);
        }
        btnsubmit.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                SharedPreferences.Editor editor = sharedPreferences.edit();
                editor.putString(KEY_NAME,firstname.getText().toString());
                editor.putString(KEY_EMAIL,uemail.getText().toString());
                editor.apply();
                Intent intent = new Intent(MainActivity.this,Main2Activity.class);
                startActivity(intent);
                Toast.makeText(MainActivity.this, "", Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```



### Activity2 main.java:

package com.example.sicet.pgm4 regvalid;

```
import android.content.SharedPreferences;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.Toast;
public class Main2Activity extends AppCompatActivity {
    TextView text_fullname,text_email;
    Button logout;
    SharedPreferences sharedPreferences;
    private static final String SHARED_PREF_NAME = "mypref";
    private static final String KEY_NAME = "name";
    private static final String KEY_EMAIL = "email";
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);
        text_email = findViewById(R.id.text_email);
        text_fullname = findViewById(R.id.text_fullname);
        logout = findViewById(R.id.logout);
        sharedPreferences = getSharedPreferences(SHARED_PREF_NAME,MODE_PRIVATE);
        String name = sharedPreferences.getString(KEY_NAME,null);
        String email = sharedPreferences.getString(KEY_EMAIL, null);
        if (name != null || email != null){
            text_fullname.setText("Full Name- "+name);
            text_email.setText("Email ID- "+email);
        }
        logout.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                SharedPreferences.Editor editor = sharedPreferences.edit();
                editor.clear();
                editor.commit();
                finish();
                Toast.makeText(Main2Activity.this,"logged out
successfully",Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```

### Output

# MAD – CYCLE 3

1.Design a simple login page using Relative layout

**activity\_main.xml**

```
<?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/activity_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#00CC99">

    <EditText
        android:id="@+id/text1"
        android:hint="Username"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="150dp"
        android:layout_marginLeft="18dp"
        android:layout_marginRight="18dp"
        android:padding="8dp"
        android:background="#fff" />
```

```

<EditText
    android:id="@+id/text2"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginLeft="18dp"
    android:layout_marginRight="18dp"
    android:padding="8dp"
    android:background="#fff"
    android:hint="Password"
    android:layout_marginTop="12dp"
    android:layout_below="@+id/text1" />

<Button
    android:id="@+id/b1"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Login"
    android:textColor="#00CC99"
    android:layout_below="@+id/text2"
    android:layout_marginTop="17dp"
    android:layout_alignStart="@+id/text2"
    android:layout_alignEnd="@+id/text2" />

<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/text3"
    android:textColor="#fff"
    android:text="Not a member?Sign up now"
    android:layout_below="@+id/b1"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="34dp" />
</RelativeLayout>

```

## **MainActivity.java**

```

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}

```

## **2.Array adapter with list view**

### **Activity\_main.xml**

```

<?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:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

```

```

    <ListView
        android:id="@+id/simpleListView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />

```

```

</RelativeLayout>

```

## Layout.xml

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">

```

```

    <TextView
        android:id="@+id/itemTextView"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center" />

```

```

</LinearLayout>

```

## MainActivity.java

```

import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import androidx.appcompat.app.AppCompatActivity;

```

```

public class MainActivity extends AppCompatActivity {

```

```

    ListView simpleListView;

```

```

    // array objects

```

```

    String courseList[] = {"C-Programming", "Data Structure", "Database", "Python",
                           "Java", "Operating System", "Compiler

```

```

    Design", "Android Development"};

```

```

    @Override

```

```

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

```

```

        simpleListView = (ListView) findViewById(R.id.simpleListView);
    }
}

```

```

        ArrayAdapter<String> arrayAdapter = new ArrayAdapter<String>(this,
            R.layout.item_view, R.id.itemTextView, courseList);
        simpleListView.setAdapter(arrayAdapter);
    }
}

```

3. Develop an application that toggle image using frame layout

### **Mainactivity.xml**

```

<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent">

```

```

    <ImageView
        android:id="@+id/imageview"
        android:layout_width="fill_parent"
        android:layout_height="fill_parent"
        android:scaleType="fitCenter"
        android:src="@drawable/piq1" />

```

```

    <Button
        android:id="@+id/next"
        android:layout_width="wrap_content"
        android:layout_height="30dp"
        android:layout_marginBottom="15dp"
        android:layout_marginRight="10dp"
        android:layout_gravity="bottom|right"
        android:paddingTop="2dp"
        android:paddingBottom="2dp"
        android:background="@drawable/buttonback"
        android:textColor="#000000"
        android:text="Next" />

