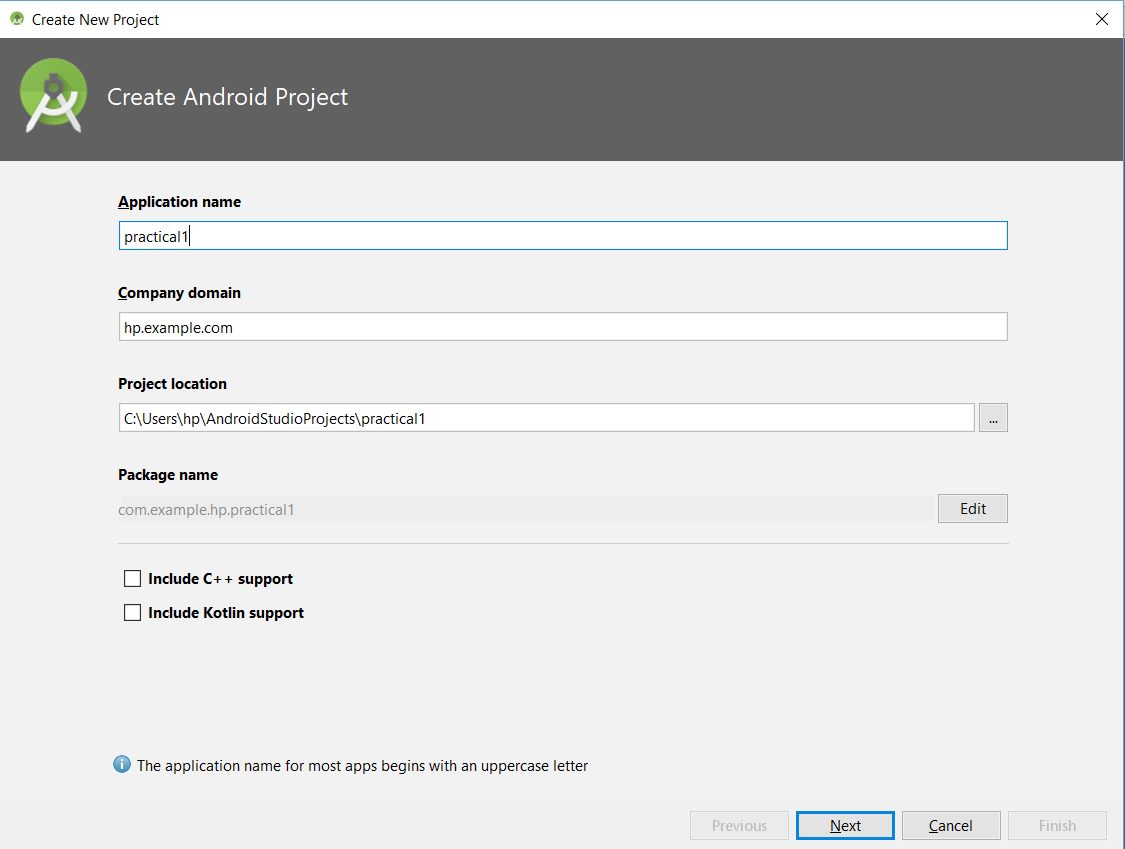
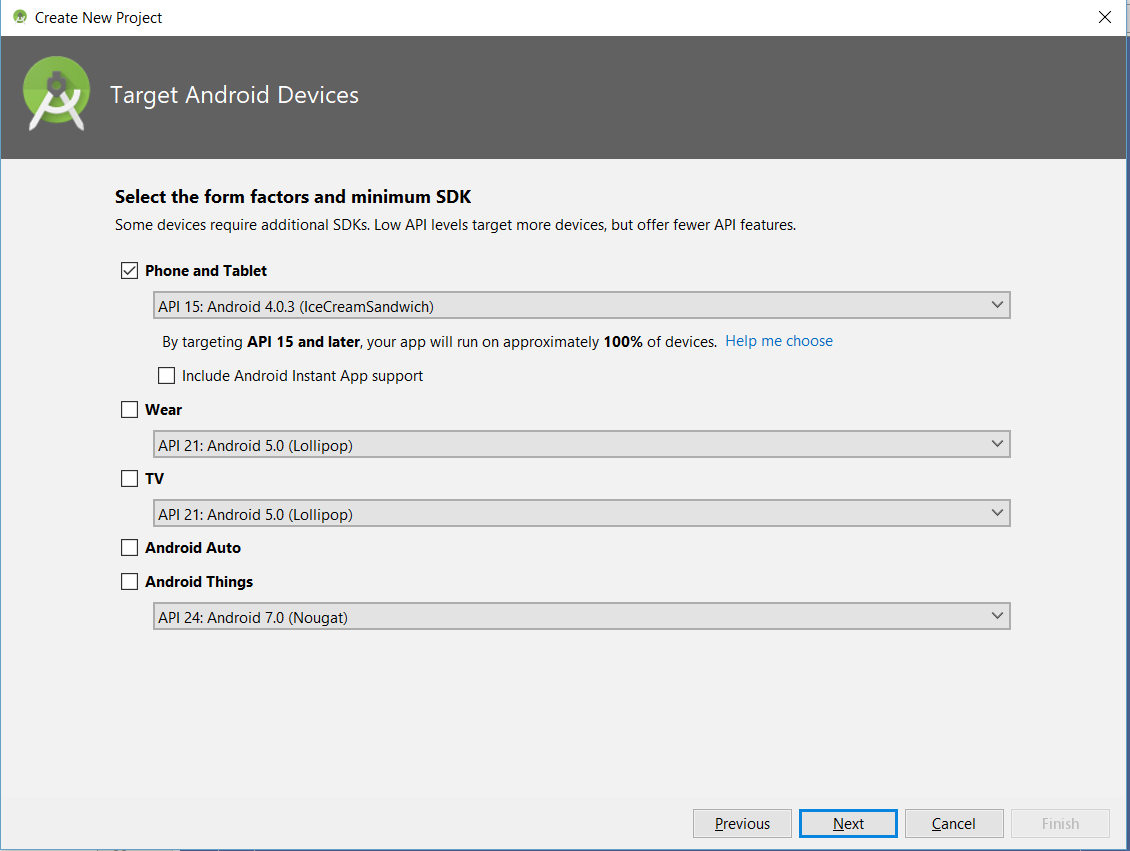
