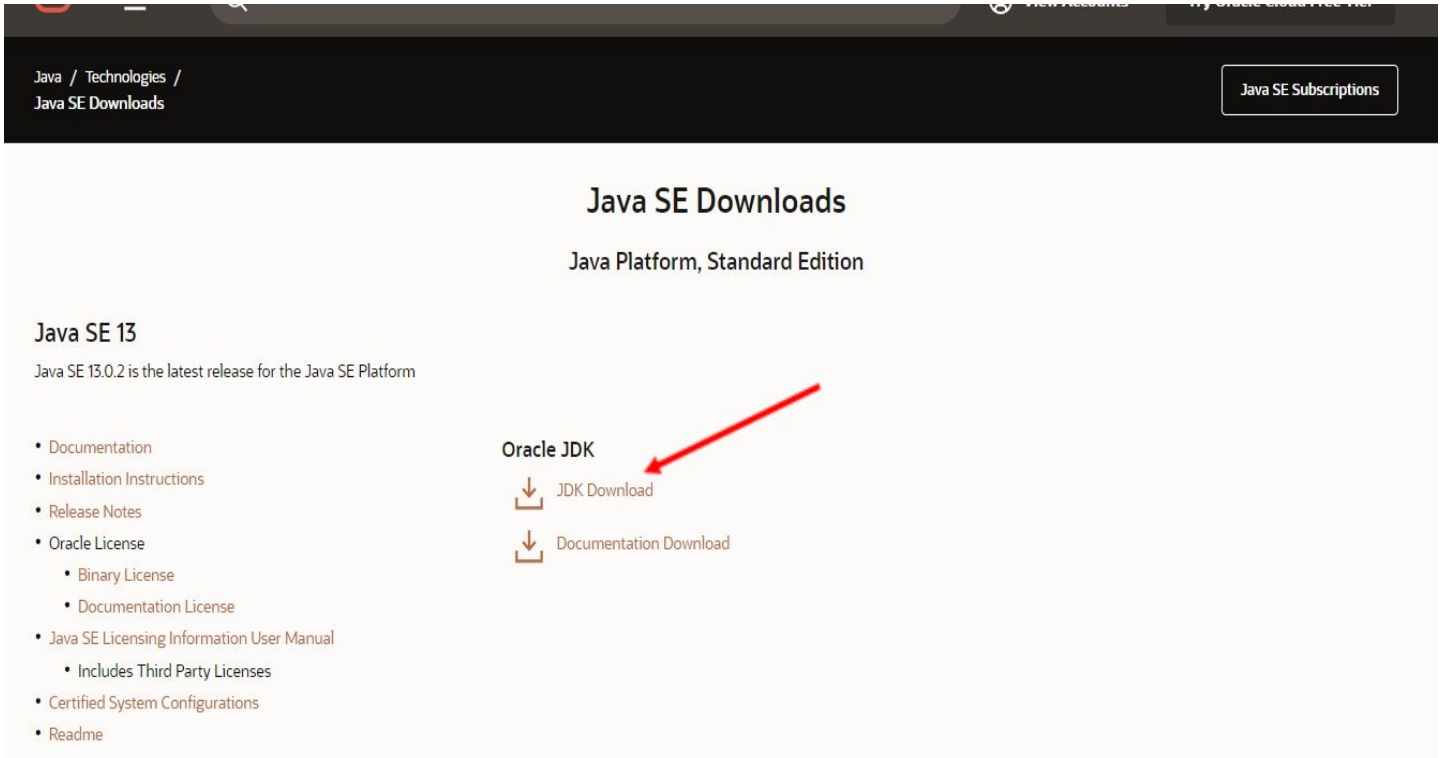
Android Studio installation and setup

Android Studio is the IDE that will be used to develop Android Applications
Steps to setup Android Studio for development in a Windows environment

