Android Application that creates an alert upon receiving a message
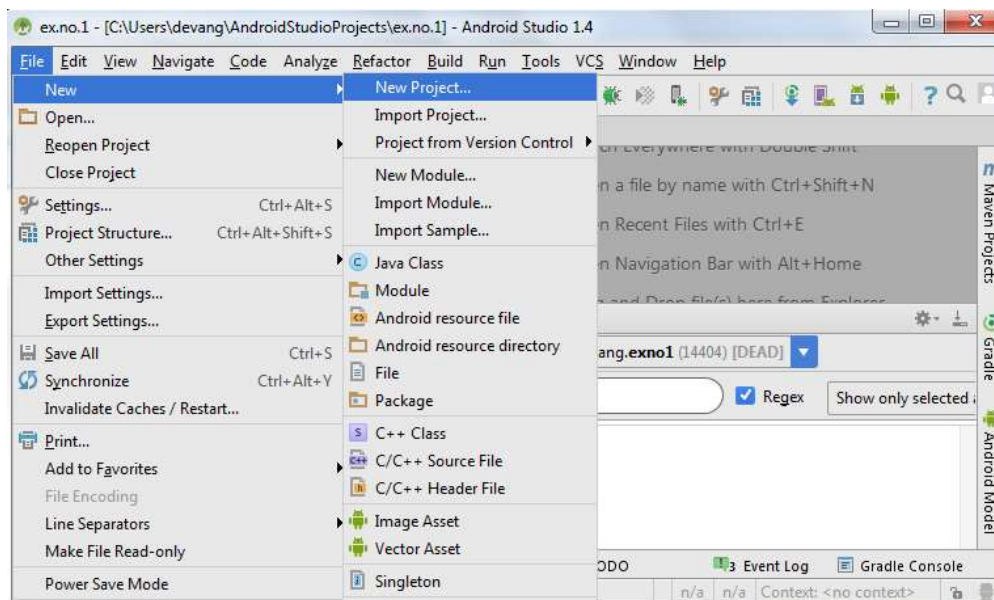
Aim:

To develop a Android Application that creates an alert upon receiving a message.
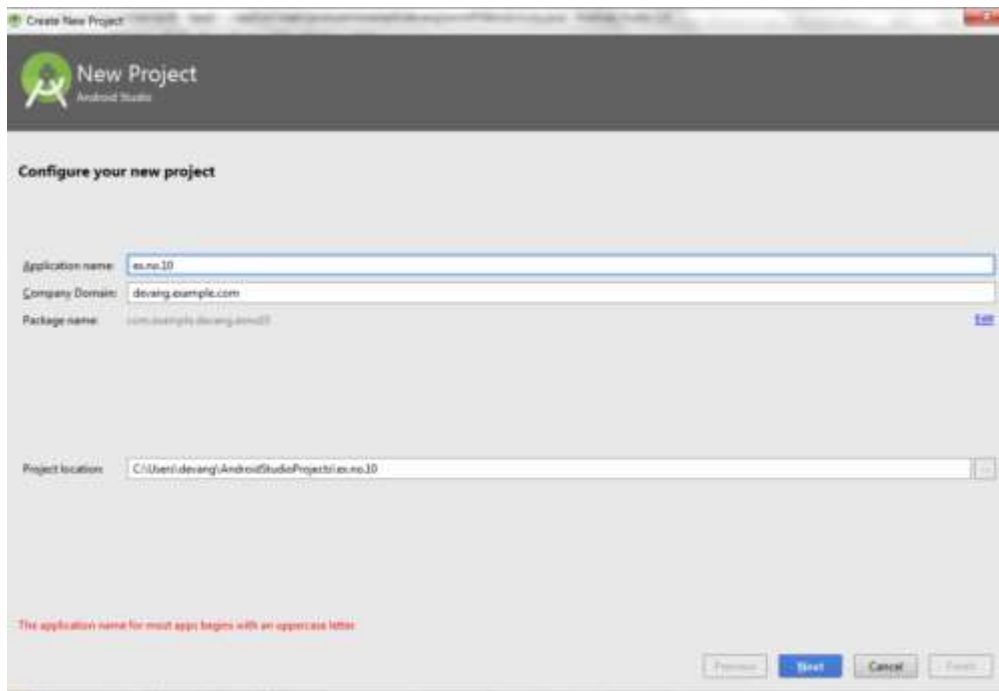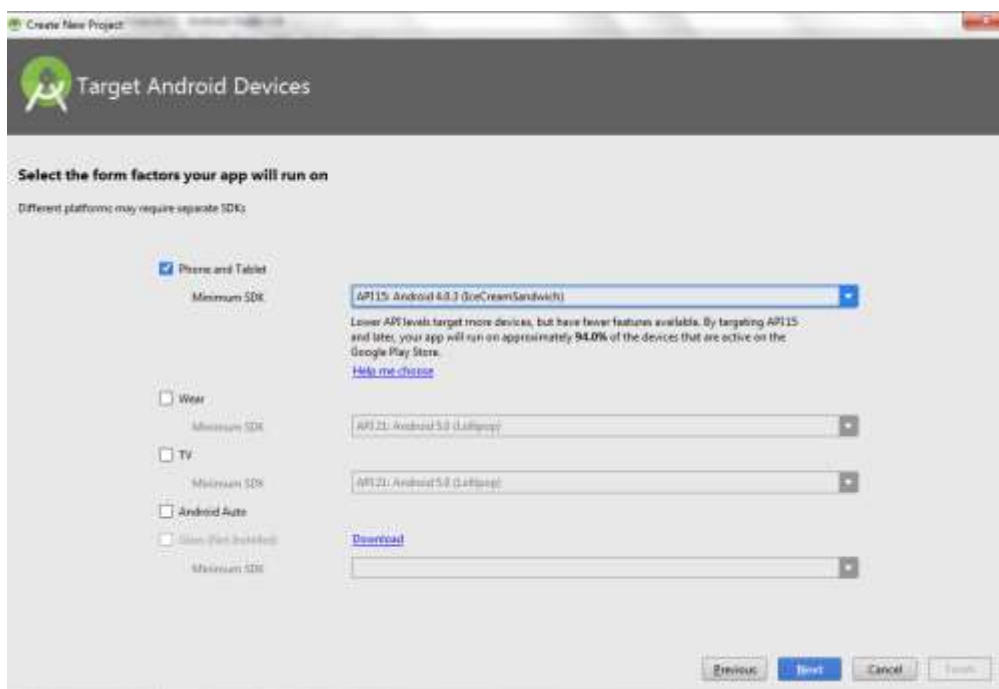
Procedure:

