Week 11: Develop an application that creates notification upon receiving a message.

Android Application that creates an alert upon receiving a message

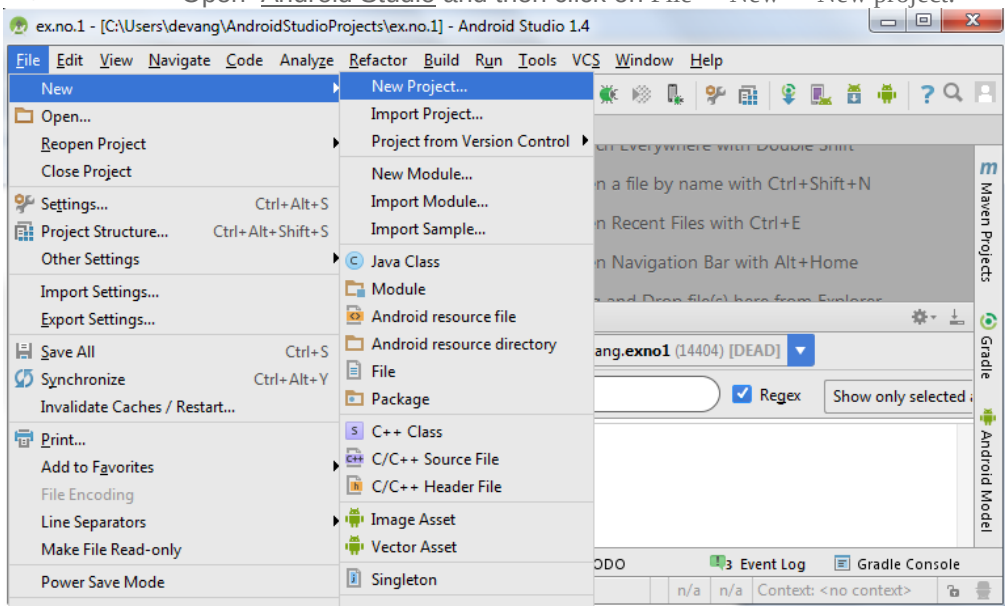
Aim:

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

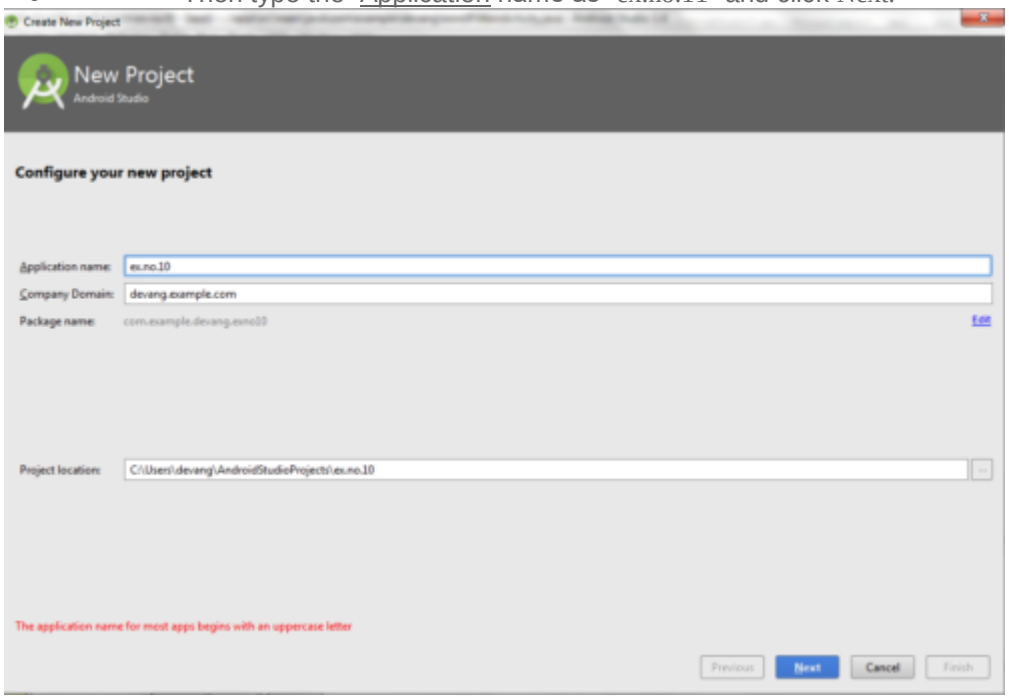
Procedure:

Creating a New project:

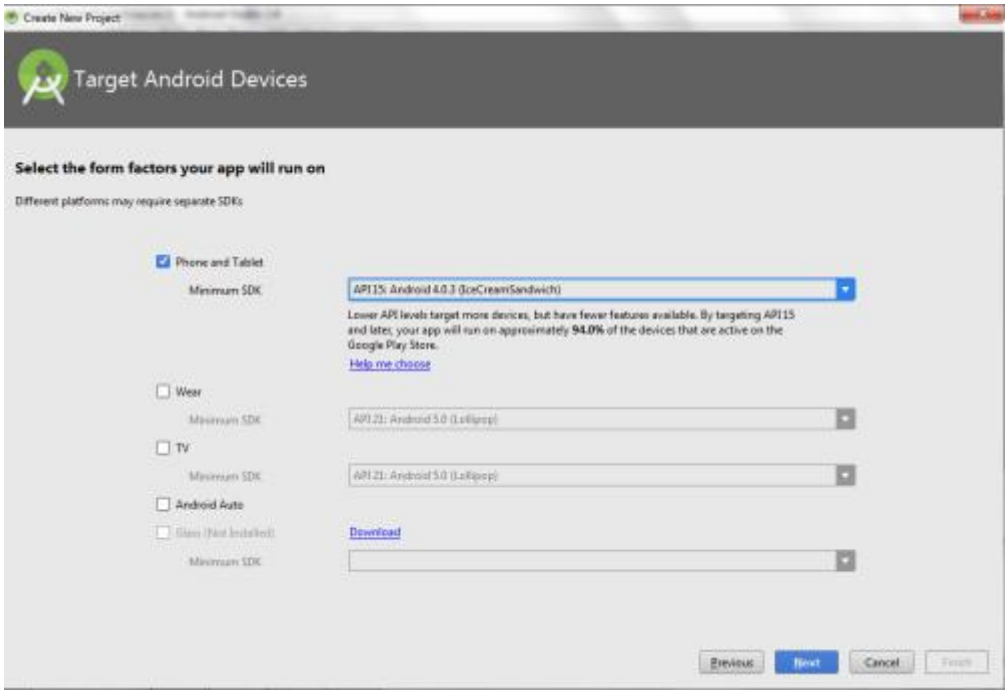
- Open Android Studio and then click on File -> New -> New project.



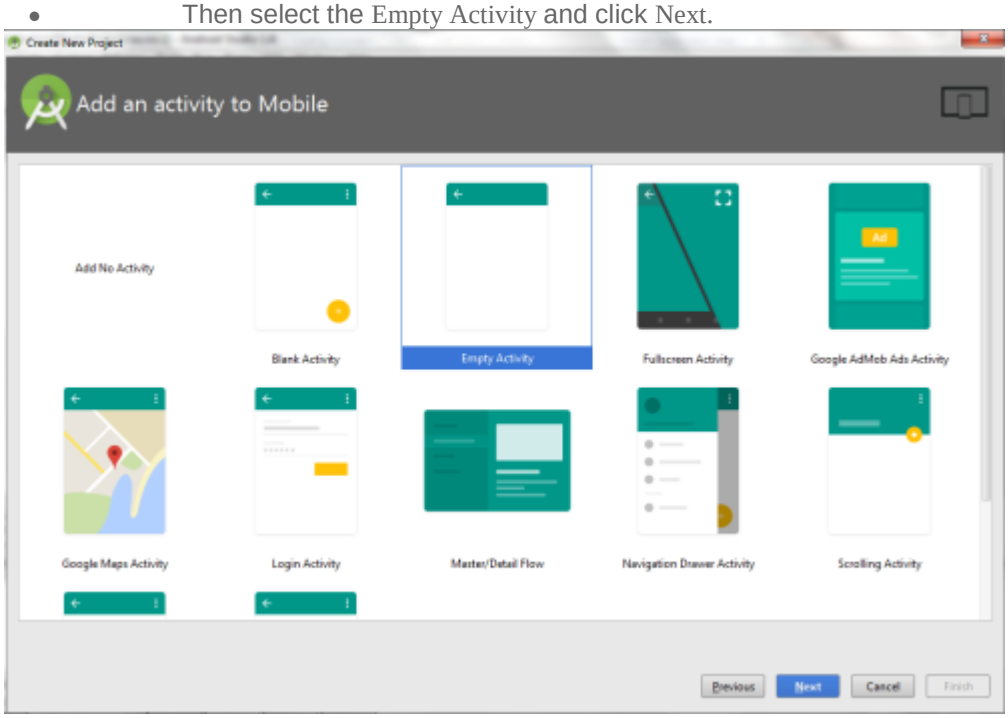
- Then type the Application name as "ex.no.11" and click Next.



