Cacl

XML Code

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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"
    android:textAlignment="center"
    android:textDirection="firstStrong"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/btn_dot"
        android:layout_width="86dp"
        android:layout_height="49dp"
        android:text="."
        android:textSize="24sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.89" />

    <Button
        android:id="@+id/btn_eight"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="8"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.543" />

    <Button
        android:id="@+id/btn_seven"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="7"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.157"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.543" />

    <Button
        android:id="@+id/btn_nine"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="9"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.869"
```

```xml
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.543" />

    <Button
        android:id="@+id/btn_two"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="2"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.651" />

    <Button
        android:id="@+id/btn_one"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="1"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.157"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.661" />

    <Button
        android:id="@+id/btn_three"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="3"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.869"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.661" />

    <Button
        android:id="@+id/btn_five"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="5"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.777" />

    <Button
        android:id="@+id/btn_multi"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="*"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.904"
```

```xml
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.428" />

    <Button
        android:id="@+id/btn_minus"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="-"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.544"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.428" />

    <Button
        android:id="@+id/btn_four"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="4"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.157"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.777" />

    <Button
        android:id="@+id/btn_eql"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="="
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.869"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.32" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="CALCULATOR"
        android:textColor="#E64A19"
        android:textSize="34sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.023" />

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Result"
        android:textAlignment="center"
```

```xml
        android:textSize="24sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.098"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.145" />

    <EditText
        android:id="@+id/ET_Result"
        android:layout_width="227dp"
        android:layout_height="111dp"
        android:ems="10"
        android:hint="Enter Number"
        android:inputType="textPersonName"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.831"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.112" />

    <Button
        android:id="@+id/btn_plus"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="+"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.157"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.446" />

    <Button
        android:id="@+id/btn_six"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="6"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.886"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.777" />

    <Button
        android:id="@+id/btn_zero"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="0"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.16"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.89" />

    <Button
        android:id="@+id/btn_divide"
```

```xml
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="/"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.145"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.336" />

    <Button
            android:id="@+id/btn_clear"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="C"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.867"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.888" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

JAVA Code

```java
package com.example.calculator;

import android.annotation.SuppressLint;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import androidx.appcompat.app.AppCompatActivity;

public class
MainActivity extends AppCompatActivity {
    Button b1,b2,b3,b4,b5,b6,b7,b8,b9,b0,bdot,bcl,bplus,bminus,bmulti,bdiv,beql;
    EditText ET_Result;
    Float v1, v2;
    Boolean add,sub,multi,div;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        b1 = (Button)findViewById(R.id.btn_one);
        b2 = (Button) findViewById(R.id.btn_two);
        b3= (Button)findViewById(R.id.btn_three);
        b4=(Button)findViewById(R.id.btn_four);
        b5=(Button)findViewById(R.id.btn_five);
        b6=(Button) findViewById(R.id.btn_six);
        b7=(Button)findViewById(R.id.btn_seven);
        b8=(Button)findViewById(R.id.btn_eight);
        b9=(Button)findViewById(R.id.btn_nine);
        b0=(Button)findViewById(R.id.btn_zero);
        bdot=(Button)findViewById(R.id.btn_dot);
        bcl=(Button)findViewById(R.id.btn_clear);
        bplus = (Button) findViewById(R.id.btn_plus);
        bminus = (Button) findViewById(R.id.btn_minus);
        bmulti = (Button) findViewById(R.id.btn_multi);
```

```java
bdiv = (Button) findViewById(R.id.btn_divide);
beql = (Button) findViewById(R.id.btn_eql);
ET_Result = (EditText) findViewById(R.id.ET_Result);
b1.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view) {
        ET_Result.setText(ET_Result.getText()+"1");
    }
});
b2.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view)
    {
        ET_Result.setText(ET_Result.getText()+"2");
    }
});
b3.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view) {
        ET_Result.setText(ET_Result.getText()+"3");
    }
});
b4.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view) {
        ET_Result.setText(ET_Result.getText()+"4");
    }
});
b5.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view) {
        ET_Result.setText(ET_Result.getText()+"5");
    }
});
b6.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view) {
        ET_Result.setText(ET_Result.getText()+"6");
    }
});
b7.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view) {
        ET_Result.setText(ET_Result.getText()+"7");
    }
});
b8.setOnClickListener(new View.OnClickListener() {
    @SuppressLint("SetTextI18n")
    @Override
    public void onClick(View view) {
        ET_Result.setText(ET_Result.getText()+"8");
    }
});
```

```java
        b9.setOnClickListener(new View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {
                ET_Result.setText(ET_Result.getText()+"9");
            }
        });
        b0.setOnClickListener(new View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {
                ET_Result.setText(ET_Result.getText()+"0");
            }
        });
        bdot.setOnClickListener(new View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {
                ET_Result.setText(ET_Result.getText()+".");
            }
        });
        bcl.setOnClickListener(new View.OnClickListener() {
            @SuppressLint("SetTextI18n")
            @Override
            public void onClick(View view) {
                ET_Result.setText(ET_Result.getText()+" ");
            }
        });
        bplus.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

                v1 = Float.parseFloat(ET_Result.getText()+"");
                add = true;
                ET_Result.setText(null);

            }
        });
        bminus.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

                v1 = Float.parseFloat(ET_Result.getText()+"");
                sub = true;
                ET_Result.setText(null);

            }
        });
        bmulti.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

                v1 = Float.parseFloat(ET_Result.getText()+"");
                multi = true;
                ET_Result.setText(null);

            }
        });
        bdiv.setOnClickListener(new View.OnClickListener() {
            @Override
```

```java
        public void onClick(View view) {

            v1 = Float.parseFloat(ET_Result.getText()+"");
            div = true;
            ET_Result.setText(null);


        }
    });
    beql.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            v2 = Float.parseFloat(String.valueOf(ET_Result.getText()));
            if (add) {
                ET_Result.setText(v1+v2+"");
                add = false;
            }
             if (sub) {
                ET_Result.setText(v1-v2+"");
                sub = false;
            }
            if (multi) {
                ET_Result.setText(v1*v2+"");
                multi = false;
            }
            if (div) {
                ET_Result.setText(v1/v2+"");
                div = false;
            }
        }
    });
    }
}
```

