**CYCLE -1**

Q1). Design a Login Form with username and password using LinearLayout and toast valid credentials

Code:

Acitvity\_main.xml

<**RelativeLayout android:layout\_width="match\_parent"**

**xmlns:android="http://schemas.android.com/apk/res/android"**

**android:layout\_height="wrap\_content"**>

<**EditText**

**android:id="@+id/et1"**

**android:hint="username"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"** />

<**EditText**

**android:id="@+id/et2"**

**android:hint="password"**

**android:layout\_below="@id/et1"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"** />

<**LinearLayout**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:orientation="horizontal"**

**android:layout\_below="@id/et2"**>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="cancel"**

**android:layout\_margin="50dp"**/>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="login"**

**android:onClick="Login"**

**android:layout\_margin="50dp"**/>

</**LinearLayout**>

</**RelativeLayout**>

**Java code:**

**Mainactivity.java**

**package** com.example.sjcet.calc;

**import** android.content.Intent;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.EditText;

**import** android.widget.Toast;

**public class** MainActivity **extends** AppCompatActivity {

EditText **usernamedt**;

EditText **passwdedt**;

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

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

}

**public void** Login(View view) {

**usernamedt**=(EditText) findViewById(R.id.***et1***);

**passwdedt**=(EditText) findViewById(R.id.***et2***);

String userName = **usernamedt**.getText().toString();

String password = **passwdedt**.getText().toString();

**if**(userName.equals(**"admin"**) && password.equals(**"admin"**)){

Toast.makeText(this, "login successfull", Toast.LENGTH\_SHORT).show();

}

**else**{

Toast.*makeText*(**this**, **"login failed"**, Toast.***LENGTH\_SHORT***).show();

}

}

}

Q2).Write a program that demonstrates Activity Lifecycle

Code:

Acitvity\_main.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=".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**>

**Java code:**

Mainactivity.java

**package** com.example.sjcet.lifecycle;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.util.Log;

**import** android.widget.Toast;

**public class** MainActivity **extends** AppCompatActivity {

@Override

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

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

*// Log.d("lifecycle","onCreate invoked");*

Toast.*makeText*(**this**, **"onCreate invoked"**, Toast.***LENGTH\_SHORT***).show();

}

**protected void** onStart() {

**super**.onStart();

*// Log.d("lifecycle","onStart invoked");*

Toast.*makeText*(**this**, **"onStart invoked"**, Toast.***LENGTH\_SHORT***).show();

}

**protected void** onResume() {

**super**.onResume();

*//Log.d("lifecycle","onResume invoked");*

Toast.*makeText*(**this**, **"onResume invoked"**, Toast.***LENGTH\_SHORT***).show();

}

**protected void** onPause() {

**super**.onPause();

*// Log.d("lifecycle","onPause invoked");*

Toast.*makeText*(**this**, **"onPause invoked"**, Toast.***LENGTH\_SHORT***).show();

}

**protected void** onStop() {

**super**.onStop();

*//Log.d("lifecycle","onStop invoked");*

Toast.*makeText*(**this**, **"oStop invoked"**, Toast.***LENGTH\_SHORT***).show();

}

**protected void** onRestart() {

**super**.onRestart();

*//Log.d("lifecycle","onRestart invoked");*

Toast.*makeText*(**this**, **"onRestart invoked"**, Toast.***LENGTH\_SHORT***).show();

}

**protected void** onDestroy() {

**super**.onDestroy();

*//Log.d("lifecycle","onDestroy invoked");*

Toast.*makeText*(**this**, **"onDestroy invoked"**, Toast.***LENGTH\_SHORT***).show();