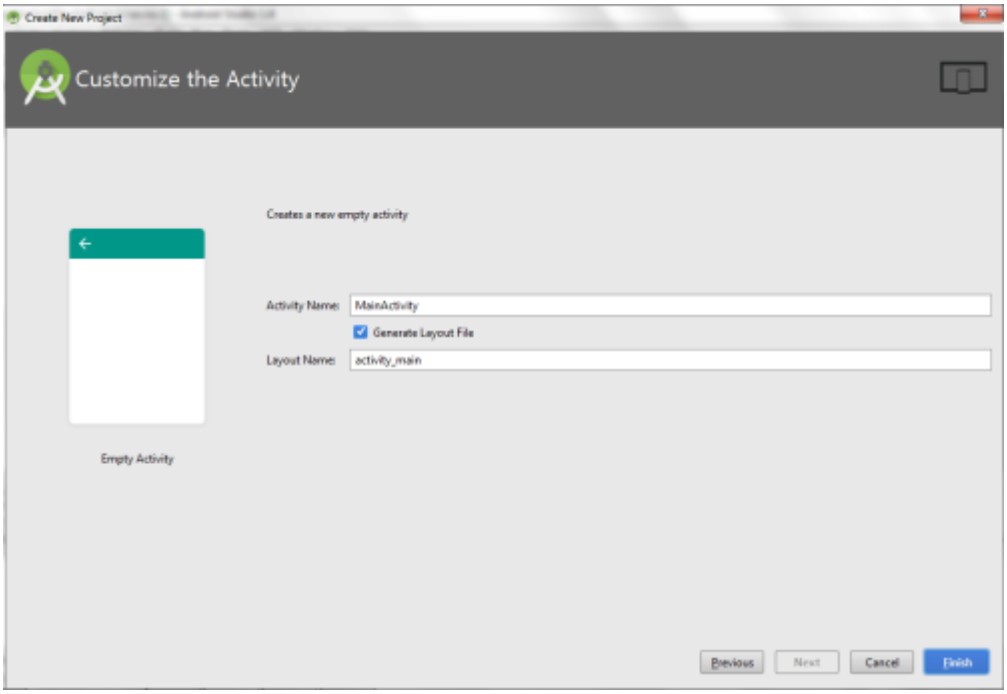
- Then select the Minimum SDK as shown below and click Next.