Creating a New project:

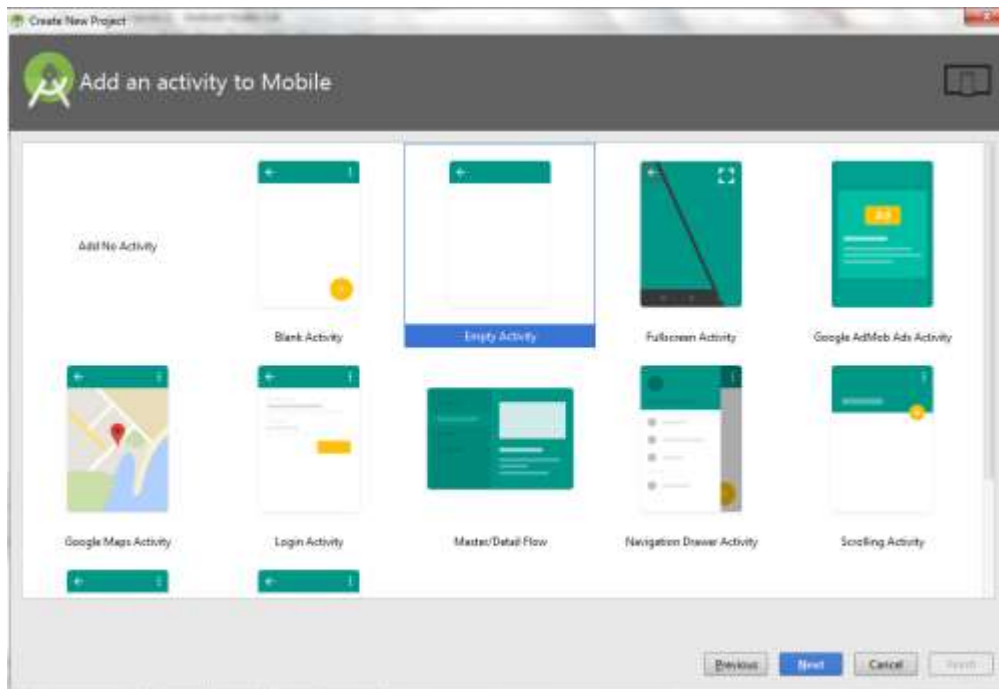- Open Android Studio and then click on **File -> New -> New project.**