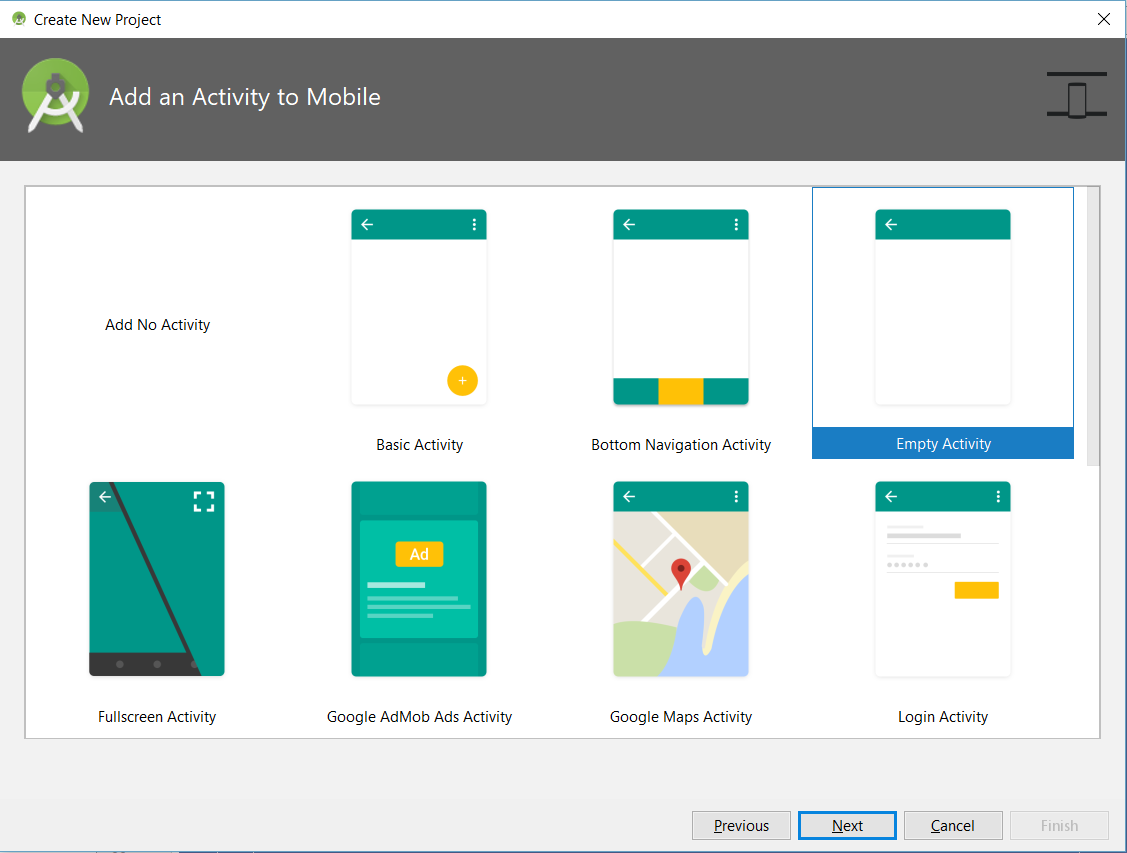
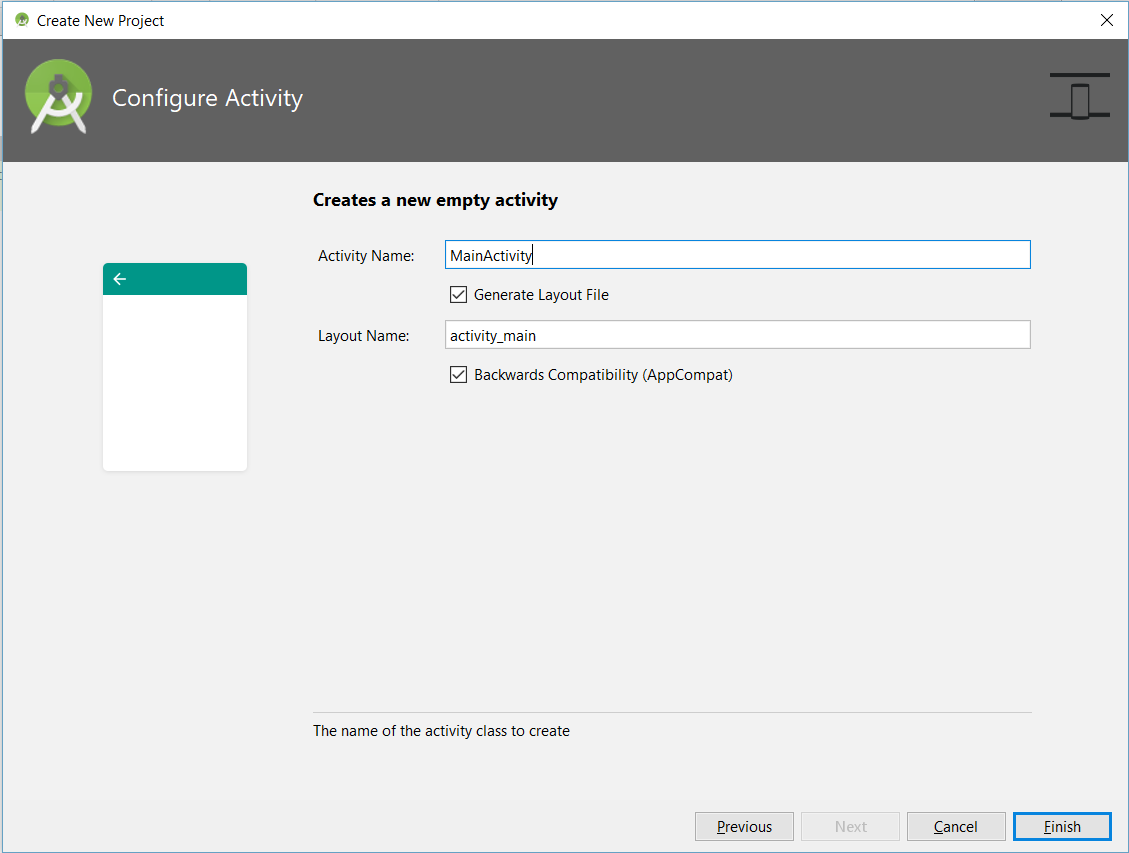
**Practical 1**