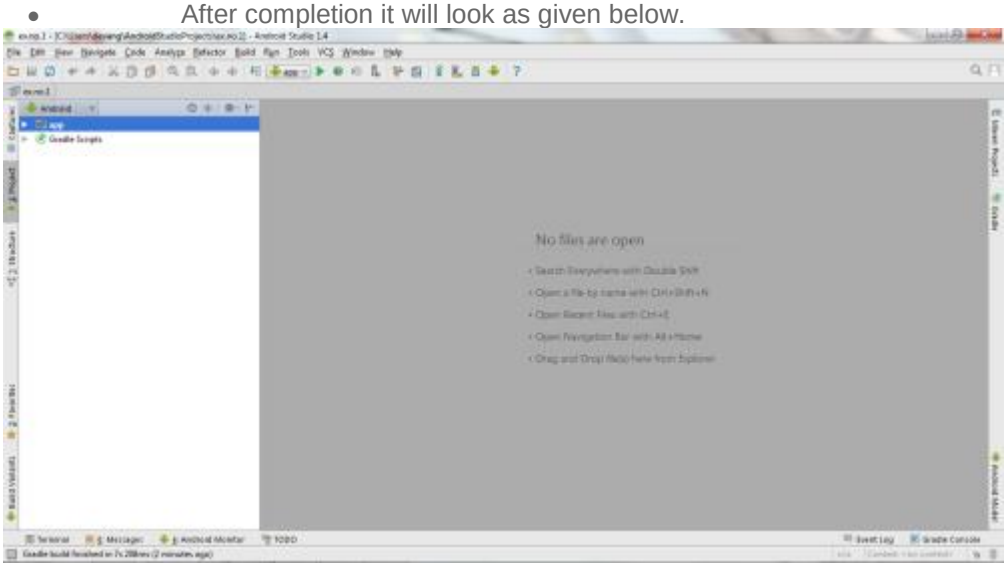
- Then select the Empty Activity and click Next.



- Finally click Finish.

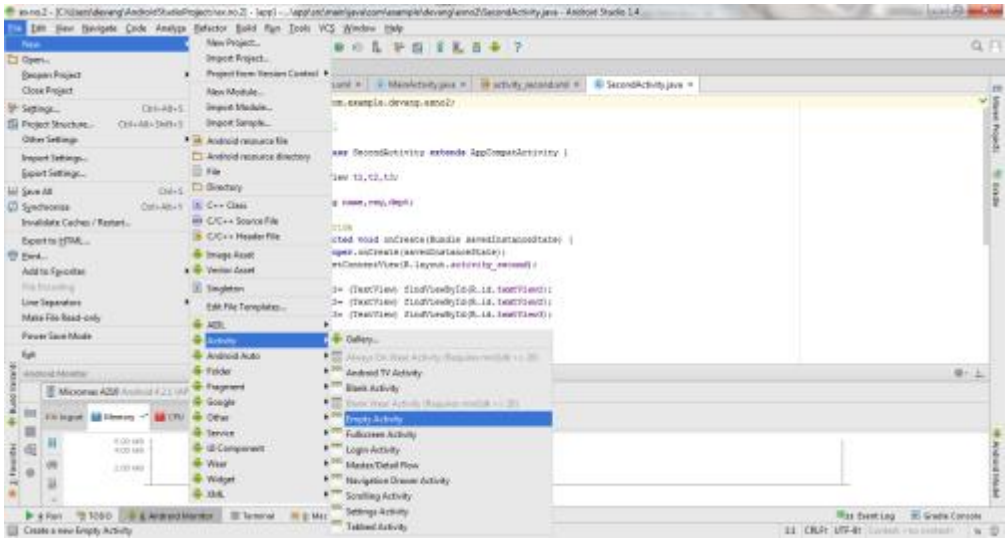


- It will take some time to build and load the project.
- After completion it will look as given below.