1. Install Java
2. Install Android Studio
3. Test with a Simple Program

1.1. Install Java

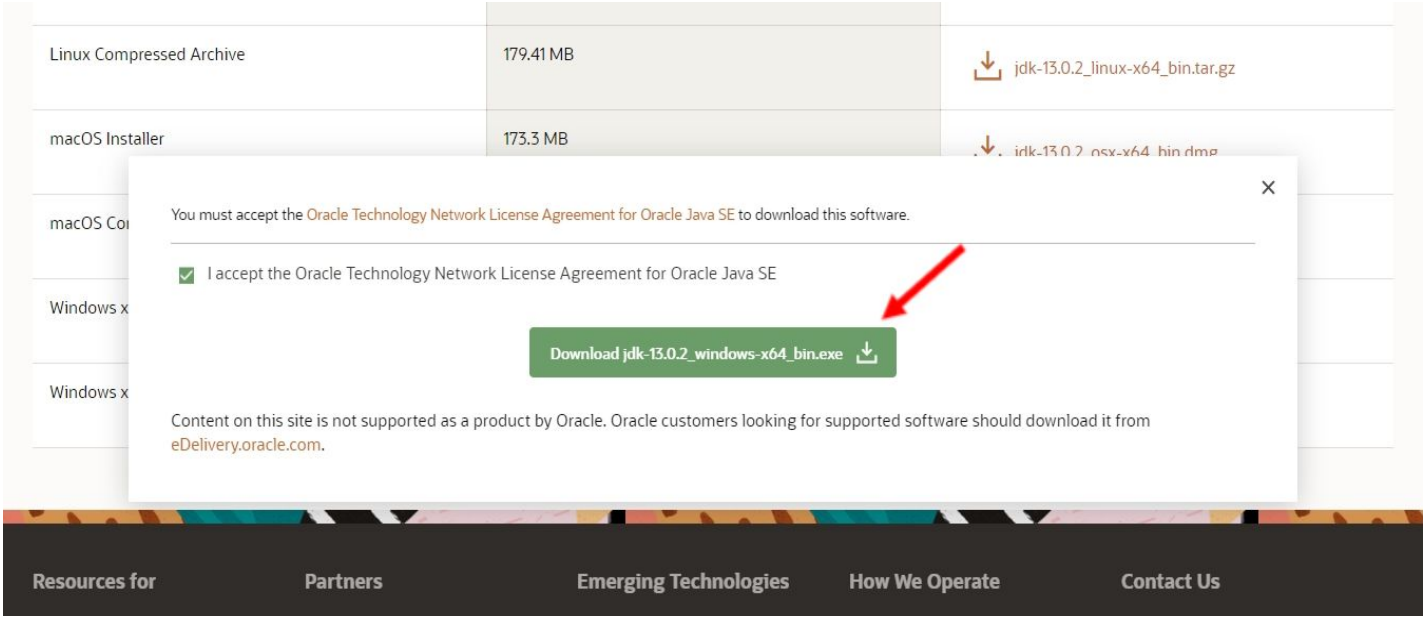
- **Step 1) Go to the link. Click on Download JDK. For java latest version.**