```

```

</FrameLayout>

```

### **MainActivity.java**

```

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;

```

```

public class Piqlout extends Activity {

```

```

    @Override

```

```

    protected void onCreate(Bundle savedInstanceState) {
        // TODO Auto-generated method stub
        super.onCreate(savedInstanceState);
        setContentView(R.layout.piq);

```

```

        Button next= (Button) findViewById(R.id.next);

```

```

if (next.getText().equals("Next")) {
    next.setOnClickListener(new View.OnClickListener() {

        @Override
        public void onClick(View v) {
            // TODO Auto-generated method stub
            ImageView img = (ImageView) findViewById(R.id.imageview);

            img.setImageResource(R.drawable.piq2);
            Button next= (Button) findViewById(R.id.next);
            next.setText("Prev");

        }
    });
}
if (next.getText().equals("Prev")){
    next.setOnClickListener(new View.OnClickListener() {

        @Override
        public void onClick(View v) {
            // TODO Auto-generated method stub

            ImageView img = (ImageView) findViewById(R.id.imageview);
            img.setImageResource(R.drawable.piq1);
            Button next= (Button) findViewById(R.id.next);
            next.setText("Next");

        }
    });
}
}

```

#### 4.Demonstrate activity lifecycle

##### **Mainactivity.xml**

```

<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
    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"
    tools:context="example.javatpoint.com.activitylifecycle.MainActivity">

```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Hello World!"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
```

```
</android.support.constraint.ConstraintLayout>
```

## **MainActivity.java**

```
package example.javatpoint.com.activitylifecycle;
```

```
import android.app.Activity;
```

```
import android.os.Bundle;
```

```
import android.util.Log;
```

```
public class MainActivity extends Activity {
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        setContentView(R.layout.activity_main);
```

```
        Log.d("lifecycle", "onCreate invoked");
```

```
    }
```

```
    @Override
```

```
    protected void onStart() {
```

```
        super.onStart();
```

```
        Log.d("lifecycle", "onStart invoked");
```

```
    }
```

```
    @Override
```

```
    protected void onResume() {
```

```
        super.onResume();
```

```
        Log.d("lifecycle", "onResume invoked");
```

```
    }
```

```
    @Override
```

```
    protected void onPause() {
```

```
        super.onPause();
```

```
        Log.d("lifecycle", "onPause invoked");
```

```
    }
```

```
    @Override
```

```
    protected void onStop() {
```

```
        super.onStop();
```

```
        Log.d("lifecycle", "onStop invoked");
```

```
    }
```

```
    @Override
```

```
    protected void onRestart() {
```

```
        super.onRestart();
```

```
        Log.d("lifecycle", "onRestart invoked");
```

```
    }
```

```

@Override
protected void onDestroy() {
    super.onDestroy();
    Log.d("lifecycle", "onDestroy invoked");
}
}

```

5. Taking camera with list view

### Mainactivity.xml

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="https://schemas.android.com/apk/res/android"
    xmlns:app="https://schemas.android.com/apk/res-auto"
    xmlns:tools="https://schemas.android.com/tools"
    android:id="@+id/content_main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingBottom="@dimen/activity_vertical_margin"
    android:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:background="#000000"
    app:layout_behavior="@string/appbar_scrolling_view_behavior"
    tools:context="com.journaldev.imagepicker.MainActivity"
    tools:showIn="@layout/activity_main">

    <RelativeLayout
        android:layout_width="250dp"
        android:layout_height="250dp"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"
        android:background="@drawable/image_border"
        android:clickable="true"
        android:orientation="vertical">

        <ImageView
            android:id="@+id/imageView"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:adjustViewBounds="true"
            android:scaleType="centerCrop" />

    </RelativeLayout>

    <de.hdodenhof.circleimageview.CircleImageView
        android:id="@+id/img_profile"
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_gravity="center_horizontal"
        android:src="@drawable/profile"

```



```

app:civ_border_width="5dp"
app:civ_border_color="#FFFFFF"
android:layout_alignParentBottom="true"
android:layout_centerHorizontal="true" />

```

```
</RelativeLayout>
```

## **MainActivity.java**

```
public class MainActivity extends AppCompatActivity {
```

```

    Bitmap myBitmap;
    Uri picUri;

```

```

    private ArrayList permissionsToRequest;
    private ArrayList permissionsRejected = new ArrayList();
    private ArrayList permissions = new ArrayList();

```

```
    private final static int ALL_PERMISSIONS_RESULT = 107;
```

```
    @Override
```

```

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
        setSupportActionBar(toolbar);

```

```

        FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
        fab.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                startActivityForResult(getPickImageChooserIntent(), 200);
            }
        });

```

```

        permissions.add(CAMERA);
        permissionsToRequest = findUnAskedPermissions(permissions);
        //get the permissions we have asked for before but are not granted..
        //we will store this in a global list to access later.

