



**CHANDIGARH
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UNIVERSITY INSTITUTE OF ENGINEERING

Department of Computer Science & Engineering

Subject Name: MOBILE APPLICATION DEVELOPMENT LAB

Subject Code: 20CSP-356

Submitted to:

Faculty name: Mr. Hemant Kumar

Submitted by:

Name: Sahil Kaundal

UID: 21BCS8197

Section: 616

Group: A

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Ex. No	List of Experiments	Conduct (MM: 12)	Viva (MM: 10)	Record (MM: 8)	Total (MM: 30)	Remarks/Signature
1.1	Installing and running applications on android studio					
1.2	To design an android application to display Hello World					
1.3	Create Application by Using Widgets					
2.1						
2.2						
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3.1						
3.2						
3.3						

Experiment 1.2

Student Name: Sahil Kaundal

Branch: CSE (Lateral Entry)

Semester: 6th

Subject Name: Mobile Application Development Lab

UID: 21BCS8197

Section/Group: 616/A

Date of Performance: 16/02/2023

Subject Code: 20CSP-356

1. Aim: To design an android application to display Hello World.

2. Objective: To design an android application to display Hello World.

Android Studio is the official IDE (Integrated Development Environment) for Android app development and it is based on JetBrains' IntelliJ IDEA software. Android Studio provides many excellent features that enhance productivity when building Android apps.

3. System Requirements:

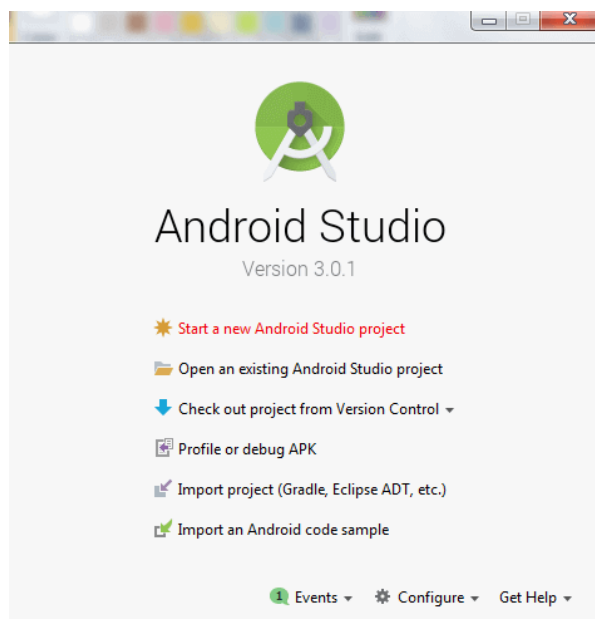
- Microsoft Windows 7/8/10 (32-bit or 64-bit)
- 4 GB RAM minimum, 8 GB RAM recommended (plus 1 GB for the Android Emulator)
- 2 GB of available disk space minimum, 4 GB recommended (500 MB for IDE plus 1.5 GB for Android SDK and emulator system image)
- 1280 x 800 minimum screen resolution
- Java JDK5 or later version
- Java Runtime Environment (JRE) 6 Android Studio

4. Steps/Program:

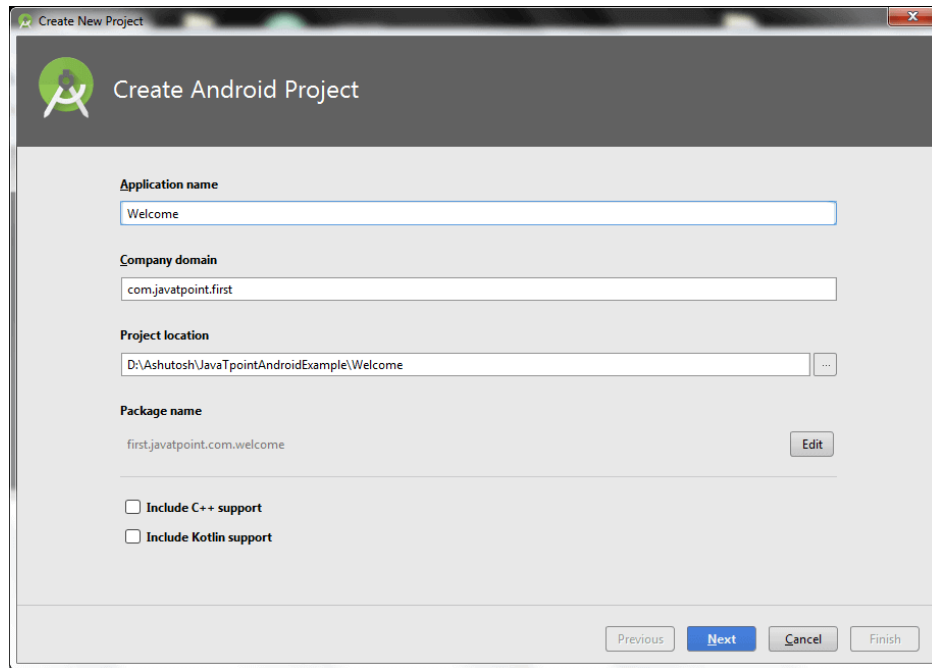
- **Create the New Android project**

For creating the new android studio project:

1. Select *Start a new Android Studio project*



2. Provide the following information: Application name, Company domain, Project location and Package name of application and click next.



