Practical 1

activity_main.xml :

```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"
    android:background="@color/colorPrimary">

    <TextView
        android:id="@+id/tb"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:text="Hello World!"
        android:textColor="@android:color/holo_red_dark"
        android:textSize="50sp"
        android:textStyle="bold"/>

</RelativeLayout>
```

MainActivity.java :

```java
package com.example.mcwc_1;

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);
    }
}
```

Practical 2

activity_main.xml :

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    android:orientation="vertical"
    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">

    <TextView
        android:id="@+id/tb1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        android:textSize="40sp"
        android:layout_gravity="center"
        android:layout_marginTop="50dp"/>

    <TextView
        android:id="@+id/tb2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Namaskar!!"
        android:textSize="40sp"
        android:layout_gravity="center"
        android:layout_marginTop="50dp"/>

    <TextView
        android:id="@+id/tb3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="40sp"
        android:layout_gravity="center"
        android:layout_marginTop="50dp" />

</LinearLayout>
```

MainActivity.java :

```java
 package com.example.mcwc_2;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
```
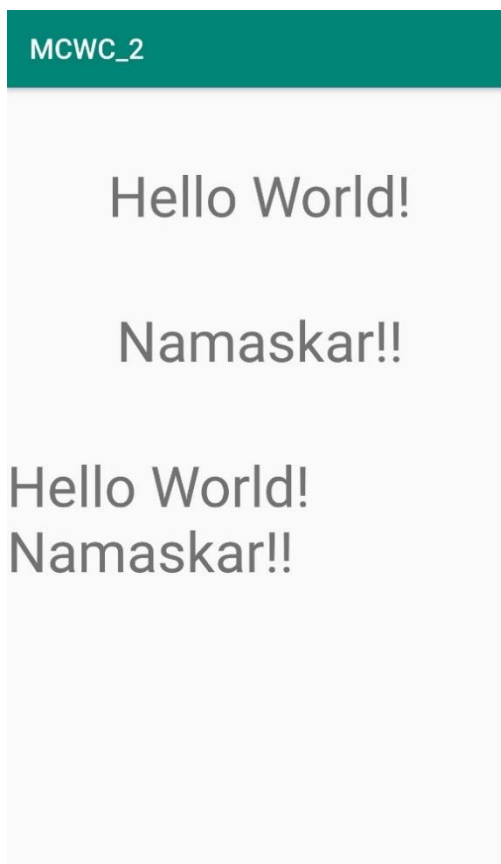
```java
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    TextView a;
    TextView b;
    TextView c;

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

        a = findViewById(R.id.tb1);
        b = findViewById(R.id.tb2);
        c = findViewById(R.id.tb3);
        String p = (String)a.getText() + (String)b.getText();
        c.setText(p);
    }
}
```

MCWC_2

Hello World!

Namaskar!!

Hello World!
Namaskar!!

Practical 3

activity_main.xml :

```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">

    <Button
        android:layout_width="300dp"
        android:layout_height="80dp"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="100dp"
        android:background="@color/colorPrimaryDark"
        android:text="Show Toast"
        android:textColor="@android:color/background_light"
        android:textSize="40sp"
        android:onClick="Show"/>