**Aim:Create an Application that display Hello world in the middle of screen Red color with white background**

****

****

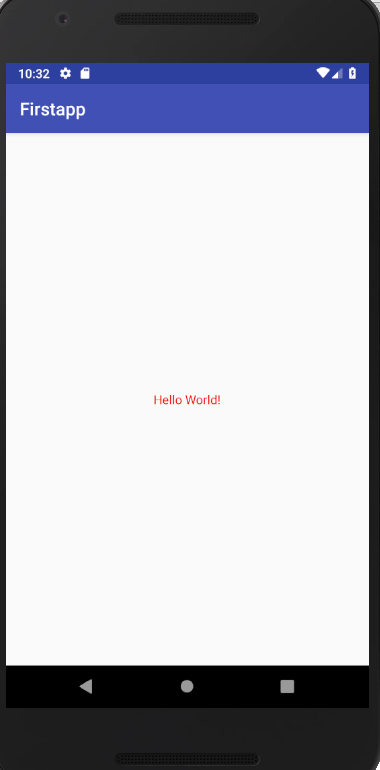
****

****

**.xml file:**

*<?***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!"  
 android:textColor="#f50808"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
  
</**android.support.constraint.ConstraintLayout**>

**Output:**

****

**Practical 2**

**Aim:create an application for addition,subtraction,multiply,divison for 2 number user has to enter number as per his/her choice.**