}

}

Qn3).Implementing basic arithmetic operations of a simple calculator

*<?***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=".MainActivity"**>

<**EditText**

**android:id="@+id/n1"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="32dp"**

**android:ems="10"**

**android:hint="number"**

**android:inputType="textPersonName"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"** />

<**EditText**

**android:id="@+id/num2"**

**android:layout\_width="0dp"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="32dp"**

**android:ems="10"**

**android:hint="number"**

**android:inputType="textPersonName"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/n1"** />

<**Button**

**android:id="@+id/b1"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="16dp"**

**android:text="add"**

**android:onClick="sum"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/num2"** />

<**Button**

**android:id="@+id/b2"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="16dp"**

**android:text="diff"**

**android:onClick="diff"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/b1"** />

<**Button**

**android:id="@+id/b3"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="16dp"**

**android:text="mul"**

**android:onClick="mul"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/b2"** />

<**Button**

**android:id="@+id/b4"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="16dp"**

**android:text="div"**

**android:onClick="div"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/b3"** />

<**TextView**

**android:id="@+id/t1"**

**android:layout\_width="0dp"**

**android:layout\_height="18dp"**

**android:layout\_marginTop="32dp"**

**android:text="result"**

**app:layout\_constraintEnd\_toEndOf="parent"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/b4"** />

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

Java Code:

**package** com.example.sjcet.co1\_q3calc;

**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 {

EditText **t1**;

EditText **t2**;

TextView **t3**;

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

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**t1**= (EditText) findViewById(R.id.***n1***);

**t2**=(EditText) findViewById(R.id.***num2***);

**t3**=(TextView) findViewById(R.id.***t1***);

}

**public void** sum(View view) {

**int** x=Integer.*parseInt*(**t1**.getText().toString());

**int** y=Integer.*parseInt*(**t2**.getText().toString());

**int** s=x+y;

**t3**.setText(Integer.*toString*(s));

}

**public void** diff(View view) {

**int** x=Integer.*parseInt*(**t1**.getText().toString());

**int** y=Integer.*parseInt*(**t2**.getText().toString());

**int** s=x-y;

**t3**.setText(Integer.*toString*(s));

}

**public void** mul(View view) {

**int** x=Integer.*parseInt*(**t1**.getText().toString());

**int** y=Integer.*parseInt*(**t2**.getText().toString());

**int** s=x\*y;

**t3**.setText(Integer.*toString*(s));

}

**public void** div(View view) {

**int** x=Integer.*parseInt*(**t1**.getText().toString());

**int** y=Integer.*parseInt*(**t2**.getText().toString());

**int** s=x/y;

**t3**.setText(Integer.*toString*(s));

}

}

4. Implement validations on various UI controls

Code:

Mainacitvity1.xml

<**RelativeLayout android:layout\_width="match\_parent"**

**xmlns:android="http://schemas.android.com/apk/res/android"**

**android:layout\_height="match\_parent"**>

<**EditText**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:hint="name"**

**android:id="@+id/et1"**/>

<**EditText**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:hint="email"**

**android:id="@+id/et2"**

**android:layout\_below="@+id/et1"**/>

<**EditText**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:hint="password"**

**android:id="@+id/et3"**

**android:layout\_below="@+id/et2"**

**android:inputType="textPassword"**/>

<**LinearLayout**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:orientation="vertical"**

**android:layout\_margin="10dp"**

**android:layout\_below="@+id/et3"**

**android:id="@+id/l1"**>

<**CheckBox**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="hindi"**

**android:id="@+id/ck1"**/>

<**CheckBox**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="english"**

**android:id="@+id/ck2"**/>

<**CheckBox**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="other"**

**android:id="@+id/ck3"**/>

<**RadioGroup**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:orientation="vertical"**

**android:id="@+id/rg1"**>

<**RadioButton**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:id="@+id/r1"**

**android:text="male"**/>

<**RadioButton**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:id="@+id/r2"**

**android:text="female"**/>

</**RadioGroup**>

</**LinearLayout**>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:id="@+id/b1"**