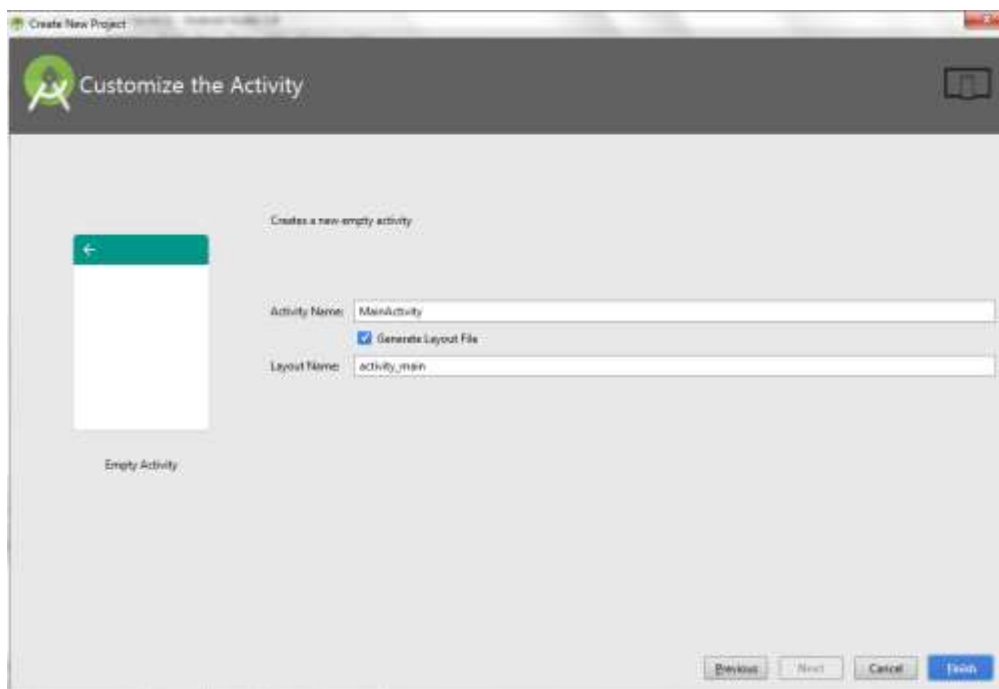- Then type the Application name as "**ex.no.10″** and click **Next.**

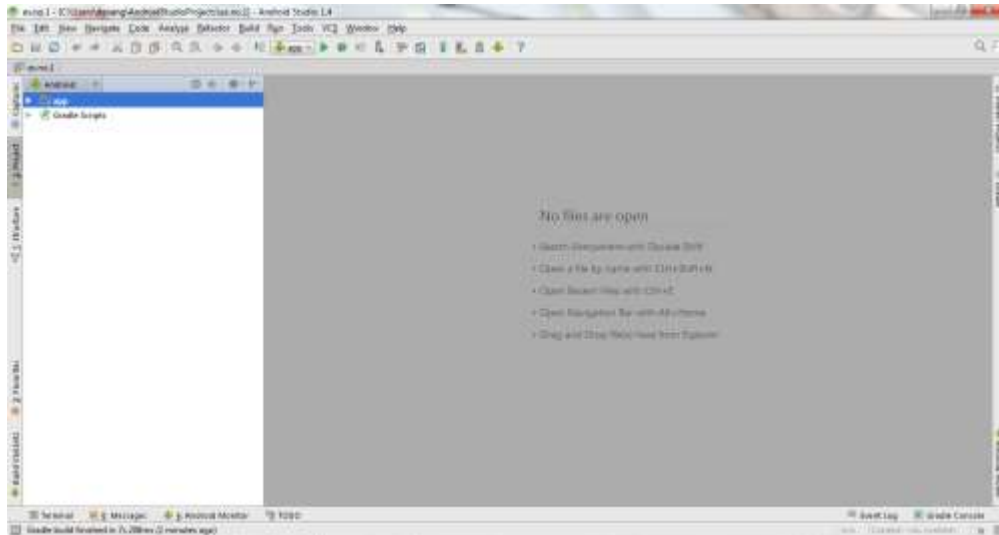- Then select the **Minimum SDK** as shown below and click **Next**.