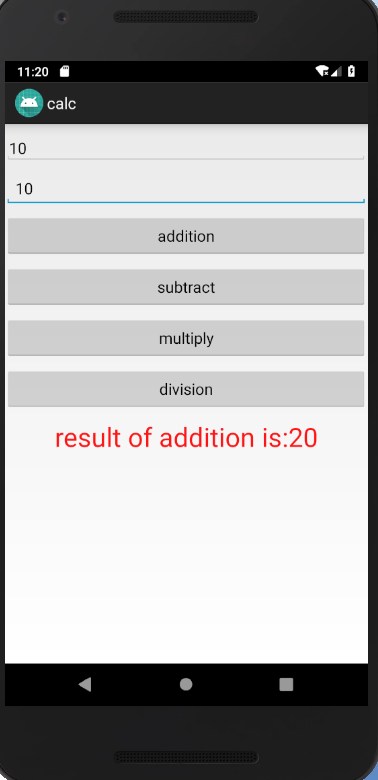
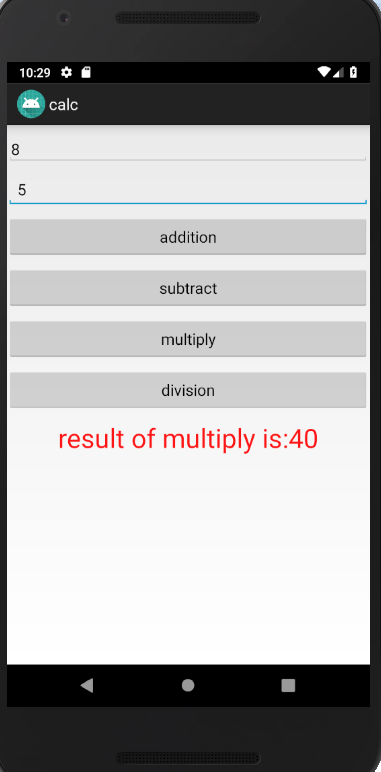
**.xml file:**

*<?***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"**>  
 <**EditText  
 android:id="@+id/e1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="enter no1"  
 android:padding="5dp"  
 android:layout\_marginTop="10dp"  
 android:text=""**/>  
  
 <**EditText  
 android:id="@+id/e2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="10dp"  
 android:ems="10"  
 android:hint="enter no2"  
 android:inputType="textPersonName"  
 android:text=""** />  
  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="10dp"  
 android:text="addition"** />  
  
 <**Button  
 android:id="@+id/button2"  
 android:layout\_width="match\_parent"  
 android:layout\_marginTop="10dp"  
 android:layout\_height="wrap\_content"  
 android:text="subtract"** />  
  
 <**Button  
 android:id="@+id/button3"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="10dp"  
 android:text="multiply"** />  
  
 <**Button  
 android:id="@+id/button4"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="10dp"  
 android:text="division"** />  
 <**TextView  
 android:id="@+id/t1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="10dp"  
 android:layout\_gravity="center"  
 android:gravity="center"  
 android:textSize="30dp"  
 android:textColor="#f11"  
 android:text="answer here"** />  
</**LinearLayout**>

**.java file:**

**package** com.example.hp.calc;  
**import** android.app.Activity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
**import static** java.lang.Integer.\*;  
**public class** MainActivity **extends** Activity {  
  
 Button **add**,**suB**,**mul**,**div**;  
 EditText **e1**,**e2**;  
 TextView **t1**;  
 **int res**=0;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **add** = (Button) findViewById(R.id.***button***);  
 **suB** = (Button) findViewById(R.id.***button2***);  
 **mul** = (Button) findViewById(R.id.***button3***);  
 **div** = (Button) findViewById(R.id.***button4***);  
  
 **e1** = (EditText) findViewById(R.id.***e1***);  
 **e2** = (EditText) findViewById(R.id.***e2***);  
 **t1** = (TextView) findViewById(R.id.***t1***);  
  
 **add**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
  
 String a=**e1**.getText().toString();  
 String a1=**e2**.getText().toString();  
 **res**=Integer.*parseInt*(a)+Integer.*parseInt*(a1);  
 **t1**.setText(**"result of addition is is:"**+Integer.*toString*(**res**));  
 }  
 });  
  
  
 **suB**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
  
 String a=**e1**.getText().toString();  
 String a1=**e2**.getText().toString();  
 **res**=Integer.*parseInt*(a)-Integer.*parseInt*(a1);  
 **t1**.setText(**"result of sutaction is:"**+Integer.*toString*(**res**));  
 }  
 });  
  
 **mul**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
  
 String a=**e1**.getText().toString();  
 String a1=**e2**.getText().toString();  
 **res**=Integer.*parseInt*(a)\*Integer.*parseInt*(a1);  
 **t1**.setText(**"result of multiply is:"**+Integer.*toString*(**res**));  
 }  
 });  
  
 **div**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
  
 String a=**e1**.getText().toString();  
 String a1=**e2**.getText().toString();  
 **double** r=Double.*parseDouble*(a)/Double.*parseDouble*(a1);  
 **t1**.setText(**"result division is:"**+Double.*toString*(r));  
 }  
 });  
 }}

**output:**

** **

**Practical 3**

**Aim:create an application for login module that display successfull message if username and password match and display error message if they don’t match**