**android:text="Register"**

**android:onClick="register"**

**android:layout\_below="@+id/l1"**/>

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="cancel"**

**android:layout\_below="@+id/l1"**

**android:layout\_marginLeft="100dp"**/>

</**RelativeLayout**>

**Java Code:**

mainacivity.java

**package** com.example.sjcet.registrationval;

**import** android.content.Intent;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.CheckBox;

**import** android.widget.EditText;

**import** android.widget.RadioGroup;

**import** android.widget.Toast;

**public class** MainActivity **extends** AppCompatActivity {

EditText **nameedt**;

EditText **emailedt**;

EditText **passedt**;

RadioGroup **rg1**;

CheckBox **ck1**,**ck2**,**ck3**;

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

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

}

**public void** register(View view) {

**nameedt**=(EditText)findViewById(R.id.***et1***);

**emailedt**=(EditText)findViewById(R.id.***et2***);

**passedt**=(EditText)findViewById(R.id.***et3***);

**rg1**=(RadioGroup)findViewById(R.id.***rg1***) ;

**ck1**=(CheckBox)findViewById(R.id.***ck1***);

**ck2**=(CheckBox)findViewById(R.id.***ck2***);

**ck3**=(CheckBox)findViewById(R.id.***ck3***);

String userName = **nameedt**.getText().toString();

String password = **emailedt**.getText().toString();

**if**(checkAll()){

Intent i= **new** Intent(getApplicationContext(),Main2Activity.**class**);

*//Intent.putString(“value1”,nameedt;*

i.putExtra(**"name"**,userName);

startActivity(i);

}

**else**{

Toast.*makeText*(**this**, **"all fields are required!!"**, Toast.***LENGTH\_SHORT***).show();

}

}

**private boolean** checkAll(){í

**if** (**nameedt**.length() == 0){

**nameedt**.setError(**"This field is required"**);

**return false**;

}

**if**(**emailedt**.length() == 0 ){

**emailedt**.setError(**"This field required"**);

**return false**;

}

**if**(**passedt**.length() == 0 ){

**passedt**.setError(**"This field required"**);

**return false**;

}

**if** (**rg1**.getCheckedRadioButtonId() == -1)

{

*//rg1.setError("this field reqiired");*

**return false**;

}

**if**(!(**ck1**.isChecked()||**ck2**.isChecked()||**ck3**.isChecked())){

**return false**;

}

**return true**;

}

}

**CYCLE 2:**

4. Develop an application that toggles image using FrameLayout

<**FrameLayout android:layout\_width="match\_parent"**

**xmlns:android="http://schemas.android.com/apk/res/android"**

**android:layout\_height="match\_parent"**

**android:id="@+id/framelayout"**>

<**ImageView**

**android:id="@+id/imageview"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:scaleType="fitCenter"**

**android:src="@drawable/ones"**/>

<**Button**

**android:id="@+id/b1"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:onClick="click"**

**android:text="toggle image"**/>

</**FrameLayout**>

JAVA CODE:

**package** com.example.sjcet.cycle2\_4;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.ImageView;

**public class** MainActivity **extends** AppCompatActivity {

ImageView **img**;

**boolean onclick**=**false**;

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

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

}

**public void** click(View view) {

ImageView img = (ImageView)findViewById(R.id.***imageview***);

**if**(!**onclick**)

{

img.setImageResource(R.drawable.***ones***);

**onclick**=**true**;

}

**else if**(**onclick**)

{

img.setImageResource(R.drawable.***two***);

**onclick**=**false**;

}

}

}

Output:



1.Design a registration activity and store registration details in local memory of phone

using Intents and SharedPreferences

<**RelativeLayout android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**xmlns:android="http://schemas.android.com/apk/res/android"**>