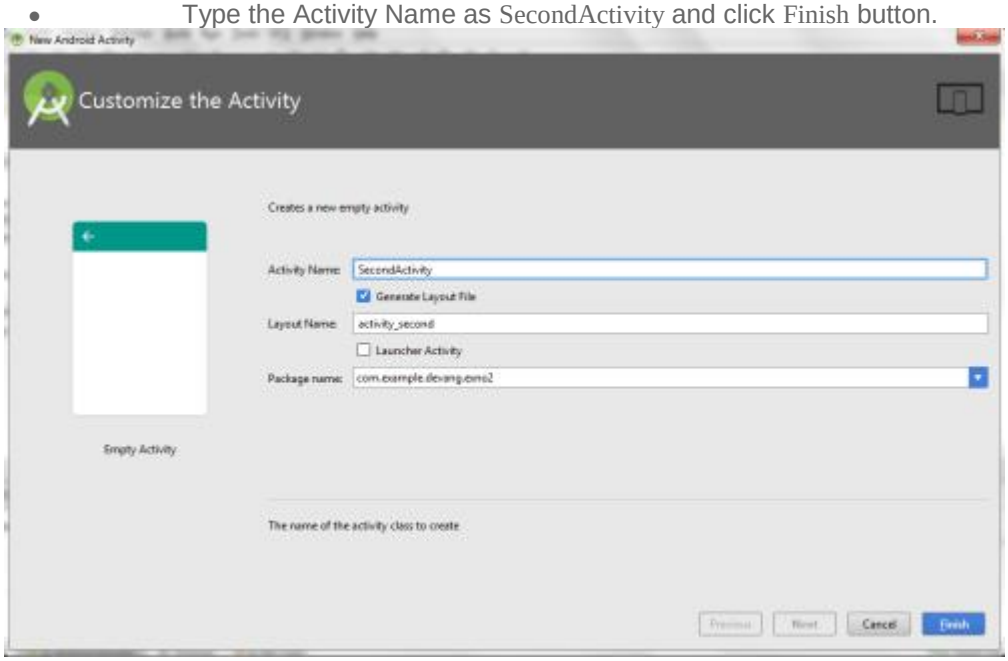


Creating Second Activity for the Android Application:

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



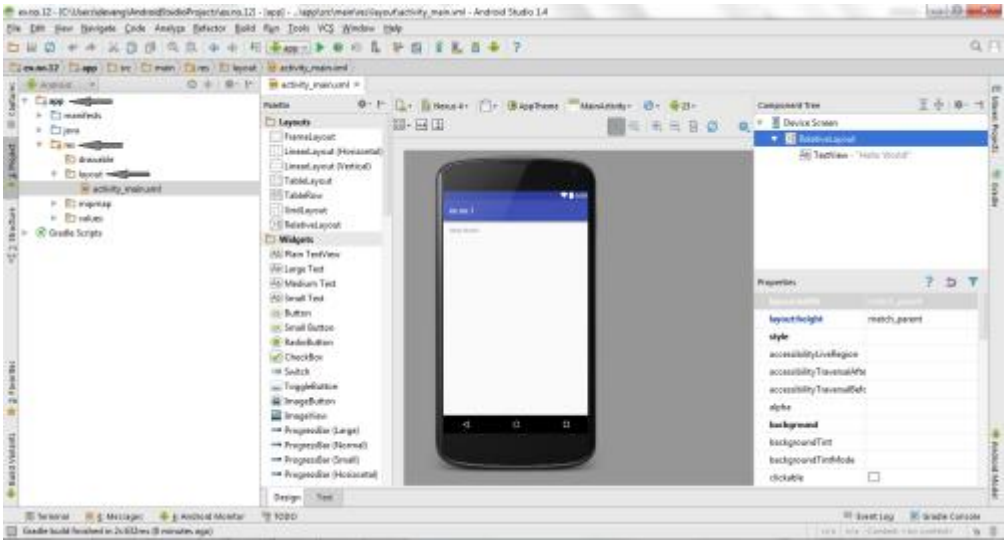
- Type the Activity Name as SecondActivity and click Finish button.



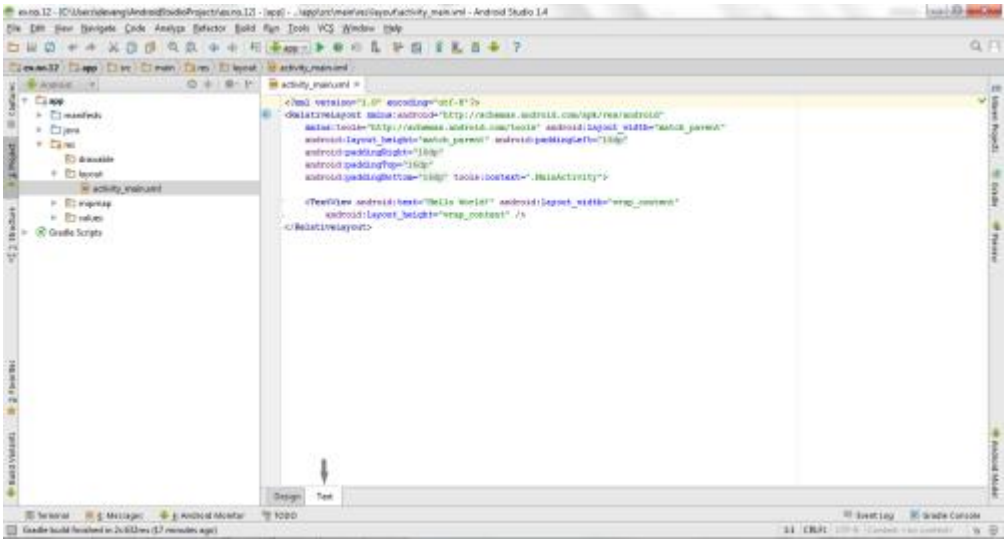
- Thus Second Activity For the application is created.