Counter

```java
package com.example.counter;

import android.os.Bundle;
import android.os.Handler;
import android.os.Message;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    TextView ctr;
    Button start, stop;
    int counter=0;
    boolean running=false;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
```

```java
        start=(Button)findViewById(R.id.btn_start);
        stop=(Button)findViewById(R.id.btn_stop);
        ctr=(TextView)findViewById(R.id.counter);
        start.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                counter=0;
                running=true;
                new MyCounter().start();
            }
        });
        stop.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                running=false;
            }
        });
    }

    Handler handler=new Handler()
    {
        public void handleMessage(Message m)
        {
            ctr.setText(String.valueOf(m.what));
        }
    };

    class MyCounter extends Thread
    {
        public void run()
        {
            while(running)
            {
                counter++;
                handler.sendEmptyMessage(counter);
                try {
                    Thread.sleep(1000);
                }
                catch (Exception e)
                { }
            }
        }
    }
}
```

Wallpaper

```java
package com.example.myapplication;

import android.os.Bundle;
import android.app.WallpaperManager;
import android.graphics.Bitmap;
import android.graphics.BitmapFactory;
import android.graphics.drawable.AnimationDrawable;
import android.graphics.drawable.BitmapDrawable;
import android.graphics.drawable.Drawable;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;
```

```java
import java.io.IOException;
import java.util.Timer;
import java.util.TimerTask;
import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
    Button changewallpaper;
    Timer mytimer;
    Drawable drawable;
    WallpaperManager wpm;
    int id=1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        mytimer = new Timer ();
        wpm = WallpaperManager.getInstance(this);
        changewallpaper = findViewById(R.id.btn_click);
        changewallpaper.setOnClickListener(new View.OnClickListener()
        {
            @Override public void onClick(View view) {
            setWallpaper();
        }
        });
    }
    private void setWallpaper()
    {
        mytimer.schedule(new TimerTask()
        {
            @Override
            public void run() {
                if(id==1) {
                    drawable = getResources().getDrawable(R.drawable.one);
                    id = 2;
                }
                else if(id==2) {
                    drawable = getResources().getDrawable(R.drawable.two); id=3;
                }
                else if(id==3) {
                    drawable = getResources().getDrawable(R.drawable.three); id=4;
                }
                else if(id==4) {
                    drawable = getResources().getDrawable(R.drawable.four); id=5;
                }
                else if(id==5) {
                    drawable = getResources().getDrawable(R.drawable.five); id=1;

                }
                Bitmap wallpaper = ((BitmapDrawable)drawable).getBitmap();
                try {
                    wpm.setBitmap(wallpaper);

                }
                catch (IOException e)
                { e.printStackTrace();
                }
            }
        },0,30000);
```

```
    }
}
```