```

```
        if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
```

```

            if (permissionsToRequest.size() > 0)
                requestPermissions(permissionsToRequest.toArray(new
String[permissionsToRequest.size()]), ALL_PERMISSIONS_RESULT);
        }
    }
}

```

```

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.menu_main, menu);
    return true;
}

@Override
public boolean onOptionsItemSelected(MenuItem item) {
    // Handle action bar item clicks here. The action bar will
    // automatically handle clicks on the Home/Up button, so long
    // as you specify a parent activity in AndroidManifest.xml.
    int id = item.getItemId();

    //noinspection SimplifiableIfStatement
    if (id == R.id.action_settings) {
        return true;
    }

    return super.onOptionsItemSelected(item);
}

/**
 * Create a chooser intent to select the source to get image from.<br />
 * The source can be camera's (ACTION_IMAGE_CAPTURE) or gallery's
 (ACTION_GET_CONTENT).<br />
 * All possible sources are added to the intent chooser.
 */
public Intent getPickImageChooserIntent() {

    // Determine Uri of camera image to save.
    Uri outputFileUri = getCaptureImageOutputUri();

    List allIntents = new ArrayList();
    PackageManager packageManager = getPackageManager();

    // collect all camera intents
    Intent captureIntent = new
Intent(android.provider.MediaStore.ACTION_IMAGE_CAPTURE);
    List listCam = packageManager.queryIntentActivities(captureIntent, 0);
    for (ResolveInfo res : listCam) {
        Intent intent = new Intent(captureIntent);
        intent.setComponent(new ComponentName(res.activityInfo.packageName,
res.activityInfo.name));
        intent.setPackage(res.activityInfo.packageName);
        if (outputFileUri != null) {
            intent.putExtra(MediaStore.EXTRA_OUTPUT, outputFileUri);
        }
    }
}

```

```

        allIntents.add(intent);
    }

    // collect all gallery intents
    Intent galleryIntent = new Intent(Intent.ACTION_GET_CONTENT);
    galleryIntent.setType("image/*");
    List listGallery = packageManager.queryIntentActivities(galleryIntent, 0);
    for (ResolveInfo res : listGallery) {
        Intent intent = new Intent(galleryIntent);
        intent.setComponent(new ComponentName(res.activityInfo.packageName,
res.activityInfo.name));
        intent.setPackage(res.activityInfo.packageName);
        allIntents.add(intent);
    }

    // the main intent is the last in the list (fucking android) so pickup the useless one
    Intent mainIntent = allIntents.get(allIntents.size() - 1);
    for (Intent intent : allIntents) {
        if
(intent.getComponent().getClassName().equals("com.android.documentsui.DocumentsActivi
ty")) {
            mainIntent = intent;
            break;
        }
    }
    allIntents.remove(mainIntent);

    // Create a chooser from the main intent
    Intent chooserIntent = Intent.createChooser(mainIntent, "Select source");

    // Add all other intents
    chooserIntent.putExtra(Intent.EXTRA_INITIAL_INTENTS, allIntents.toArray(new
Parcelable[allIntents.size()]));

    return chooserIntent;
}

/**
 * Get URI to image received from capture by camera.
 */
private Uri getCaptureImageOutputUri() {
    Uri outputFileUri = null;
    File getImage = getExternalCacheDir();
    if (getImage != null) {
        outputFileUri = Uri.fromFile(new File(getImage.getPath(), "profile.png"));
    }
    return outputFileUri;
}

```

```

@Override
protected void onActivityResult(int requestCode, int resultCode, Intent data) {

    Bitmap bitmap;
    if (resultCode == Activity.RESULT_OK) {

        ImageView imageView = (ImageView) findViewById(R.id.imageView);

        if (getPickImageResultUri(data) != null) {
            picUri = getPickImageResultUri(data);

            try {
                myBitmap = MediaStore.Images.Media.getBitmap(this.getContentResolver(),
picUri);
                myBitmap = rotateImageIfRequired(myBitmap, picUri);
                myBitmap = getResizedBitmap(myBitmap, 500);

                CircleImageView croppedImageView = (CircleImageView)
findViewById(R.id.img_profile);
                croppedImageView.setImageBitmap(myBitmap);
                imageView.setImageBitmap(myBitmap);

            } catch (IOException e) {
                e.printStackTrace();
            }

        } else {

            bitmap = (Bitmap) data.getExtras().get("data");

            myBitmap = bitmap;
            CircleImageView croppedImageView = (CircleImageView)
findViewById(R.id.img_profile);
            if (croppedImageView != null) {
                croppedImageView.setImageBitmap(myBitmap);
            }

            imageView.setImageBitmap(myBitmap);

        }

    }

}

private static Bitmap rotateImageIfRequired(Bitmap img, Uri selectedImage) throws
IOException {