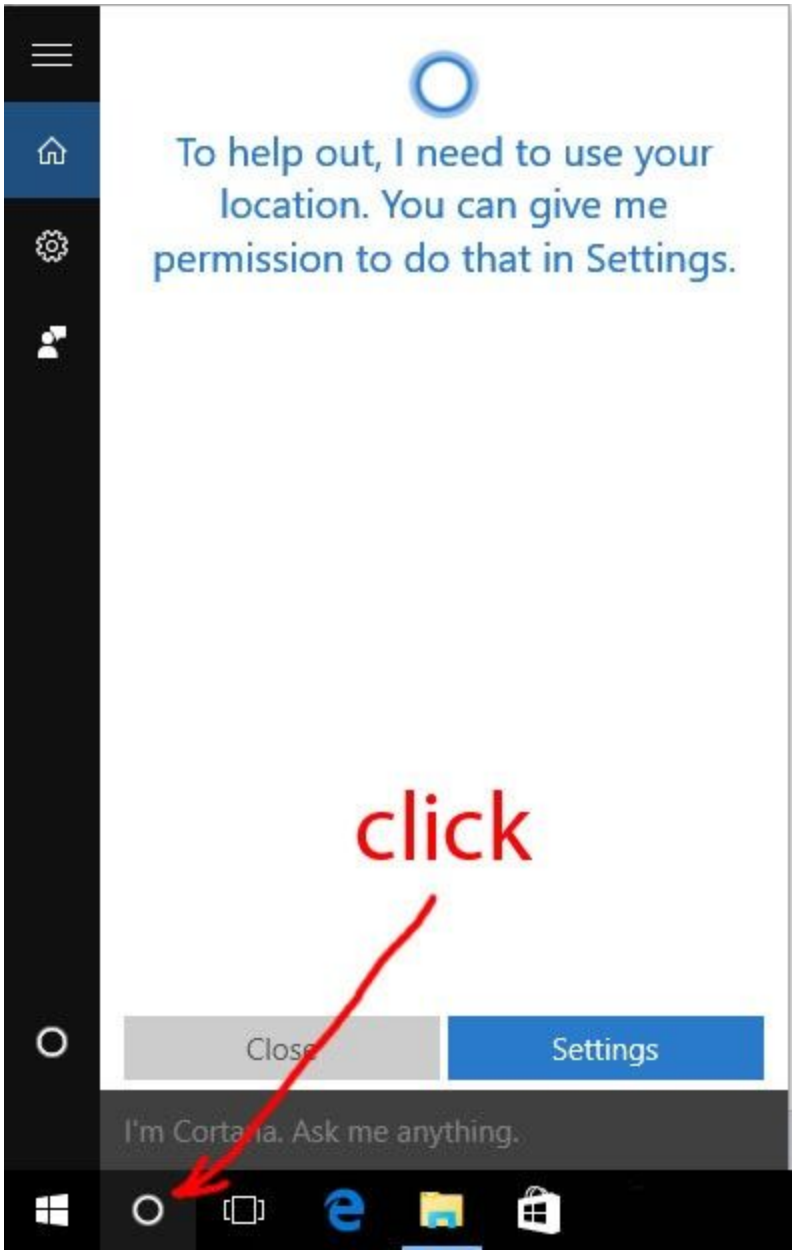
- **Step 2) Select JDK version for your system**

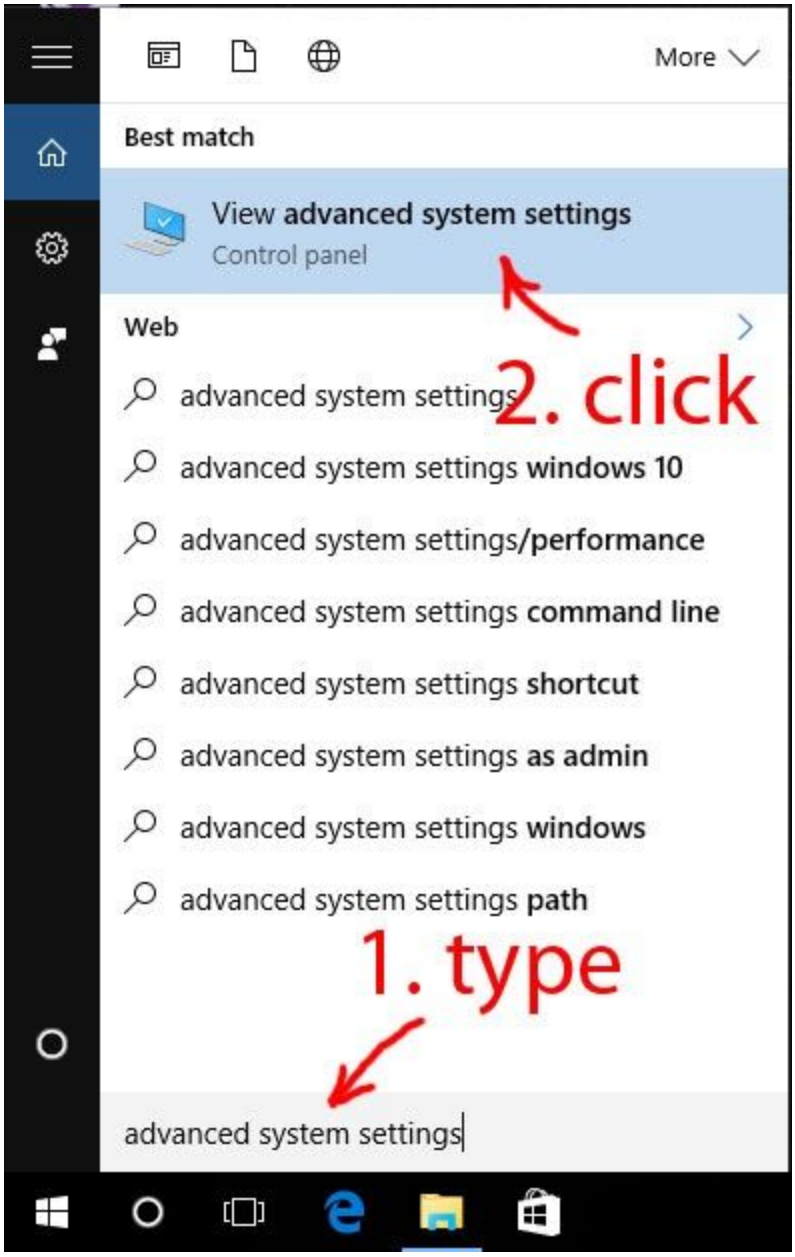
Product / File Description	File Size	Download
Linux Debian Package	155.72 MB	jdk-13.0.2_linux-x64_bin.deb
Linux RPM Package	162.66 MB	jdk-13.0.2_linux-x64_bin.rpm
Linux Compressed Archive	179.41 MB	jdk-13.0.2_linux-x64_bin.tar.gz
macOS Installer	173.3 MB	jdk-13.0.2_osx-x64_bin.dmg
macOS Compressed Archive	173.7 MB	jdk-13.0.2_osx-x64_bin.tar.gz
Windows x64 Installer	159.83 MB	jdk-13.0.2_windows-x64_bin.exe
Windows x64 Compressed Archive	178.99 MB	jdk-13.0.2_windows-x64_bin.zip