</RelativeLayout>
```
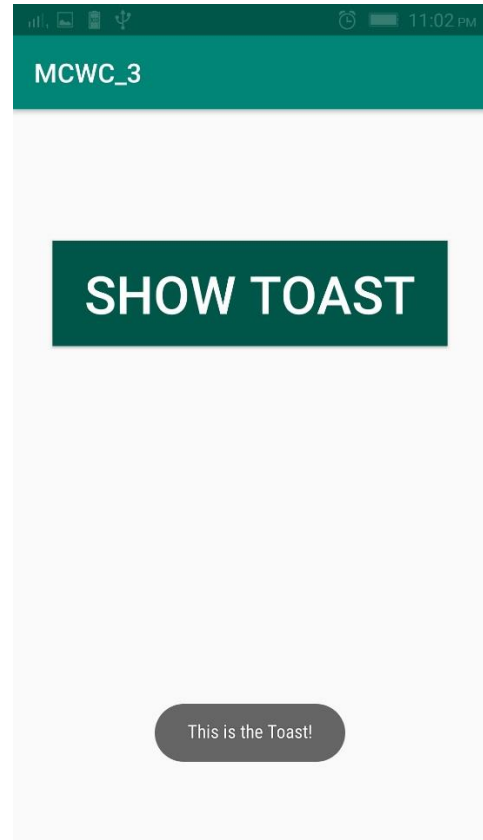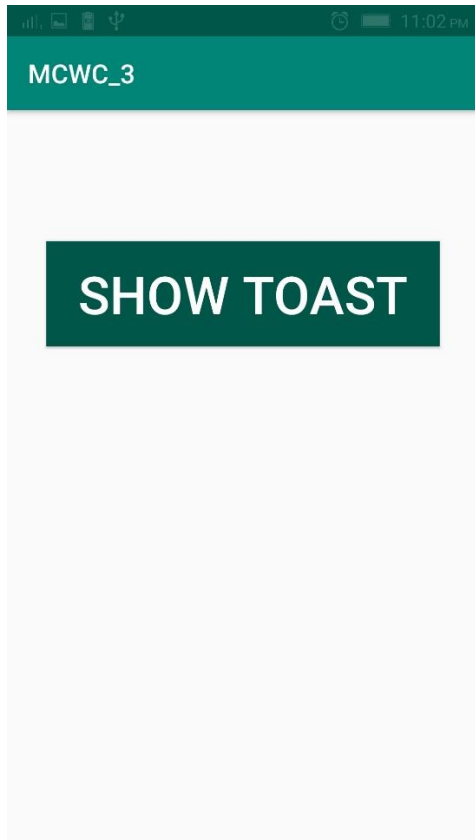
MainActivity.java :

```java
package com.example.mcwc_3;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

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

    public void Show (View v) {
        Toast.makeText(getApplicationContext(), "This is the Toast!", Toast.LENGTH_LONG).show();
    }
}
```

Practical 4

activity_main.xml :

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    android:orientation="vertical"
    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">

    <TextView
        android:id="@+id/tb1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        android:textSize="40sp"
        android:layout_gravity="center"
        android:layout_marginTop="100dp"/>

    <TextView
        android:id="@+id/tb2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Namaskar!!"
        android:textSize="40sp"
        android:layout_gravity="center"
        android:layout_marginTop="100dp"/>

    <Button
        android:layout_width="250dp"
        android:layout_height="60dp"
        android:text="Concate"
        android:textSize="30sp"
        android:layout_gravity="center"
        android:layout_marginTop="100dp"
        android:onClick="next"/>

</LinearLayout>
```

MainActivity.java :

```java
package com.example.mcwc_4;

import android.content.Intent;
```

```java
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    String p;
    String q;

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

        p = ((TextView) findViewById(R.id.tb1)).getText().toString();
        q = ((TextView) findViewById(R.id.tb2)).getText().toString();
    }

    public void next(View v) {
        Intent i = new Intent(this, SubActivity.class);
        i.putExtra("p1", p);
        i.putExtra("p2", q);
        startActivity(i);
    }
}
```

Activity_sub.xml :

```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=".SubActivity">

    <TextView
        android:id="@+id/tb3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:gravity="center"
        android:textSize="40sp"/>

</RelativeLayout>
```