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.

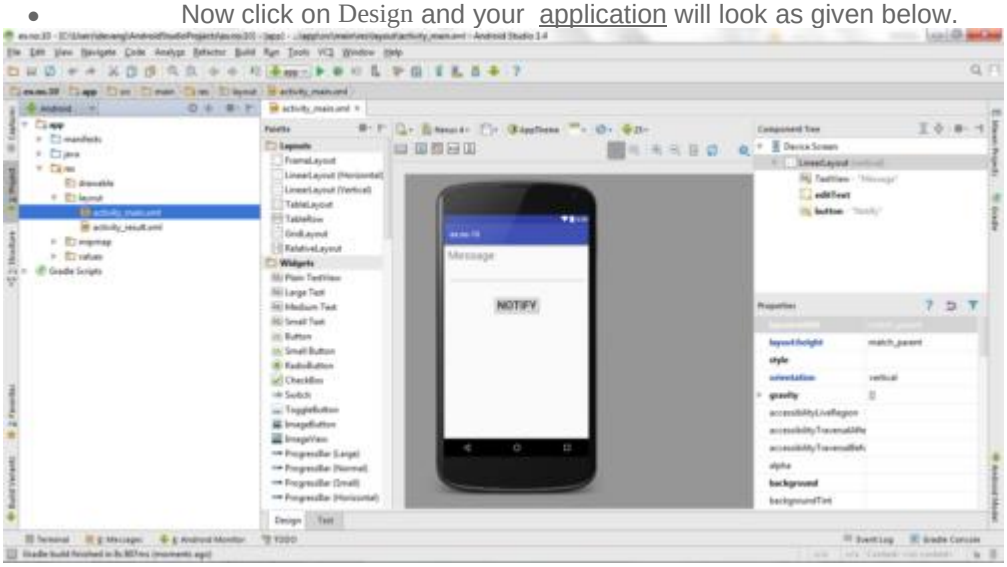
Code for Activity_main.xml:

?

```
<?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>
```

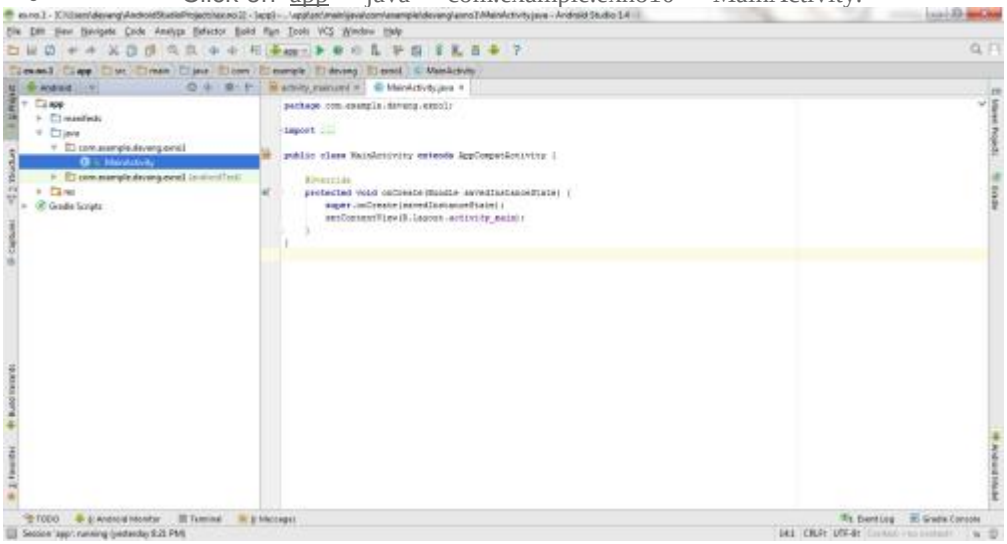
- Now click on Design and your application will look as given below.