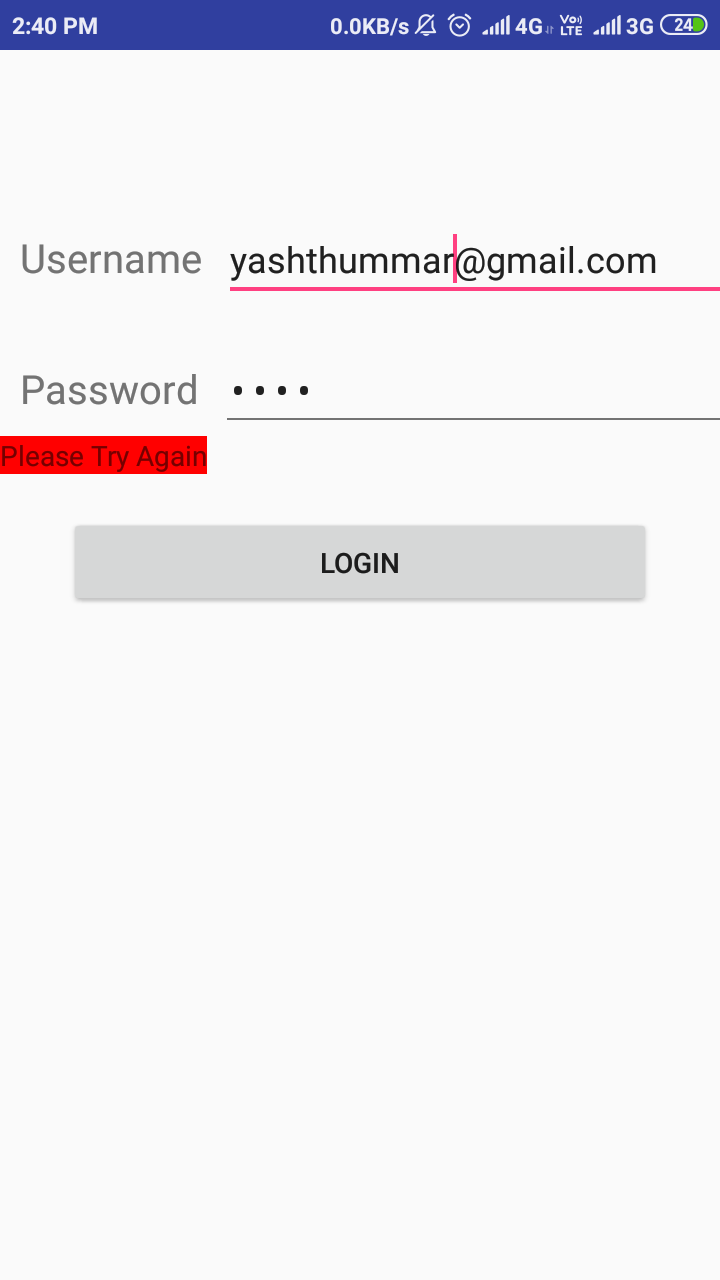
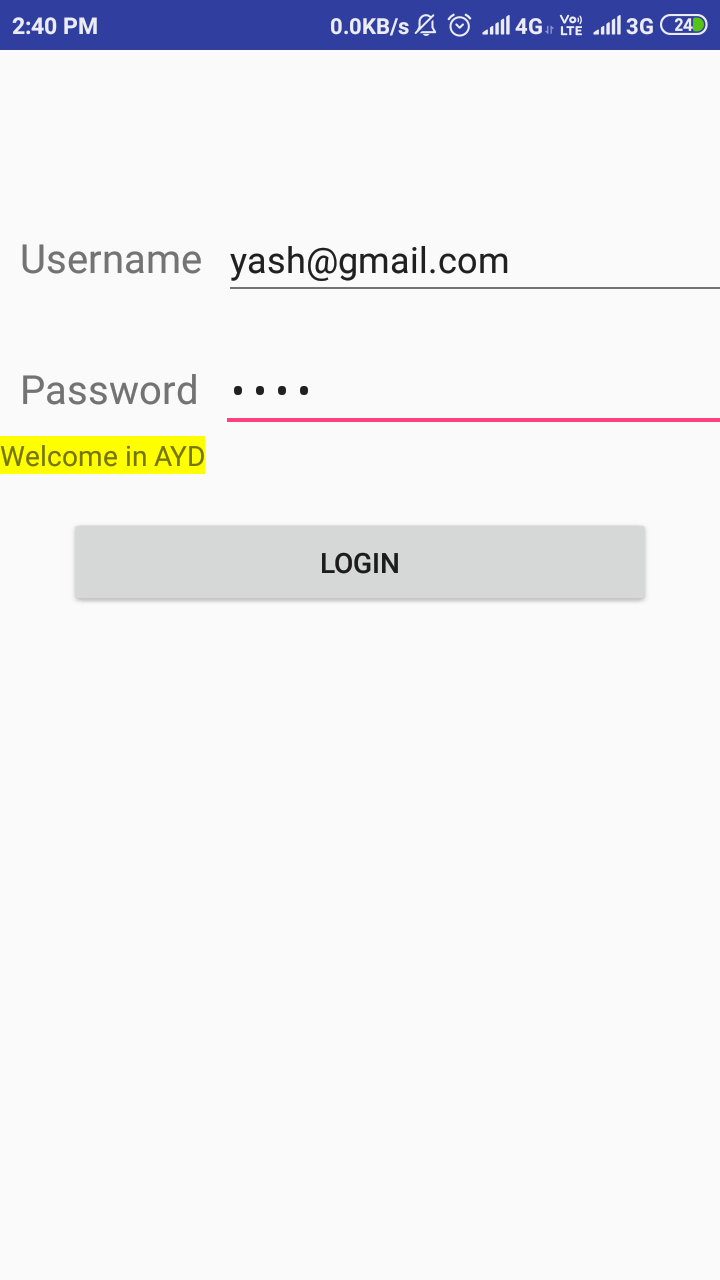
**.xml file:**