```

```

        ExifInterface ei = new ExifInterface(selectedImage.getPath());
        int orientation = ei.getAttributeInt(ExifInterface.TAG_ORIENTATION,
        ExifInterface.ORIENTATION_NORMAL);

        switch (orientation) {
            case ExifInterface.ORIENTATION_ROTATE_90:
                return rotateImage(img, 90);
            case ExifInterface.ORIENTATION_ROTATE_180:
                return rotateImage(img, 180);
            case ExifInterface.ORIENTATION_ROTATE_270:
                return rotateImage(img, 270);
            default:
                return img;
        }
    }

    private static Bitmap rotateImage(Bitmap img, int degree) {
        Matrix matrix = new Matrix();
        matrix.postRotate(degree);
        Bitmap rotatedImg = Bitmap.createBitmap(img, 0, 0, img.getWidth(), img.getHeight(),
matrix, true);
        img.recycle();
        return rotatedImg;
    }

    public Bitmap getResizedBitmap(Bitmap image, int maxSize) {
        int width = image.getWidth();
        int height = image.getHeight();

        float bitmapRatio = (float) width / (float) height;
        if (bitmapRatio > 0) {
            width = maxSize;
            height = (int) (width / bitmapRatio);
        } else {
            height = maxSize;
            width = (int) (height * bitmapRatio);
        }
        return Bitmap.createScaledBitmap(image, width, height, true);
    }

    /**
     * Get the URI of the selected image from {@link #getPickImageChooserIntent()}.<br />
     * Will return the correct URI for camera and gallery image.
     *
     * @param data the returned data of the activity result
     */
    public Uri getPickImageResultUri(Intent data) {
        boolean isCamera = true;
        if (data != null) {

```

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        String action = data.getAction();
        isCamera = action != null &&
action.equals(MediaStore.ACTION_IMAGE_CAPTURE);
    }

    return isCamera ? getCaptureImageOutputUri() : data.getData();
}

@Override
protected void onSaveInstanceState(Bundle outState) {
    super.onSaveInstanceState(outState);

    // save file url in bundle as it will be null on screen orientation
    // changes
    outState.putParcelable("pic_uri", picUri);
}

@Override
protected void onRestoreInstanceState(Bundle savedInstanceState) {
    super.onRestoreInstanceState(savedInstanceState);

    // get the file url
    picUri = savedInstanceState.getParcelable("pic_uri");
}

private ArrayList findUnAskedPermissions(ArrayList wanted) {
    ArrayList result = new ArrayList();

    for (String perm : wanted) {
        if (!hasPermission(perm)) {
            result.add(perm);
        }
    }

    return result;
}

private boolean hasPermission(String permission) {
    if (canMakeSmoes()) {
        if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
            return (checkSelfPermission(permission) ==
PackageManager.PERMISSION_GRANTED);
        }
    }
    return true;
}

private void showMessageOKCancel(String message, DialogInterface.OnClickListener
okListener) {

```

```

        new AlertDialog.Builder(this)
            .setMessage(message)
            .setPositiveButton("OK", okListener)
            .setNegativeButton("Cancel", null)
            .create()
            .show();
    }

    private boolean canMakeSmoeres() {
        return (Build.VERSION.SDK_INT > Build.VERSION_CODES.LOLLIPOP_MR1);
    }

    @TargetApi(Build.VERSION_CODES.M)
    @Override
    public void onRequestPermissionsResult(int requestCode, String[] permissions, int[]
grantResults) {

        switch (requestCode) {

            case ALL_PERMISSIONS_RESULT:
                for (String perms : permissionsToRequest) {
                    if (hasPermission(perms)) {

                        } else {

                            permissionsRejected.add(perms);
                        }
                    }

                if (permissionsRejected.size() > 0) {

                    if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
                        if (shouldShowRequestPermissionRationale(permissionsRejected.get(0))) {
                            showMessageOKCancel("These permissions are mandatory for the
application. Please allow access.",
                                new DialogInterface.OnClickListener() {
                                    @Override
                                    public void onClick(DialogInterface dialog, int which) {
                                        if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M)
{

                                            //Log.d("API123", "permissionrejected " +
permissionsRejected.size());

                                            requestPermissions(permissionsRejected.toArray(new
String[permissionsRejected.size()]), ALL_PERMISSIONS_RESULT);
                                        }
                                    }
                                }
                            ));
                }
            }
        }
    }

```

```
        return;
    }
}

break;
}
}
```