Signup signin

Activity_Main.XML
```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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"
    android:orientation="vertical"
    tools:context=".Signup">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginStart="95dp"
        android:layout_marginEnd="90dp"
        android:text="Signup Activity"
        android:textColor="@color/black"
        android:textSize="30dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.092" />

    <EditText
        android:id="@+id/username"
        android:layout_width="398dp"
        android:layout_height="100dp"
        android:hint="Username : "
        android:textAlignment="textStart"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.461"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.313" />

    <EditText
        android:id="@+id/password"
        android:layout_width="389dp"
        android:layout_height="85dp"
        android:hint="Password : "
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.272"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/signup"
        android:layout_width="wrap_content"
```

```
            android:layout_height="wrap_content"
            android:layout_marginLeft="150dp"
            android:text="Sign Up"
            app:layout_constraintBottom_toBottomOf="parent"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintHorizontal_bias="0.116"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent"
            app:layout_constraintVertical_bias="0.651" />



</androidx.constraintlayout.widget.ConstraintLayout>
```

Activity_Signin.XML
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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"
    android:orientation="vertical"
    tools:context=".Signin">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginStart="95dp"
        android:layout_marginEnd="90dp"
        android:text="Login Activity"
        android:textColor="@color/black"
        android:textSize="30dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.121" />

    <EditText
        android:id="@+id/username"
        android:layout_width="match_parent"
        android:layout_height="89dp"
        android:hint="Username : "
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="1.0"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.272" />

    <EditText
        android:id="@+id/password"
        android:layout_width="match_parent"
        android:layout_height="102dp"
        android:hint="Password : "
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.0"
        app:layout_constraintStart_toStartOf="parent"
```

```
      app:layout_constraintTop_toTopOf="parent"
      app:layout_constraintVertical_bias="0.481" />

  <Button
      android:id="@+id/login"
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginLeft="150dp"
      android:text="Login"
      app:layout_constraintBottom_toBottomOf="parent"
      app:layout_constraintEnd_toEndOf="parent"
      app:layout_constraintHorizontal_bias="0.021"
      app:layout_constraintStart_toStartOf="parent"
      app:layout_constraintTop_toTopOf="parent"
      app:layout_constraintVertical_bias="0.641" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

Activity_Welcome.XML
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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=".Welcome">

  <TextView
      android:id="@+id/textView"
      android:layout_width="182dp"
      android:layout_height="165dp"
      android:text="WELCOME TO HOME PAGE"
      android:textAlignment="center"
      android:textColor="#D32F2F"
      android:textSize="34sp"
      app:layout_constraintBottom_toBottomOf="parent"
      app:layout_constraintEnd_toEndOf="parent"
      app:layout_constraintHorizontal_bias="0.498"
      app:layout_constraintStart_toStartOf="parent"
      app:layout_constraintTop_toTopOf="parent"
      app:layout_constraintVertical_bias="0.439" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Signup.JAVA
```
package com.example.signup;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.Button;
import android.widget.EditText;
import android.content.Intent;
import android.view.View;
import android.widget.Toast;
import java.util.regex.Pattern;
```

```java
public class Signup extends AppCompatActivity {
    EditText username, pwd;
    Button signup;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        username = (EditText) findViewById(R.id.username);
        pwd = (EditText) findViewById(R.id.password);
        signup = (Button) findViewById(R.id.signup);
        signup.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String email = username.getText().toString();
                String userpwd = pwd.getText().toString();
                if (email.matches("")) {
                    Toast.makeText(Signup.this,          "Username       cannot      be          empty",
Toast.LENGTH_LONG).show();
                    return;
                }
                if (!isvalidPassword(userpwd)) {
                    Toast.makeText(Signup.this, "Invalid Password", Toast.LENGTH_LONG).show();
                    return;
                }
                Intent intent = new Intent(Signup.this, Signin.class);
                intent.putExtra("email", email);
                intent.putExtra("userpwd", userpwd);
                startActivity(intent);
            }
        });
    }
    Pattern lowercase = Pattern.compile("^.*[a-z].*$");
    Pattern uppercase = Pattern.compile("^.*[A-Z].*$");
    Pattern number = Pattern.compile("^.*[0-9].*$");
    Pattern special = Pattern.compile("^.*[@#$%^&*(){},.;/].*$");

    private boolean isvalidPassword(String userpwd) {
        if (userpwd.length() < 8) {
            return false;
        }
        if(!lowercase.matcher(userpwd).matches()){
            return false;
        }
        if(!uppercase.matcher(userpwd).matches()){
            return false;
        }
        if(!number.matcher(userpwd).matches()){
            return false;
        }
        if(!special.matcher(userpwd).matches()){
            return false;
        }
        return true;
    }
}
```