<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="62dp"  
 android:gravity="fill\_horizontal"  
 android:orientation="vertical"**>  
  
  
  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"**>  
  
 <**TextView  
 android:id="@+id/tvusername"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:textSize="20dp"  
 android:layout\_marginRight="10dp"  
 android:text="Username"** />  
  
 <**EditText  
 android:id="@+id/user"  
 android:layout\_width="291dp"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="E-Mail"  
 android:inputType="textPersonName"** />  
 </**LinearLayout**>  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"**>  
  
 <**TextView  
 android:id="@+id/textView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginRight="10dp"  
 android:textSize="20dp"  
 android:text="Password"** />  
  
 <**EditText  
 android:id="@+id/editText2"  
 android:layout\_width="292dp"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="textPassword"  
 android:visibility="visible"**>  
  
 <**requestFocus** />  
 </**EditText**>  
 </**LinearLayout**>  
  
 <**TextView  
 android:id="@+id/msg"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""** />  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:layout\_gravity="center"  
 android:orientation="horizontal"**>  
 <**Button  
 android:id="@+id/button1"  
 android:layout\_width="293dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:gravity="center"  
 android:text="Login"** />  
 </**LinearLayout**>  
</**LinearLayout**>

**.java file:**

**package** com.example.hp.pract3;  
**import** java.util.Random;  
**import** android.net.Uri;  
**import** android.os.Bundle;  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.content.Intent;  
**import** android.graphics.Color;  
**import** android.text.Editable;  
**import** android.text.TextWatcher;  
**import** android.view.Gravity;  
**import** android.view.View;  
**import** android.view.View.OnClickListener;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
**public class** MainActivity **extends** Activity **implements** View.OnClickListener {  
  
 EditText **text1**;  
 EditText **text2**;  
 Button **login**;  
 TextView **errormsg**;  
  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 setvalue();  
 **login**.setOnClickListener((OnClickListener) **this**);  
 }  
  
 **public void** setvalue() {  
 **login** = (Button) findViewById(R.id.***button1***);  
 **errormsg** = (TextView) findViewById(R.id.***msg***);  
 **text1** = (EditText) findViewById(R.id.***user***);  
 **text2** = (EditText) findViewById(R.id.***editText2***);  
 }  
  
 @Override  
 **public void** onClick(View arg0) {  
 *//* ***TODO Auto-generated method stub*** String user = **text1**.getText().toString();  
 String pass = **text2**.getText().toString();  
  
 **if** (user.compareTo(**"yash@gmail.com"**) == 0 && pass.compareTo(**"yash"**) == 0) {  
  
  
 **errormsg**.setText(**"Welcome in AYD"**);  
 **errormsg**.setBackgroundColor(Color.***YELLOW***);  
  
 }  
 **else** {  
 **errormsg**.setText(**"Please Try Again"**);  
 **errormsg**.setBackgroundColor(Color.***RED***);  
  
 }  
 }  
}

**output:**



**Practical 4**

**Aim:create a login application where you have to validate username and password if it does not validate login button should remain disable**