- Then select the **Empty Activity** and click **Next.**
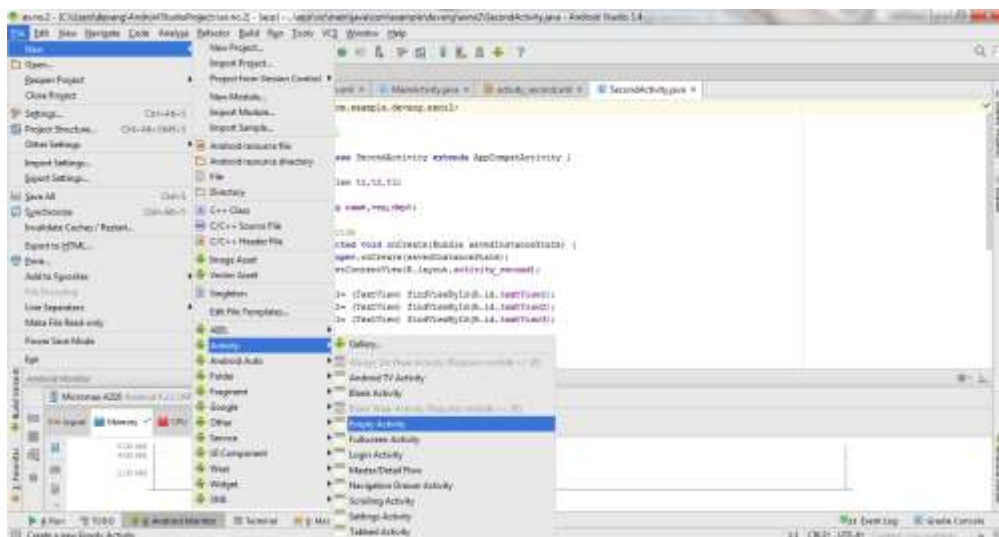
- Finally click **Finish**.

- It will take some time to build and load the project.
- After completion it will look as given below.

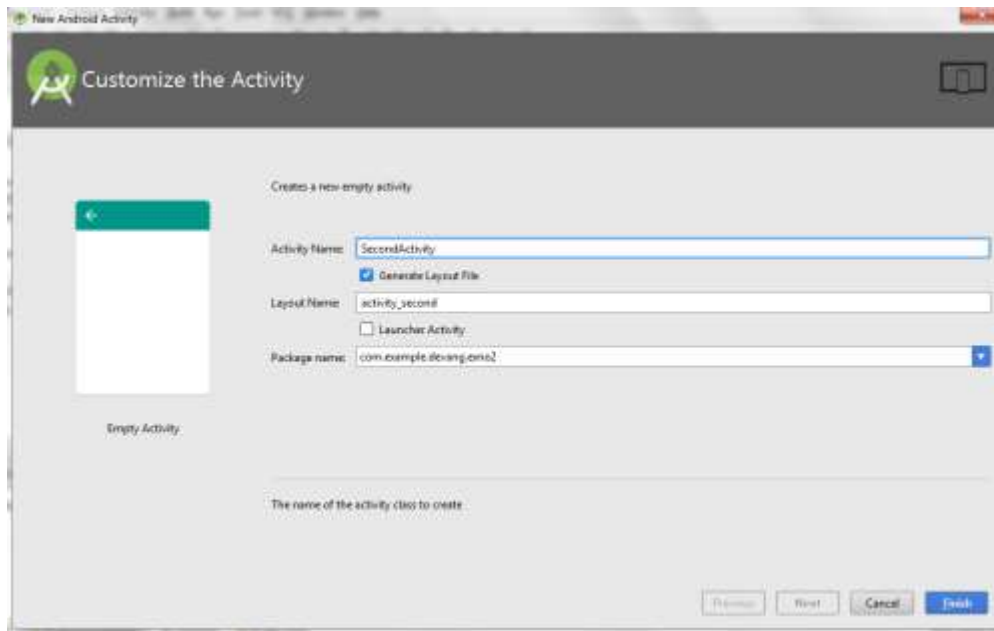## Creating Second Activity for the Android Application:

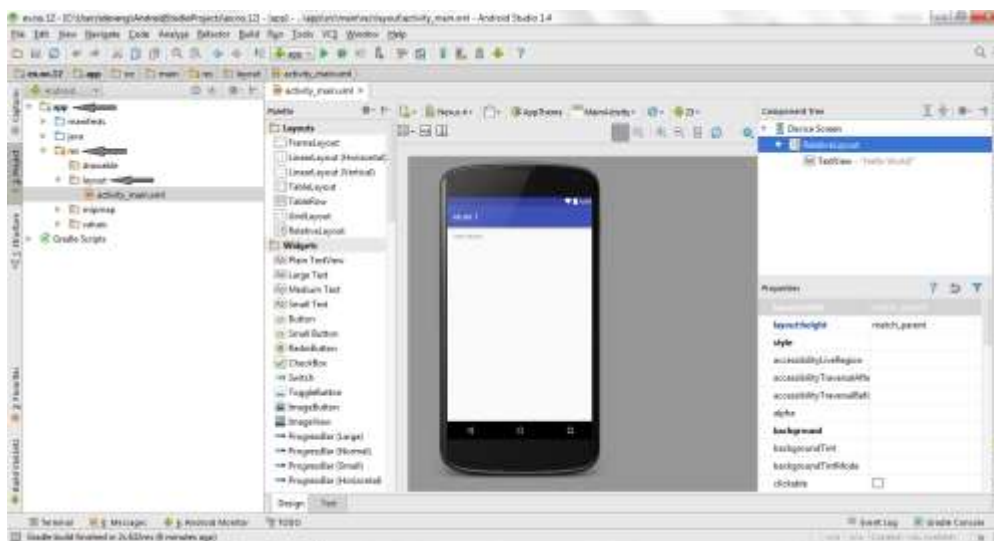- Click on **File -> New -> Activity -> Empty Activity.**

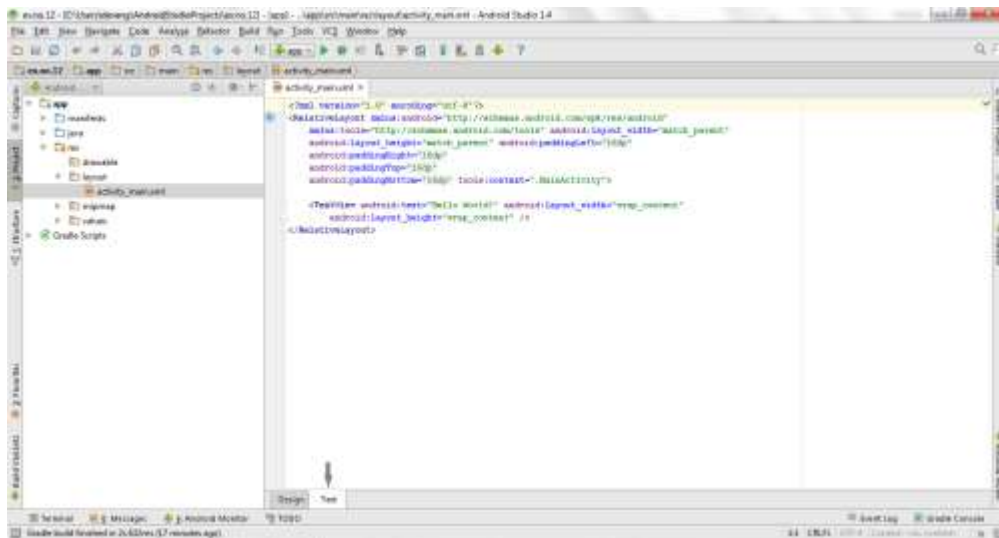- Type the Activity Name as **SecondActivity** and click **Finish** button.

- Thus Second Activity For the application is created.

Designing layout for the Android Application:

- Click on **app -> res -> layout -> activity_main.xml.**

- Now click on **Text** as shown below.