Create New Project

Create Android Project

Application name
Welcome

Company domain
com.javatpoint.first

Project location
D:\Ashutosh\JavaTpointAndroidExample\Welcome

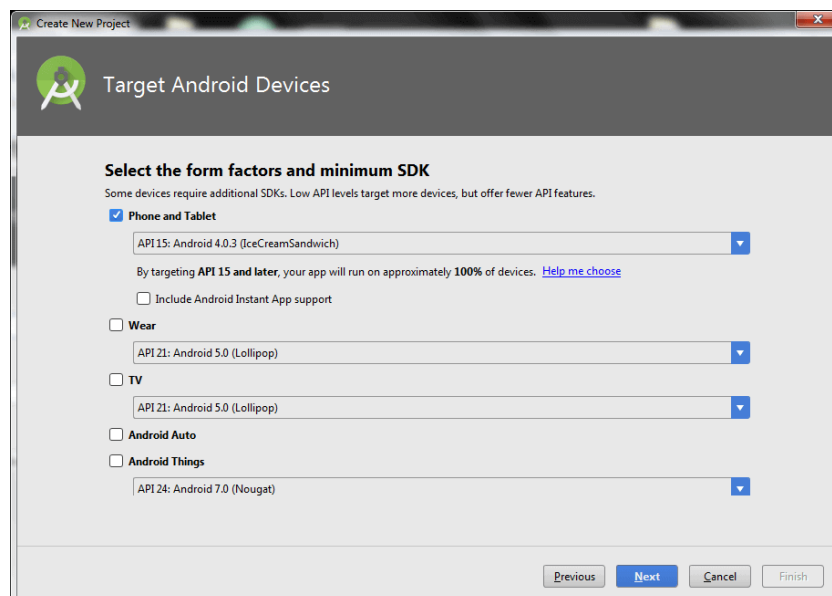
Package name
first.javatpoint.com.welcome

☐ Include C++ support

☐ Include Kotlin support

Previous Next Cancel Finish

3. Select the API level of application and click next.



Create New Project

Target Android Devices

Select the form factors and minimum SDK

Some devices require additional SDKs. Low API levels target more devices, but offer fewer API features.

☒ Phone and Tablet

API 15: Android 4.0.3 (IceCreamSandwich)

By targeting API 15 and later, your app will run on approximately 100% of devices. [Help me choose](#)

☐ Include Android Instant App support

☐ Wear

API 21: Android 5.0 (Lollipop)

☐ TV

API 21: Android 5.0 (Lollipop)