<**EditText**

**android:id="@+id/et1"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="22dp"**

**android:hint="username"**/>

<**EditText**

**android:id="@+id/et2"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_alignEnd="@id/et1"**

**android:layout\_alignRight="@id/et1"**

**android:layout\_marginTop="105dp"**

**android:layout\_marginEnd="31dp"**

**android:layout\_marginRight="31dp"**

**android:hint="password"**/>

</**RelativeLayout**>

**Java code**

**package** com.example.sjcet.co2qn1;

**import** android.content.Context;

**import** android.content.SharedPreferences;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.widget.EditText;

**public class** MainActivity **extends** AppCompatActivity {

EditText **et1**,**et2**;

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

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**et1**=(EditText)findViewById(R.id.***et1***);

**et2**=(EditText)findViewById(R.id.***et2***);

}

**protected void** onStop()

{

**super**.onStop();

SharedPreferences mypref=getSharedPreferences(**"myperselfie"**,0);

SharedPreferences.Editor editor=mypref.edit();

editor.putString(**"user"**,**et1**.getText().toString());

editor.putString(**"pass"**,**et2**.getText().toString());

editor.commit();

}

@Override

**protected void** onResume(){

**super**.onResume();

SharedPreferences mypref=getSharedPreferences(**"mypreselfie"**,0);

String username=mypref.getString(**"user"**,**null**);

String password=mypref.getString(**"pass"**,**null**);

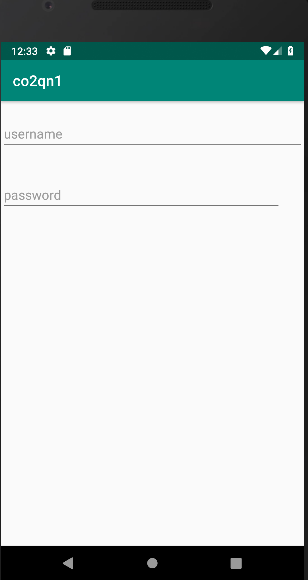
**et1**.setText(username);

**et2**.setText(password);

}

}

OUTPUT:



2. Design a simple Calculator using GridLayout and Cascaded LinearLayout

*<?***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:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:orientation="vertical"**

**tools:context=".MainActivity"**>

<**HorizontalScrollView**

**android:layout\_width="match\_parent"**

**android:layout\_height="0dp"**

**android:layout\_weight="1"**>

<**LinearLayout**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:orientation="vertical"**>

<**TextView**

**android:id="@+id/showValues"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:textSize="50dp"** />

<**TextView**

**android:id="@+id/showResults"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:textSize="100dp"** />

</**LinearLayout**>

</**HorizontalScrollView**>

<**GridLayout**

**android:layout\_width="match\_parent"**

**android:layout\_height="0dp"**

**android:layout\_weight="2"**

**android:columnCount="4"**

**android:orientation="horizontal"**

**android:rowCount="5"**

**android:useDefaultMargins="true"**>

<**Button**

**android:id="@+id/delete"**

**android:layout\_columnSpan="4"**

**android:text="C"** />

<**Button**

**android:id="@+id/b1"**

**android:text="1"** />

<**Button**

**android:id="@+id/b2"**

**android:text="2"** />

<**Button**

**android:id="@+id/b3"**

**android:text="3"** />

<**Button**

**android:id="@+id/divide"**

**android:text="/"** />

<**Button**

**android:id="@+id/b4"**

**android:text="4"** />

<**Button**

**android:id="@+id/b5"**

**android:text="5"** />

<**Button**

**android:id="@+id/b6"**

**android:text="6"** />

<**Button**

**android:id="@+id/multiply"**

**android:text="\*"** />

<**Button**

**android:id="@+id/b7"**

**android:text="7"** />

<**Button**

**android:id="@+id/b8"**

**android:text="8"** />

<**Button**

**android:id="@+id/b9"**

**android:text="9"** />

<**Button**

**android:id="@+id/subtract"**

**android:text="-"** />

<**Button**

**android:id="@+id/bpoint"**

**android:text="."** />

<**Button**

**android:id="@+id/b0"**

**android:text="0"** />

<**Button**

**android:id="@+id/equal"**

**android:text="="** />

<**Button**

**android:id="@+id/add"**

**android:text="+"** />

</**GridLayout**>

</**LinearLayout**>

JAVA CODE:

**package** com.example.sjcet.co2q2;

**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 **number**, **values**;

**double num1**=0, **num2**=0, **ans** = 0;

**boolean add**, **minus**, **product**, **divide**, **decimal**;

Button **b1**, **b2**, **b3**, **b4**, **b5**, **b6**, **b7**, **b8**, **b9**, **b0**, **sum**, **sub**, **mul**, **div**, **deci**, **equal**, **clear**;

@Override

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

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**number** = findViewById(R.id.***showResults***);

**values** = findViewById(R.id.***showValues***);

**b0** = findViewById(R.id.***b0***);

**b1** = findViewById(R.id.***b1***);

**b2** = findViewById(R.id.***b2***);

**b3** = findViewById(R.id.***b3***);

**b4** = findViewById(R.id.***b4***);

**b5** = findViewById(R.id.***b5***);

**b6** = findViewById(R.id.***b6***);

**b7** = findViewById(R.id.***b7***);

**b8** = findViewById(R.id.***b8***);

**b9** = findViewById(R.id.***b9***);

**sum** = findViewById(R.id.***add***);

**sub** = findViewById(R.id.***subtract***);

**mul** = findViewById(R.id.***multiply***);

**div** = findViewById(R.id.***divide***);

**deci** = findViewById(R.id.***bpoint***);

**equal** = findViewById(R.id.***equal***);

**clear** = findViewById(R.id.***delete***);

**b0**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"0"**);

}

});

**b1**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"1"**);

}

});

**b2**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"2"**);

}

});

**b3**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"3"**);

}

});

**b4**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"4"**);

}

});

**b5**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"5"**);

}

});

**b6**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"6"**);

}

});

**b7**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"7"**);

}

});

**b8**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"8"**);

}

});

**b9**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"9"**);

}

});

**deci**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**number**.getText() + **"."**);

}

});

**clear**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**number**.setText(**""**);

**values**.setText(**""**);

}

});

**sum**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**if** (**number**.getText() != **null**) {

**num1** = Float.*parseFloat*(**number**.getText() + **""**);

**add** = **true**;

}

**values**.setText(**number**.getText() + **" +"**);

**number**.setText(**null**);

}

});

**sub**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**if** (**number**.getText() != **null**) {

**num1** = Float.*parseFloat*(**number**.getText() + **""**);

**minus** = **true**;

}

**values**.setText(**number**.getText() + **" -"**);

**number**.setText(**null**);

}

});

**mul**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**if** (**number**.getText() != **null**) {

**num1** = Float.*parseFloat*(**number**.getText() + **""**);

**product** = **true**;

}

**values**.setText(**number**.getText() + **" \*"**);

**number**.setText(**null**);

}

});

**div**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**if** (**number**.getText() != **null**) {

**num1** = Float.*parseFloat*(**number**.getText() + **""**);

**divide** = **true**;

}

**values**.setText(**number**.getText() + **" /"**);

**number**.setText(**null**);

}

});

**equal**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

**if** (**add** == **true** || **minus** == **true** || **product** == **true** || **divide** == **true**) {

**if** (**number**.getText() != **null** ) {

**num2** = Float.*parseFloat*(**number**.getText() + **""**);

**values**.setText(**values**.getText() + **" "** + **number**.getText());

**if** (**add** == **true**)

**ans** = **num1** + **num2**;

**add** = **false**;

**if** (**minus** == **true**)

**ans** = **num1** - **num2**;

**minus** = **false**;

**if** (**product** == **true**)

**ans** = **num1** \* **num2**;

**product** = **false**;

**if** (**divide** == **true**)

**ans** = **num1** / **num2**;

**divide** = **false**;

**number**.setText(**ans** + **""**);

**num2** = **ans**;

**num1** = 0;

}

}

}

});

}

}