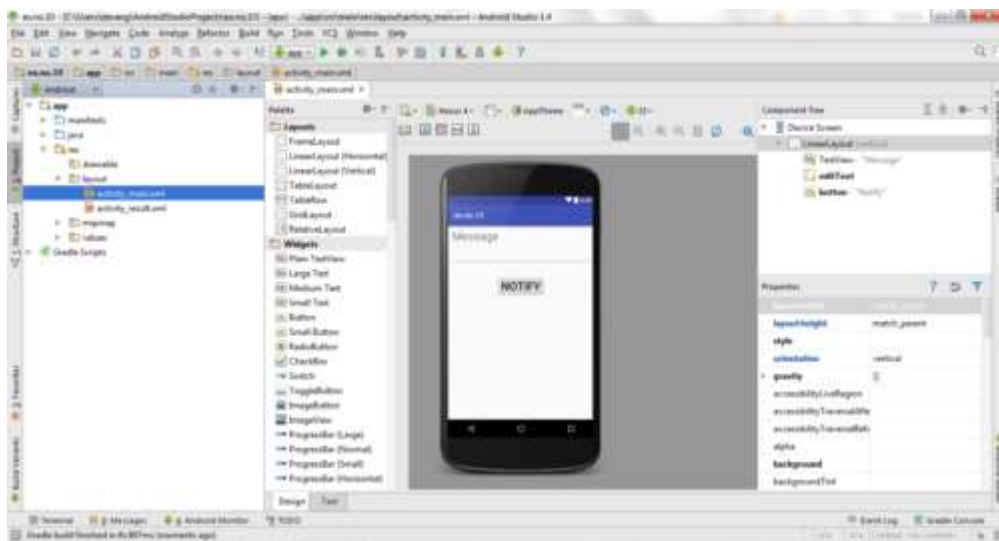- Then delete the code which is there and type the code as given below.

Code for Activity_main.xml:

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```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_margin="10dp"
    android:orientation="vertical">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Message"
        android:textSize="30sp" />

    <EditText
        android:id="@+id/editText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:singleLine="true"
        android:textSize="30sp" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_margin="30dp"
        android:layout_gravity="center"
        android:text="Notify"
        android:textSize="30sp"/>

</LinearLayout>
```
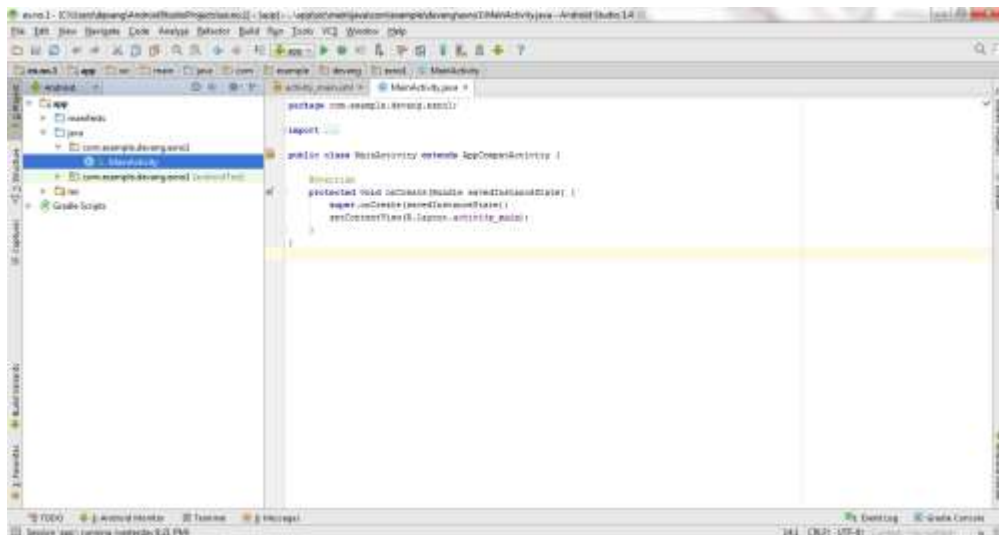
- Now click on **Design** and your application will look as given below.

- So now the designing part is completed.

Java Coding for the Android Application:

- Click on **app -> java -> com.example.exno10 -> MainActivity.**

- Then delete the code which is there and type the code as given below.

Code for MainActivity.java:

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```
1 package com.example.exno10;
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3 import android.app.Notification;
4 import android.app.NotificationManager;
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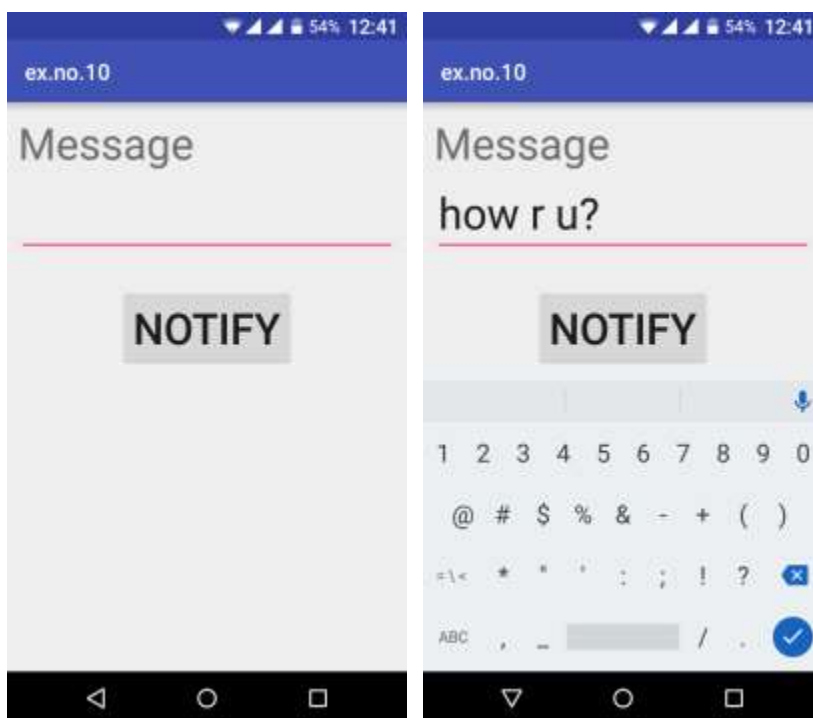
```java
import android.app.PendingIntent;
import android.content.Intent;
import android.os.Bundle;
import android.support.v7.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity
{
    Button notify;
    EditText e;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        notify= (Button) findViewById(R.id.button);
        e= (EditText) findViewById(R.id.editText);