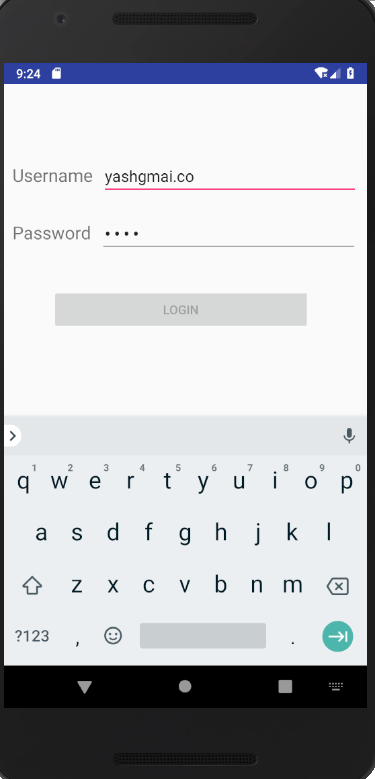
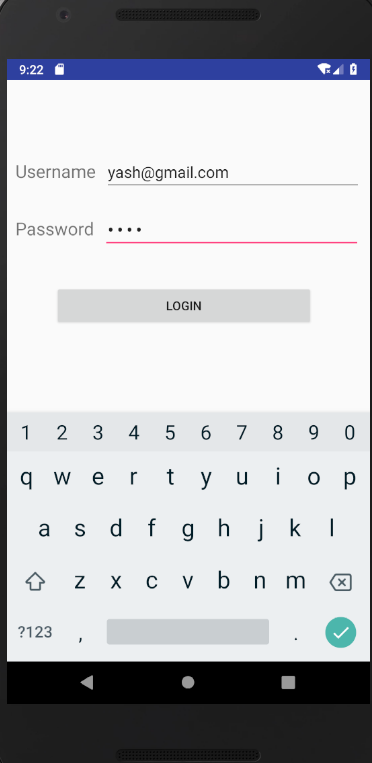
**.xml file:**

<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="62dp"  
 android:gravity="fill\_horizontal"  
 android:orientation="vertical"**>  
  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"**>  
  
 <**TextView  
 android:id="@+id/tvusername"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:textSize="20dp"  
 android:layout\_marginRight="10dp"  
 android:text="Username"** />  
  
 <**EditText  
 android:id="@+id/user"  
 android:layout\_width="291dp"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="E-Mail"  
  
 android:inputType="textPersonName"** />  
 </**LinearLayout**>  
  
  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"**>  
  
 <**TextView  
 android:id="@+id/textView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginRight="10dp"  
 android:textSize="20dp"  
 android:text="Password"** />  
  
 <**EditText  
 android:id="@+id/editText2"  
 android:layout\_width="292dp"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="textPassword"  
 android:visibility="visible"**>  
  
 <**requestFocus** />  
 </**EditText**>  
 </**LinearLayout**>  
  
 <**TextView  
 android:id="@+id/msg"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""** />  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:layout\_gravity="center"  
 android:orientation="horizontal"**>  
 <**Button  
 android:id="@+id/button1"  
 android:layout\_width="293dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:gravity="center"  
 android:text="Login"** />  
 </**LinearLayout**>  
</**LinearLayout**>

**.java file:**

**package** com.example.hp.pract4;  
**import** java.util.Random;  
**import** android.net.Uri;a  
**import** android.os.Bundle;  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.content.Intent;  
**import** android.graphics.Color;  
**import** android.text.Editable;  
**import** android.text.TextWatcher;  
**import** android.view.Gravity;  
**import** android.view.View;  
**import** android.view.View.OnClickListener;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**public class** MainActivity **extends** Activity **implements** View.OnClickListener {  
  
 EditText **text1**;  
 EditText **text2**;  
 Button **login**;  
 TextView **errormsg**;  
  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 setvalue();  
  
  
 }  
 **public void** setvalue()  
 {  
 **login** = (Button) findViewById(R.id.***button1***);  
 **errormsg** = (TextView) findViewById(R.id.***msg***);  
 **text1** = (EditText) findViewById(R.id.***user***);  
 **text2** = (EditText) findViewById(R.id.***editText2***);  
  
 **text1**.addTextChangedListener(**new** TextWatcher() {  
  
 @Override  
 **public void** onTextChanged(CharSequence arg0, **int** arg1, **int** arg2, **int** arg3) {  
 *//* ***TODO Auto-generated method stub*** }  
  
 @Override  
 **public void** beforeTextChanged(CharSequence arg0, **int** arg1, **int** arg2,  
 **int** arg3) {  
 *//* ***TODO Auto-generated method stub*** }  
  
 @Override  
 **public void** afterTextChanged(Editable arg0) {  
 *//* ***TODO Auto-generated method stub*** Context context = getApplicationContext();  
 String emailInput = **text1**.getText().toString().trim();  
  
 String emailPattern = **"^[\_A-Za-z0-9-]+(\\.[\_A-Za-z0-9-]+)\*@[A-Za-z0-9]+(\\.[A-Za-z0-9]+)\*(\\.[A-Za-z]{2,})$"**;  
  
  
 **if** (emailInput.matches(emailPattern)) {  
  
 CharSequence msg = **"valid email address"**;  
  
 **final** Toast Toasttop = Toast.*makeText*(context, msg,Toast.***LENGTH\_SHORT***);  
 **int** movetoastdown = 150;  
 **int** movetoastright = 150;  
  