Signin.JAVA
```java
package com.example.signup;
import androidx.appcompat.app.AppCompatActivity;
```

```java
import android.os.Bundle;
import android.content.Intent;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class Signin extends AppCompatActivity {
  EditText eusername, epwd;
   Button login;
   int count=0;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.activity_signin);
      eusername = (EditText) findViewById(R.id.username);
      epwd = (EditText)findViewById(R.id.password);
      login = (Button)findViewById(R.id.login);
      String regemail=getIntent().getStringExtra("email");
      String regpwd=getIntent().getStringExtra("userpwd");
      login.setOnClickListener(new View.OnClickListener() {
         @Override
         public void onClick(View view) {
            String newemail=eusername.getText().toString();
            String newpwd=epwd.getText().toString();
            if(regemail.equals(newemail) && regpwd.equals(newpwd)){
               Toast.makeText(Signin.this, "Login Successful", Toast.LENGTH_LONG).show();
               Intent intent=new Intent(Signin.this,Welcome.class);
               startActivity(intent);
               eusername.setText("");
               epwd.setText("");
            }
            else{
               count++;
               Toast.makeText(Signin.this, "Login Failed "+count, Toast.LENGTH_LONG).show();
               if(count==3)
               {
                  login.setEnabled(false);
                  Toast.makeText(Signin.this, "Login Failed "+count, Toast.LENGTH_LONG).show();
               }
            }
         }
      });

}
}
```

Welcome.JAVA

```java
package com.example.signup;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
```

```java
public class Welcome extends AppCompatActivity {

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

Medicine
Activity_main.xml
```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:layout_marginRight="10dp"
        android:orientation="horizontal">

        <TextView
            android:layout_width="100dp"
            android:layout_height="match_parent"
            android:layout_weight="1"
            android:text="MEDICINE DATABASE"
            android:textAllCaps="false"
            android:textColor="#740D0101"
            android:textSize="20sp" />

    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:layout_marginRight="10dp"
        android:orientation="horizontal">

        <TextView

            android:layout_width="75dp"
            android:layout_height="48dp"
            android:layout_weight="1"
            android:text="Insert"
            android:textAllCaps="false"
            android:textColor="#740D0101"
            android:textSize="20sp" />

        <Switch
            android:id="@+id/switch1"
            android:layout_width="wrap_content"
            android:layout_height="48dp"
            android:layout_weight="1" />
```

```xml
        <TextView
            android:id="@+id/textView4"
            android:layout_width="wrap_content"
            android:layout_height="48dp"
            android:layout_weight="1"
            android:text="Fetch"
            android:textSize="20sp" />
    </LinearLayout>

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:layout_marginRight="10dp"
        android:orientation="horizontal">

        <TextView
            android:id="@+id/medtext"
            android:layout_width="100dp"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Medicine Name"
            android:textAllCaps="false"
            android:textColor="#740D0101"
            android:textSize="24sp" />

        <EditText
            android:id="@+id/medicinename"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:ems="10"
            android:hint="Enter Medicine Name"
            android:textSize="20sp" />
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="10dp"
        android:layout_marginRight="10dp"
        android:orientation="horizontal">
        <TextView
            android:id="@+id/textView3"
            android:layout_width="100dp"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:text="Date"
            android:textAllCaps="false"
            android:textColor="#740D0101"
            android:textSize="24sp" />

        <EditText
            android:id="@+id/date"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_weight="1"
            android:ems="10"
            android:inputType="date"
            android:hint="Enter Date DD/MM/YYYY"
```

```xml
                android:textSize="24sp" />
        </LinearLayout>

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginTop="10dp"
            android:layout_marginRight="10dp"
            android:orientation="horizontal">

            <TextView
                android:layout_width="100dp"
                android:layout_height="wrap_content"
                android:layout_weight="1"
                android:text="Time of the day"
                android:textAllCaps="false"
                android:textColor="#740D0101"
                android:textSize="20sp" />

            <Spinner
                android:id="@+id/spinner"
                android:layout_width="24dp"
                android:layout_height="48dp"
                android:layout_weight="1"
                android:entries="@array/timeoftheday" />
        </LinearLayout>

        <Button
            android:id="@+id/insert"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginTop="10dp"
            android:text="INSERT" />