SubActivity.java :

```java
package com.example.mcwc_4;
```

```
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;

public class SubActivity extends AppCompatActivity {

    TextView c;

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

        Intent i = getIntent();

        c = findViewById(R.id.tb3);

        String p = i.getStringExtra("p1") + i.getStringExtra("p2");
        c.setText(p);
    }
}
```
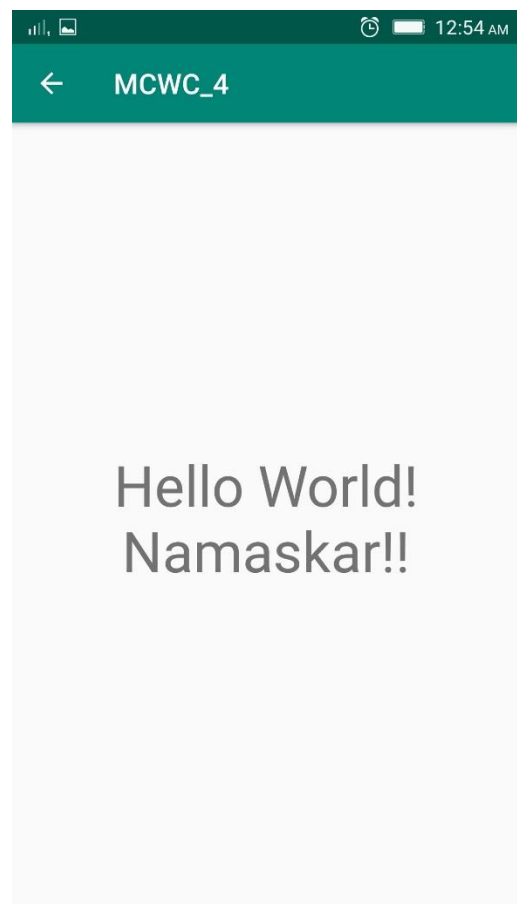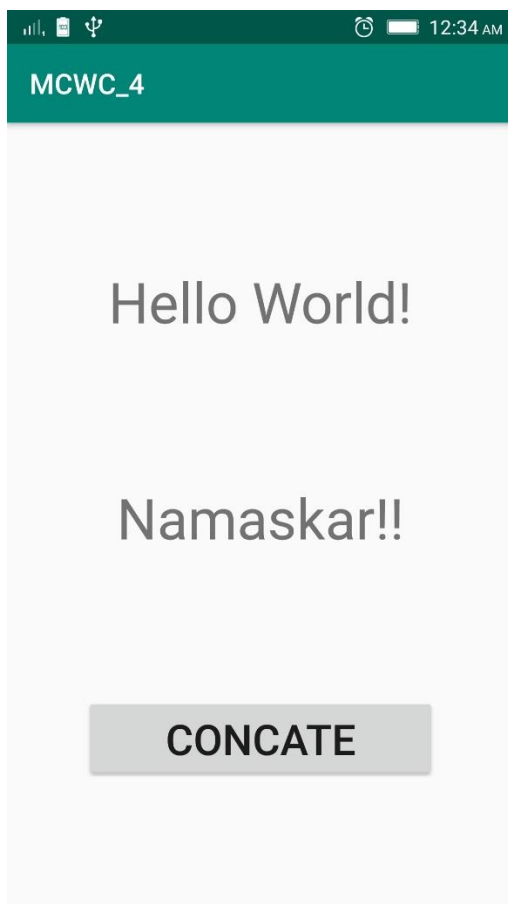
Practical 5

activity_main.xml :

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    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"
    android:gravity="center_horizontal"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <ScrollView
        android:id="@+id/login_form"
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical">

            <AutoCompleteTextView
                android:id="@+id/uname"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginLeft="40dp"
                android:layout_marginTop="80dp"
                android:layout_marginRight="40dp"
                android:hint="Username"
                android:inputType="text"
                android:maxLines="1"
                android:padding="16dp"
                android:singleLine="true"
                android:textColor="@color/purple"
                android:textSize="24sp" />

            <EditText
                android:id="@+id/pwd"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginLeft="40dp"
                android:layout_marginTop="20dp"
                android:layout_marginRight="40dp"
                android:hint="Password"
```

```xml
            android:inputType="textPassword"
            android:maxLines="1"
            android:padding="16dp"
            android:singleLine="true"
            android:textColor="@color/purple"
            android:textSize="24sp" />

        <Button
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:layout_marginLeft="80dp"
            android:layout_marginTop="50dp"
            android:layout_marginRight="80dp"
            android:background="@color/colorPrimaryDark"
            android:padding="16dp"
            android:text="Log In"
            android:textColor="@android:color/background_light"
            android:textSize="24sp"
            android:textStyle="bold"
            android:onClick="check"/>

    </LinearLayout>

  </ScrollView>

  </LinearLayout>
```

MainActivity.java :

```java
package com.example.mcwc_5;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