 Toasttop.setGravity(Gravity.***TOP***, movetoastdown, movetoastright);  
  
  
 Toasttop.show();  
  
 **login**.setEnabled(**true**);  
  
  
 } **else** {  
  
 Toast.*makeText*(getApplicationContext(), **"Invalid email address"**,  
 Toast.***LENGTH\_SHORT***).show();  
 **login**.setEnabled(**false**);  
 }  
 }  
 });  
  
 }  
  
 @Override  
 **public void** onClick(View view) {  
  
 }  
}

**output:**

****

**Practical 5**

**Aim:create a login application in which on successful login a web browser will open with any url using intent**

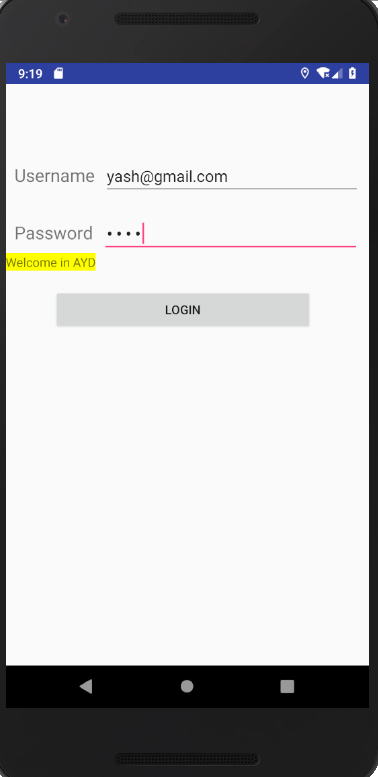
**.xml file:**

<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="62dp"  
 android:gravity="fill\_horizontal"  
 android:orientation="vertical"**>  
  
  
  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"**>  
  
 <**TextView  
 android:id="@+id/tvusername"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:textSize="20dp"  
 android:layout\_marginRight="10dp"  
 android:text="Username"** />  
  
 <**EditText  
 android:id="@+id/user"  
 android:layout\_width="291dp"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="E-Mail"  
  
 android:inputType="textPersonName"** />  
 </**LinearLayout**>  
  
  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:orientation="horizontal"**>  
  
 <**TextView  
 android:id="@+id/textView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginRight="10dp"  
 android:textSize="20dp"  
 android:text="Password"** />  
  
 <**EditText  
 android:id="@+id/editText2"  
 android:layout\_width="292dp"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="textPassword"  
 android:visibility="visible"**>  
  
 <**requestFocus** />  
 </**EditText**>  
 </**LinearLayout**>  
  
 <**TextView  
 android:id="@+id/msg"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""** />  
 <**LinearLayout  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:layout\_gravity="center"  
 android:orientation="horizontal"**>  
 <**Button  
 android:id="@+id/button1"  
 android:layout\_width="293dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:gravity="center"  
 android:text="Login"** />  
 </**LinearLayout**>  
</**LinearLayout**>

**.java file:**

**package** com.example.hp.pract5;  
  
**import** java.util.Random;  
  
  
**import** android.net.Uri;  
**import** android.os.Bundle;  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.content.Intent;  
**import** android.graphics.Color;  
**import** android.text.Editable;  
**import** android.text.TextWatcher;  
**import** android.view.Gravity;  
**import** android.view.View;  
**import** android.view.View.OnClickListener;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
  
  
**public class** MainActivity **extends** Activity **implements** View.OnClickListener {  
  
 EditText **text1**;  
 EditText **text2**;  
 Button **login**;  
 TextView **errormsg**;  
  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 setvalue();  
  
 **login**.setOnClickListener((OnClickListener) **this**);  
  
  
 }  
  
 **public void** setvalue()  
 {  
 **login** = (Button) findViewById(R.id.***button1***);  
 **errormsg** = (TextView) findViewById(R.id.***msg***);  
 **text1** = (EditText) findViewById(R.id.***user***);  
 **text2** = (EditText) findViewById(R.id.***editText2***);  
 }  
  
 @Override  
 **public void** onClick(View arg0) {  
 *//* ***TODO Auto-generated method stub*** String user = **text1**.getText().toString();  
 String pass = **text2**.getText().toString();  
  
 **if**(user.compareTo(**"yash@gmail.com"**) == 0 && pass.compareTo(**"yash"**) == 0 )  
 {  
 **errormsg**.setText(**"Welcome in AYD"**);  
 **errormsg**.setBackgroundColor(Color.***YELLOW***);  
  
 String url = **"http://www.google.com"**;  
 Intent i = **new** Intent(Intent.***ACTION\_VIEW***);  
 i.setData(Uri.*parse*(url));  
 startActivity(i);  
 }  
 **else** {  
 **errormsg**.setText(**"Please Try Again"**);  
 **errormsg**.setBackgroundColor(Color.***RED***);  
 }  
 }  
}

**Output:**

****