- 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.

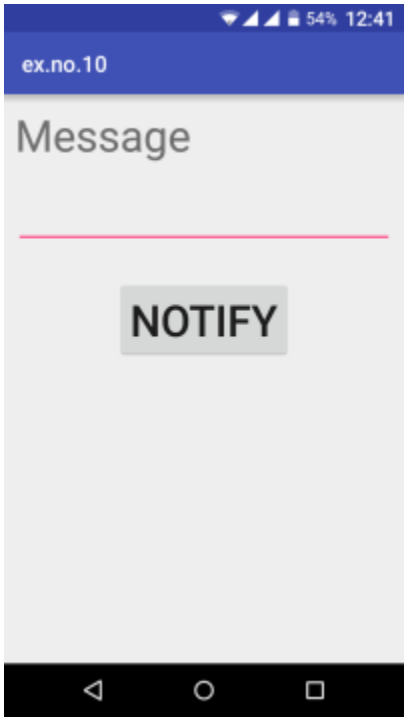
Code for MainActivity.java:

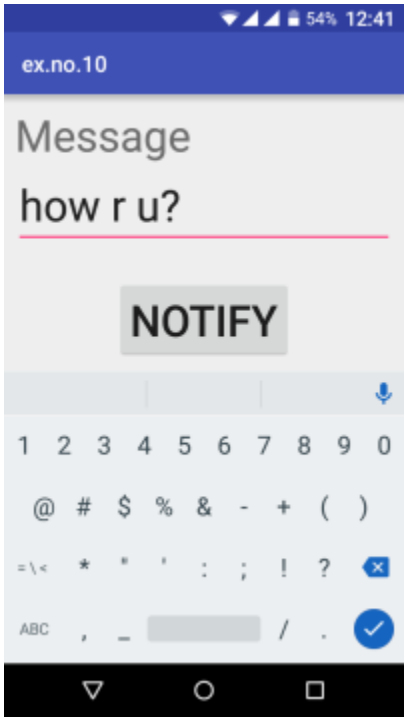
?

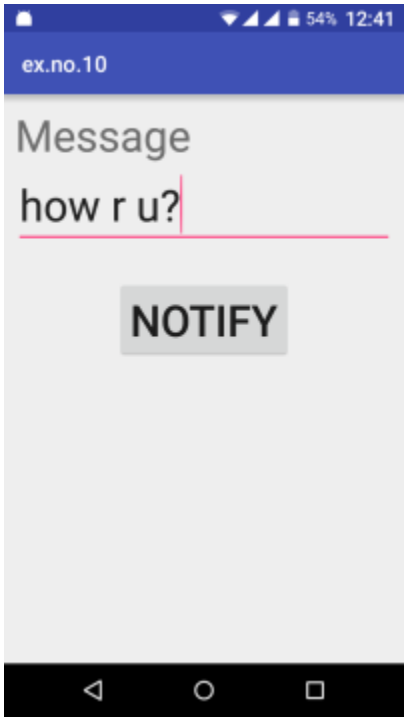
```
package com.example.exno10;

import android.app.Notification;
import android.app.NotificationManager;
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_launche
r).setContentIntent(pending).build();
                NotificationManager manager = (NotificationManager)
getSystemService(NOTIFICATION_SERVICE);
                noti.flags |= Notification.FLAG_AUTO_CANCEL;
                manager.notify(0, noti);
            }
        });
    }
}
```

- So now the Coding part is also completed.
- Now run the application to see the output.

Output:


54% 12:41
ex.no.10
Message
NOTIFY


54% 12:41
ex.no.10
Message
how r u?
NOTIFY
1 2 3 4 5 6 7 8 9 0
@ # $ % & - + ( )
* " ' : ; ! ?
ABC , _ / .



Result:

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