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

  public void check (View v) {

    String user = ((TextView)findViewById(R.id.uname)).getText().toString();
```

```java
    String pass = ((TextView)findViewById(R.id.pwd)).getText().toString();

    if (!user.equals("prachik")) {
        Toast.makeText(getApplicationContext(), "Incorrect Username!!",
Toast.LENGTH_LONG).show();
    }
    else if (!pass.equals("logmein")) {
        Toast.makeText(getApplicationContext(), "Incorrect Password!!",
Toast.LENGTH_LONG).show();
    }
    else {
        Intent i = new Intent(this, Home.class);
        i.putExtra("un", user);
        startActivity( i );
    }

  }
}
```

Activity_sub.xml :

```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=".Home">

  <TextView
    android:id="@+id/tv"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerInParent="true"
    android:gravity="center"
    android:textSize="40sp"
    android:textStyle="bold"/>

</RelativeLayout>
```

SubActivity.java :

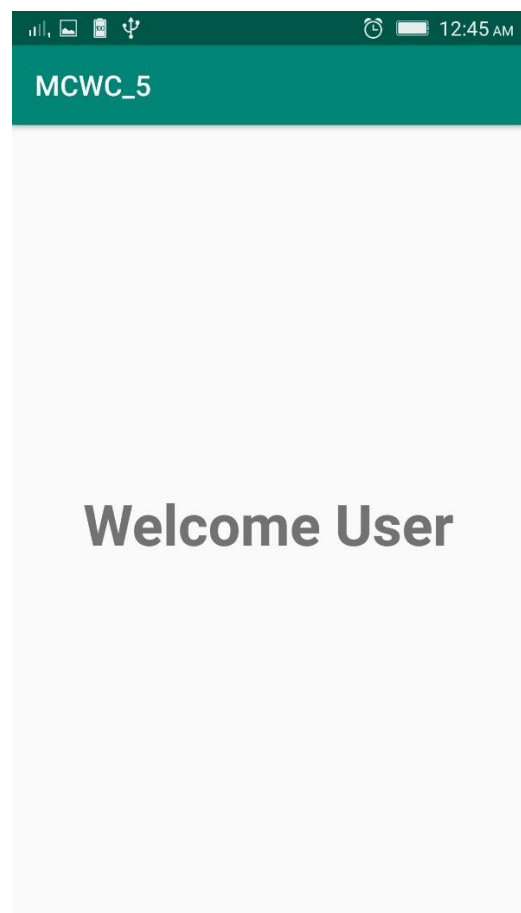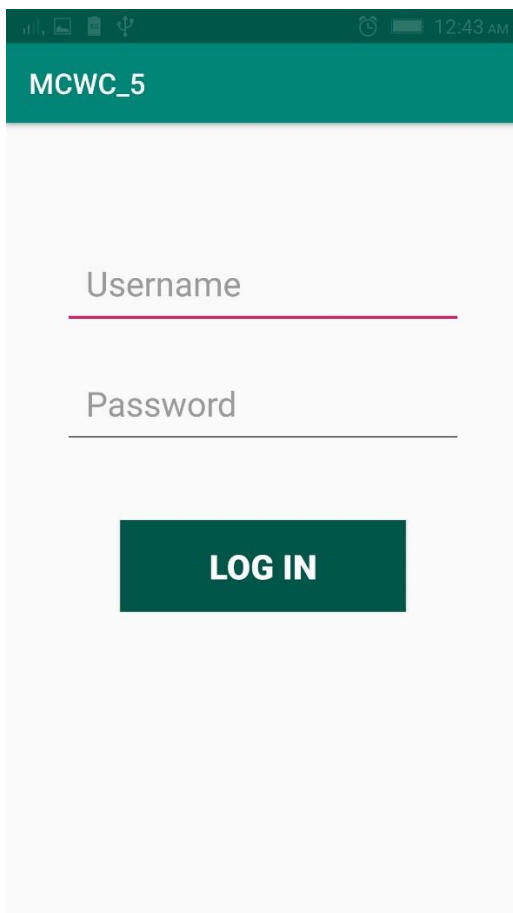```java
package com.example.mcwc_5;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;

public class Home extends AppCompatActivity {
```

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

    Intent i = getIntent();