        notify.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View v)
            {
                Intent intent = new Intent(MainActivity.this,
SecondActivity.class);
                PendingIntent pending =
PendingIntent.getActivity(MainActivity.this, 0, intent, 0);
                Notification noti = new
Notification.Builder(MainActivity.this).setContentTitle("New
Message").setContentText(e.getText().toString()).setSmallIcon(R.mipmap.ic
_launcher).setContentIntent(pending).build();
                NotificationManager manager = (NotificationManager)
getSystemService(NOTIFICATION_SERVICE);
                noti.flags |= Notification.FLAG_AUTO_CANCEL;
                manager.notify(0, noti);
            }
        });
    }
}
```
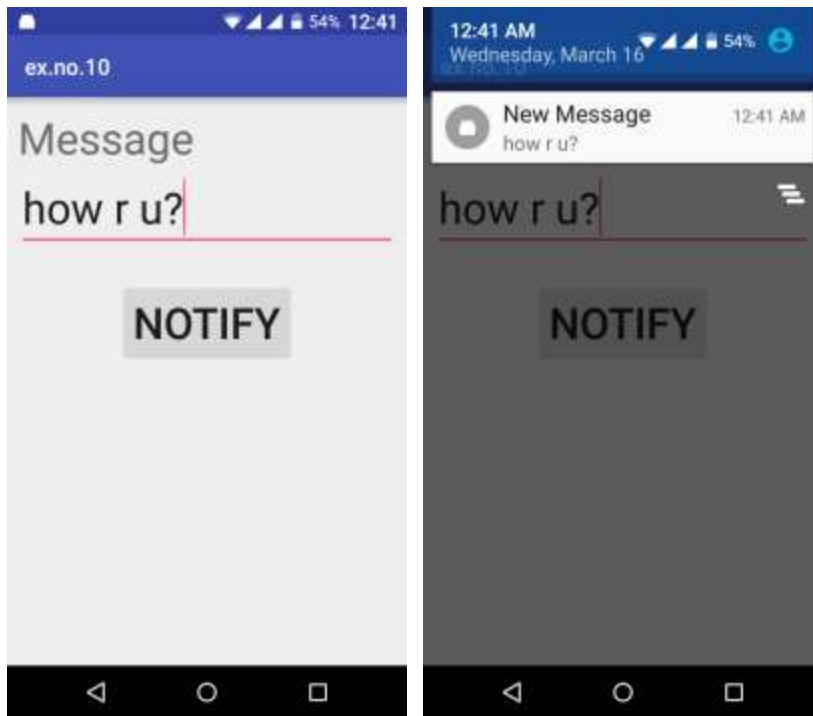
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- So now the Coding part is also completed.
- Now run the application to see the output.

Output:

Result:

Thus Android Application that creates an alert upon receiving a message is developed and executed successfully.