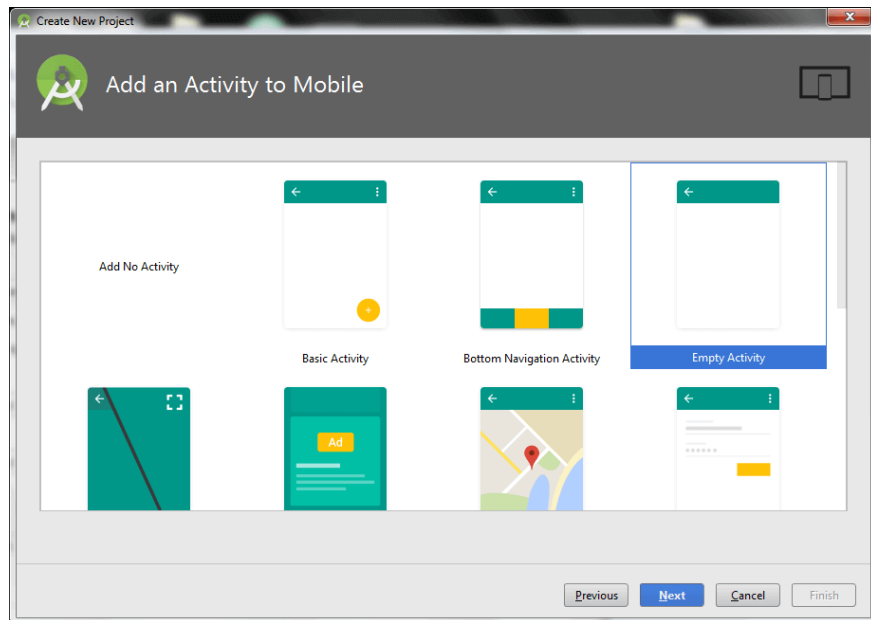
☐ Android Auto

☐ Android Things

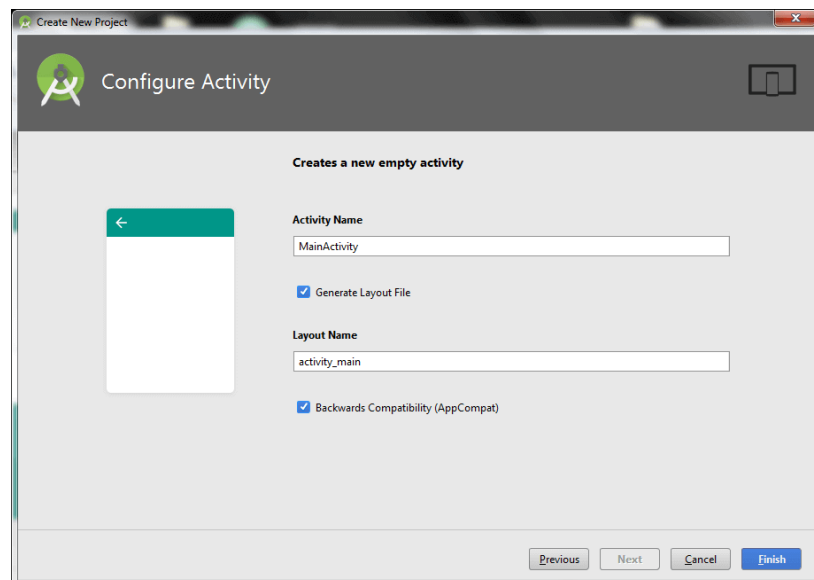
API 24: Android 7.0 (Nougat)

Previous Next Cancel Finish

4. Select the Activity type (Empty Activity).

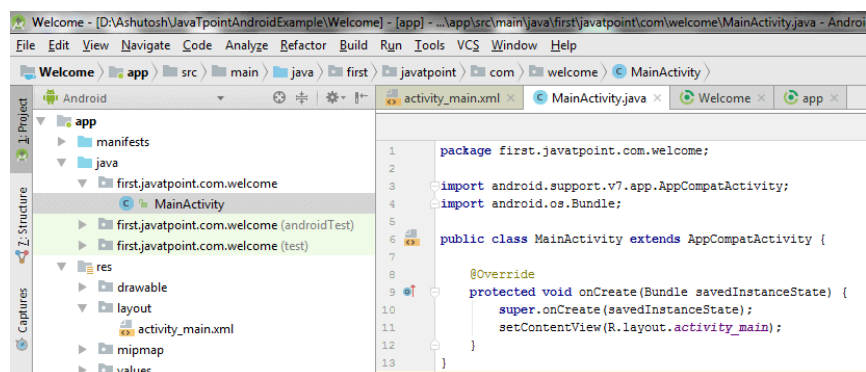


5. Provide the Activity Name and click finish.



After finishing the Activity configuration, Android Studio auto generates the activity class and other required configuration files.

Now an android project has been created. You can explore the android project and see the simple program; it looks like this:



- **Write the message**

File: activity_main.xml

Android studio auto generates code for activity_main.xml file. You may edit this file according to your requirement.

```
<?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="first.javatpoint.com.welcome.MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello Android!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</android.support.constraint.ConstraintLayout>
}
```