    String p = "Welocme " + i.getStringExtra("un");
    ((TextView) findViewById(R.id.tv)).setText( p );
}
}
```

Practical 6

activity_main.xml :

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    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"
    android:gravity="center_horizontal"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <ScrollView
        android:id="@+id/login_form"
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical">

            <AutoCompleteTextView
                android:id="@+id/uname"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginLeft="40dp"
                android:layout_marginTop="80dp"
                android:layout_marginRight="40dp"
                android:hint="Username"
                android:inputType="text"
                android:maxLines="1"
                android:padding="16dp"
                android:singleLine="true"
                android:textColor="@android:color/holo_blue_light"
                android:textSize="24sp" />

            <EditText
                android:id="@+id/pwd"
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginLeft="40dp"
                android:layout_marginTop="20dp"
                android:layout_marginRight="40dp"
                android:hint="Password"
```

```xml
            android:inputType="textPassword"
            android:maxLines="1"
            android:padding="16dp"
            android:singleLine="true"
            android:textColor="@android:color/holo_blue_light"
            android:textSize="24sp" />

        <Button
            android:id="@+id/btn"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:layout_marginLeft="80dp"
            android:layout_marginTop="50dp"
            android:layout_marginRight="80dp"
            android:background="@color/colorPrimaryDark"
            android:padding="16dp"
            android:text="Log In"
            android:enabled="false"
            android:textColor="@android:color/background_light"
            android:textSize="24sp"
            android:textStyle="bold"
            android:onClick="Check" />

    </LinearLayout>

  </ScrollView>

</LinearLayout>
```

MainActivity.java :

```java
package com.example.mcwc_6;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.Editable;
import android.text.TextWatcher;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {
    TextView uname;
    EditText pwd;
    Button btn;
    String u;
    String p;
```

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

        uname = findViewById(R.id.uname);
        pwd = findViewById(R.id.pwd);
        btn = findViewById(R.id.btn);

        uname.addTextChangedListener( PTextWatcher );
        pwd.addTextChangedListener( PTextWatcher );
    }

    private TextWatcher PTextWatcher = new TextWatcher() {
        @Override
        public void beforeTextChanged(CharSequence s, int start, int count, int after) {

        }

        @Override
        public void onTextChanged(CharSequence s, int start, int before, int count) {
            u = uname.getText().toString().trim();
            p = pwd.getText().toString().trim();
            boolean en = false;

            if( !u.isEmpty() && !p.isEmpty() ) {
                if ( u.equals("prachik") && p.equals("prachi") ){
                    en = true;
                }
            }

            btn.setEnabled( en );
        }

        @Override
        public void afterTextChanged(Editable s) {

        }
    };

    public void Check(View v) {

        Intent i = new Intent (this, Home.class);
        i.putExtra("un", u);
        startActivity(i);

    }

}
```

Activity_sub.xml :

```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=".Home">

  <TextView
    android:id="@+id/tv"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerInParent="true"
    android:gravity="center"
    android:textSize="40sp"
    android:textStyle="bold"/>

</RelativeLayout>
```

SubActivity.java :
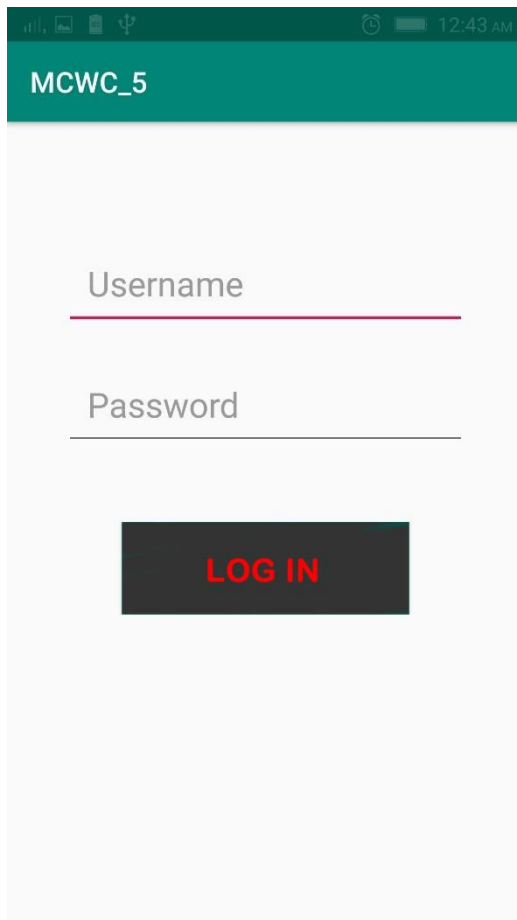
```java
package com.example.mcwc_6;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;

public class Home extends AppCompatActivity {

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

    Intent i = getIntent();

