

1. Give the steps to setup Android Environment using Android Studio IDE

<https://www.tutlane.com/tutorial/android/android-studio-installation-for-development-environment>

2. Give the steps to setup Android Environment using Eclipse IDE

<https://www.w3schools.blog/setup-android-for-eclipse-ide>
<https://www.javatpoint.com/how-to-setup-android-for-eclipse-ide>

3. Give the steps to create Android Virtual Device (AVD)

<https://www.tutlane.com/tutorial/android/android-setup-emulator-or-create-avd-android-virtual-device>

4. Write about Android project structure

An Android project consists of several directories and files that contain the code, resources, and manifest file for your app. If you're working on an Android project, it's important to familiarize yourself with this structure so that you know where to find the files you need and how to properly organize your own files.

The project structure for an Android application is as follows:

1. **app:** This directory contains the code, resources, and manifest file for your app.
2. **manifests:** This directory contains the **AndroidManifest.xml** file, which is the central configuration file for your app. It specifies the app's package name, the minimum required Android version, the components that are included in the app, and any permissions that the app requires.
3. **src:** This directory contains the source code files for your project, including the main activity class and any other Java classes you've created.
4. **res:** This directory contains all the resources for your project, including layouts, drawables, and strings. It is organized into subdirectories based on the type of resource. For example, the drawable directory contains image files, and the layout directory contains XML files that define the layout of your app's user interface.

The res directory in an Android project contains resources that are used by the app, such as layouts, drawables, and strings. This directory is organized into several subdirectories, each of which contains a specific type of resource. Here is a list of the common subdirectories found in the res directory:

drawable: This directory contains image files and other drawable resources.

layout: This directory contains XML files that define the layout of the user interface for your app.

values: This directory contains XML files that define various types of values, such as strings, dimensions, and colors.

menu: This directory contains XML files that define the menus used in your app.

mipmap: This directory contains the app launcher icons for different densities.

anim: This directory contains XML files that define property animations.

raw: This directory contains raw files that can be accessed by the app, such as audio or video files.

xml: This directory can contain any XML files that are used by the app.

5. **assets:** This directory can be used to store any files that your app needs to access, but that are not compiled into the APK file.

6. **libs:** This directory contains any third-party libraries that your app depends on.

7. **build:** This directory contains the files that are generated by the Android build system, such as the APK file that is used to install your app on a device.

build.gradle: This file is used to configure the build for your app. It specifies the dependencies for your app, as well as any custom build options that you need.

8. **proguard-rules.pro:** This file is used to configure ProGuard, which is a tool that is used to shrink and optimize your app's code.

<https://www.tutlane.com/tutorial/android/android-app-project-folder-structure>

5. Develop an android application to display a message like “Hello World”

<https://www.tutlane.com/tutorial/android/android-hello-world-app-example>

6. Develop android application that will get the Text Entered in Edit Text and display that Text using toast message on clicking a button

<https://www.practicalserver.net/2022/01/entered-in-edittext-and-display-in-toast-android.html>

7. Create an Android app to accept two numbers in two EditText(textfields) and display the sum of them in a Toast message on clicking a button

<https://teachics.org/android-examples/android-program-to-add-two-numbers/>

8. Create an Android app to accept a number in EditText and display the factorial of it in a Toast message on clicking a button.

<https://www.edureka.co/community/205622/factorial-program-in-android>

- 9. Design a simple calculator application to perform addition, subtraction, multiplication and division using different buttons.**

<https://www.narendradwivedi.org/2022/07/simple-calculator-app-android-studio.html>

<https://medium.com/swlh/simple-calculator-app-in-android-studio-for-beginners-d0324ef10420>

10. Develop android application using Linear Layout

Linear layout is a view group that aligns all its children in a single direction, either horizontally or vertically. To develop an Android application using linear layout, you can follow these steps:

<https://www.tutlane.com/tutorial/android/android-linearlayout-with-examples>

11. Develop android application using Relative Layout

<https://www.tutlane.com/tutorial/android/android-relativelayout-with-examples>

12. Develop android application using Table Layout

<https://www.tutlane.com/tutorial/android/android-tablelayout-with-examples>

13. Develop android application using Constraint Layout

<https://www.geeksforgeeks.org/constraintlayout-in-android/>