File: MainActivity.java

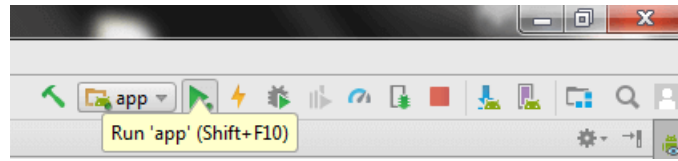
```
package first.javatpoint.com.welcome;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;

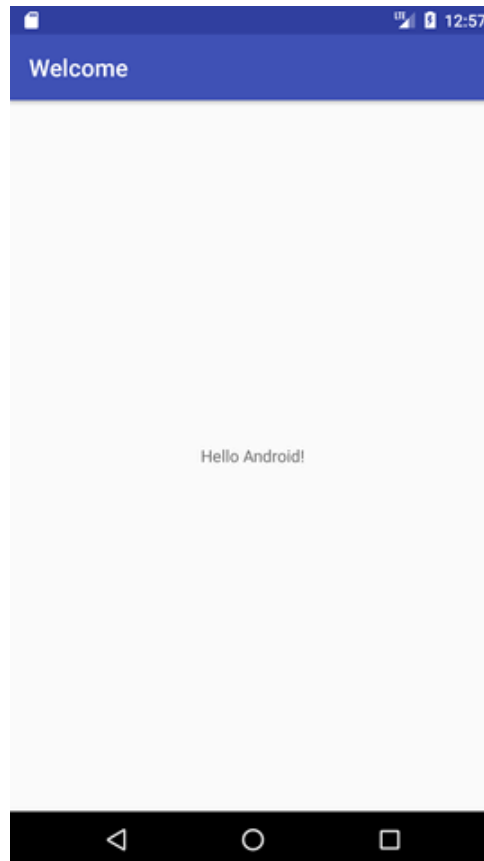
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

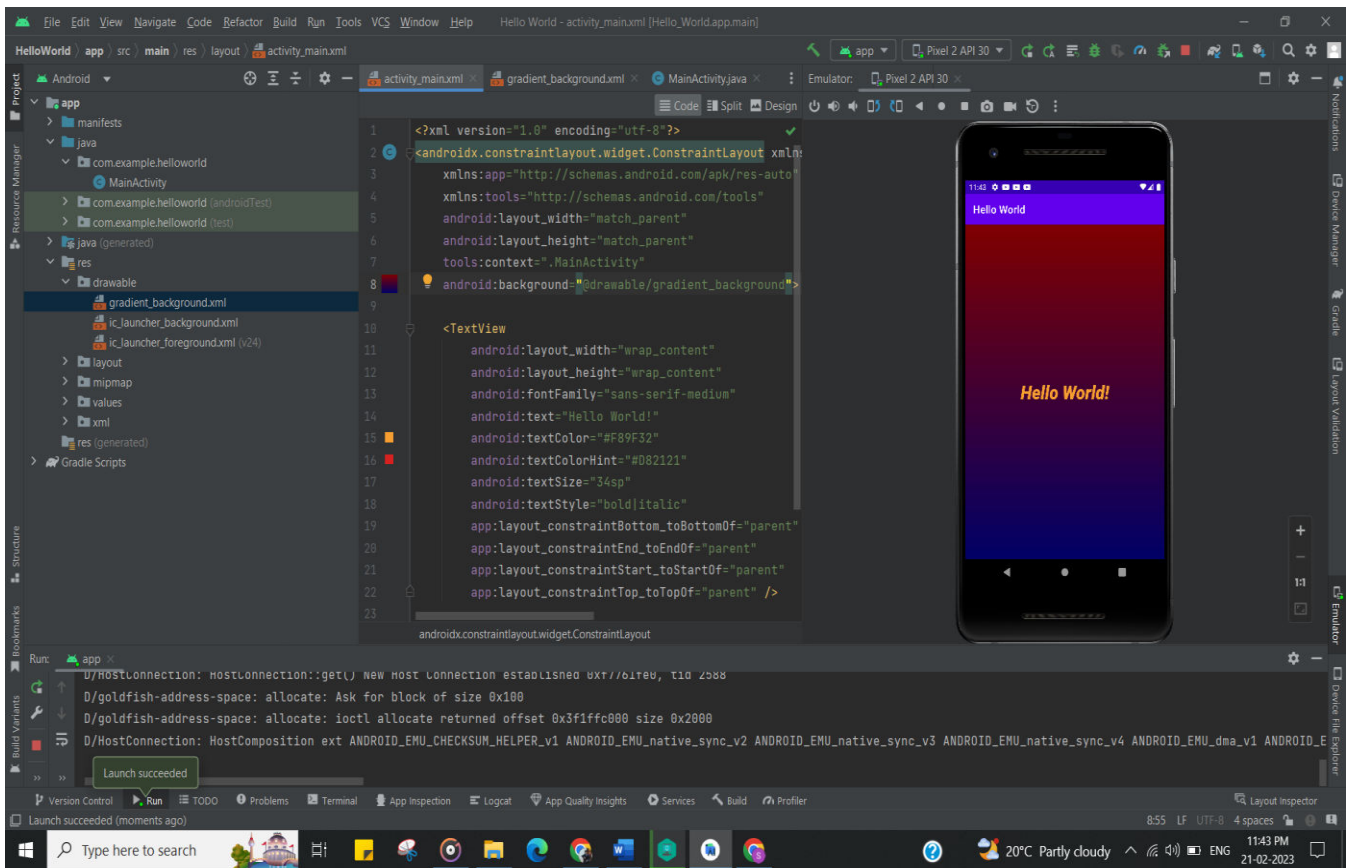
- **Run the android application**

To run the android application, click the run icon on the toolbar or simply press Shift + F10.



The android emulator might take 2 or 3 minutes to boot. So please have patience. After booting the emulator, the android studio installs the application and launches the activity. You will see something like this:





Learning outcomes (What I have learnt):

- To design an android application to display Hello World in android studio.
- Learnt about running application on android studio.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			