        <Button
            android:id="@+id/fetch"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:layout_marginTop="10dp"
            android:text="FETCH" />

</LinearLayout>
```

Project Tab->res->values->String.xml (Spinner values)
```xml
<resources>
    <string name="app_name">MedicineReminder</string>
    <string-array name="timeoftheday">
        <item> MORNING </item>
        <item> AFTERNOON </item>
        <item> EVENING </item>
        <item> NIGHT </item>
    </string-array>
</resources>
```

Mainactivity.java
```java
package com.example.medicinereminder;
import android.database.Cursor;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
```

```java
import android.widget.CompoundButton;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.Switch;
import android.widget.TextView;
import android.widget.Toast;
import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;


public class MainActivity extends AppCompatActivity {
    EditText medname,meddate;
    Button insert,fetch;
    Spinner day;
    Switch switch1;
    TextView medtxt;
    DatabaseConnection dbconnection;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        medname=(EditText)findViewById(R.id.medicinename);
        meddate=(EditText)findViewById(R.id.date);
        insert=(Button)findViewById(R.id.insert);
        fetch=(Button)findViewById(R.id.fetch);
        day=(Spinner)findViewById(R.id.spinner);
        switch1=(Switch)findViewById(R.id.switch1);
        medtxt=(TextView)findViewById(R.id.medtext);
        dbconnection=new DatabaseConnection(this);

        fetch.setVisibility(View.INVISIBLE);
        switch1.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(CompoundButton compoundButton, boolean b) {
                if(!b)
                {
                    fetch.setVisibility(View.INVISIBLE);
                    insert.setVisibility(View.VISIBLE);
                    medname.setVisibility(View.VISIBLE);
                    medtxt.setVisibility(View.VISIBLE);
                }
                else{
                    fetch.setVisibility(View.VISIBLE);
                    insert.setVisibility(View.INVISIBLE);
                    medname.setVisibility(View.INVISIBLE);
                    medtxt.setVisibility(View.INVISIBLE);
                }
            }
        });


        insert.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String name=medname.getText().toString();
                String date=meddate.getText().toString();
                String time=day.getSelectedItem().toString();
                boolean insert=dbconnection.insertvalues(name,date,time);
```

```java
            if(insert==true)
            {
                Toast.makeText(getApplicationContext(),                    "Data                    Inserted",
        Toast.LENGTH_LONG).show();
                medname.setText(" ");
                meddate.setText(" ");
            }
            else {
                Toast.makeText(getApplicationContext(),             "Data          Not          Inserted",
        Toast.LENGTH_LONG).show();
            }
        }
    });

    fetch.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String date=meddate.getText().toString();
            String time=day.getSelectedItem().toString();
            String med="";
            Cursor c=dbconnection.FetchData(date,time);
            if(c.moveToFirst()) {
                do {
                    med += (String.valueOf(c.getString(c.getColumnIndexOrThrow("MedicineName"))));
                    med += "\n";
                } while (c.moveToNext());
                Toast.makeText(getApplicationContext(), med, Toast.LENGTH_LONG).show();
            }
            else
                Toast.makeText(getApplicationContext(),          "No          Entries          in          Database",
        Toast.LENGTH_SHORT).show();
        }
    });

  }


}
```

DatabaseConnection.java

```java
package com.example.medicinereminder;
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import androidx.annotation.Nullable;

public class DatabaseConnection extends SQLiteOpenHelper {
    public DatabaseConnection(Context context) {
        super(context, "Medicinedb", null, 1);
    }

    @Override
    public void onCreate(SQLiteDatabase sqLiteDatabase) {
        sqLiteDatabase.execSQL("create Table MDTable(MedicineName Text,date TEXT,time TEXT)");
    }

    @Override
    public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {
```

```java
    }

    public boolean insertvalues(String medname,String meddate,String medtime)
    {
        SQLiteDatabase database=this.getWritableDatabase();
        ContentValues contentValues=new ContentValues();
        contentValues.put("MedicineName",medname);
        contentValues.put("date",meddate);
        contentValues.put("time",medtime);
        long res=database.insert("MDTable",null,contentValues);
        if(res==-1)
            return false;
        else
            return true;
    }

    public Cursor FetchData(String date,String time)
    {
        SQLiteDatabase database=this.getReadableDatabase();
        Cursor  c=database.rawQuery("Select  *  from  MDTable  where  date='"+date+"'  AND
time='"+time+"'",null);
        return c;
    }
}
```