  //  String p = "Welocme " + i.getStringExtra("un");
    String p = "Welcome User";
    ((TextView) findViewById(R.id.tv)).setText( p );
  }
}
```
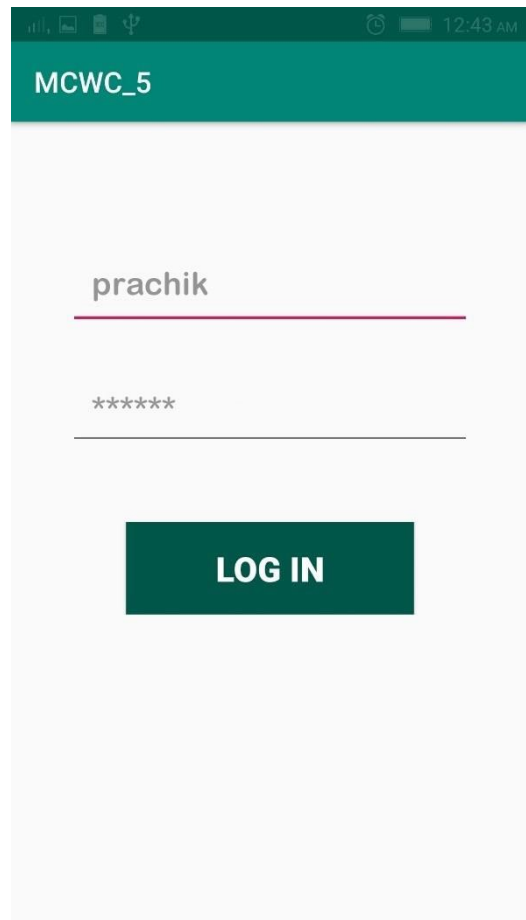
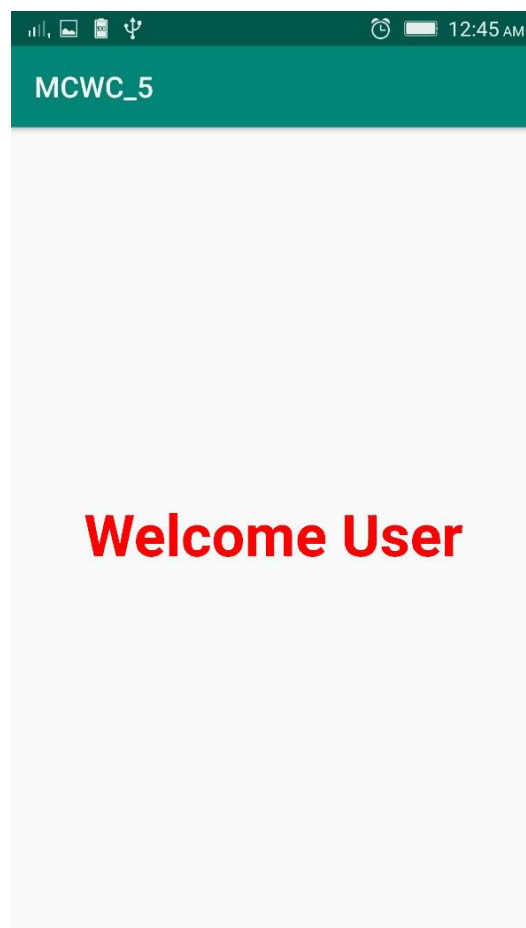|	
MCWC_5	**MCWC_5**
Username	prachik
Password	******
LOG IN	**LOG IN**

MCWC_5

Welcome User