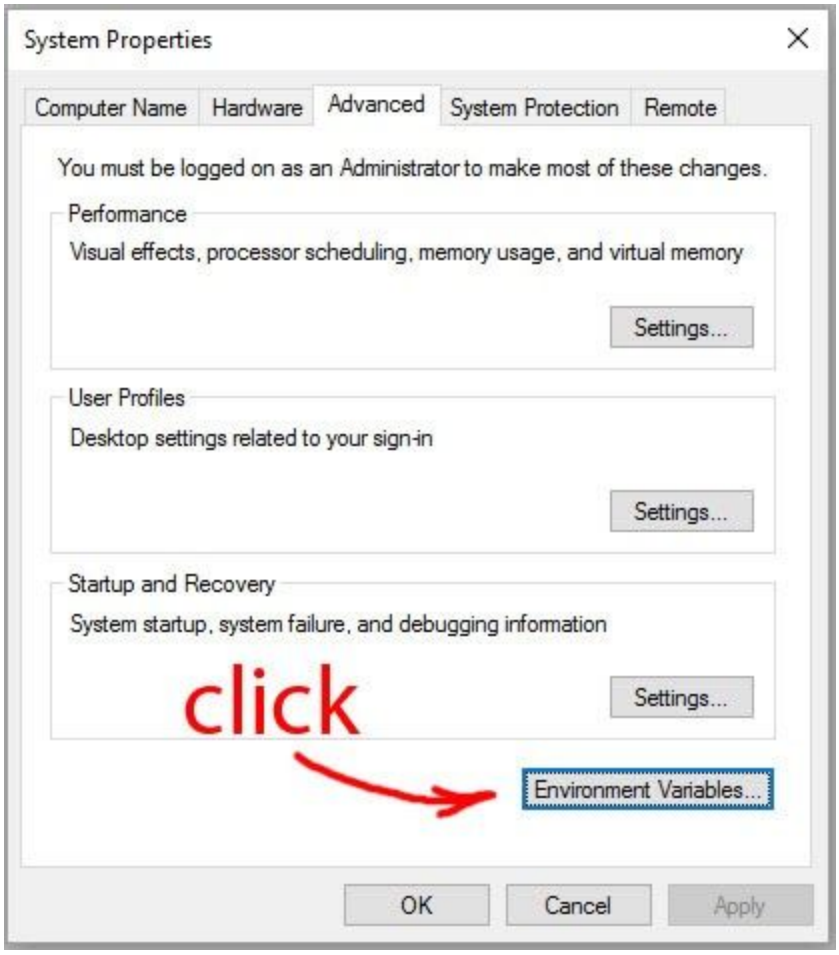
- **Step 3) Accept the Oracle Technology Network License Agreement for Oracle Java SE to download this software**

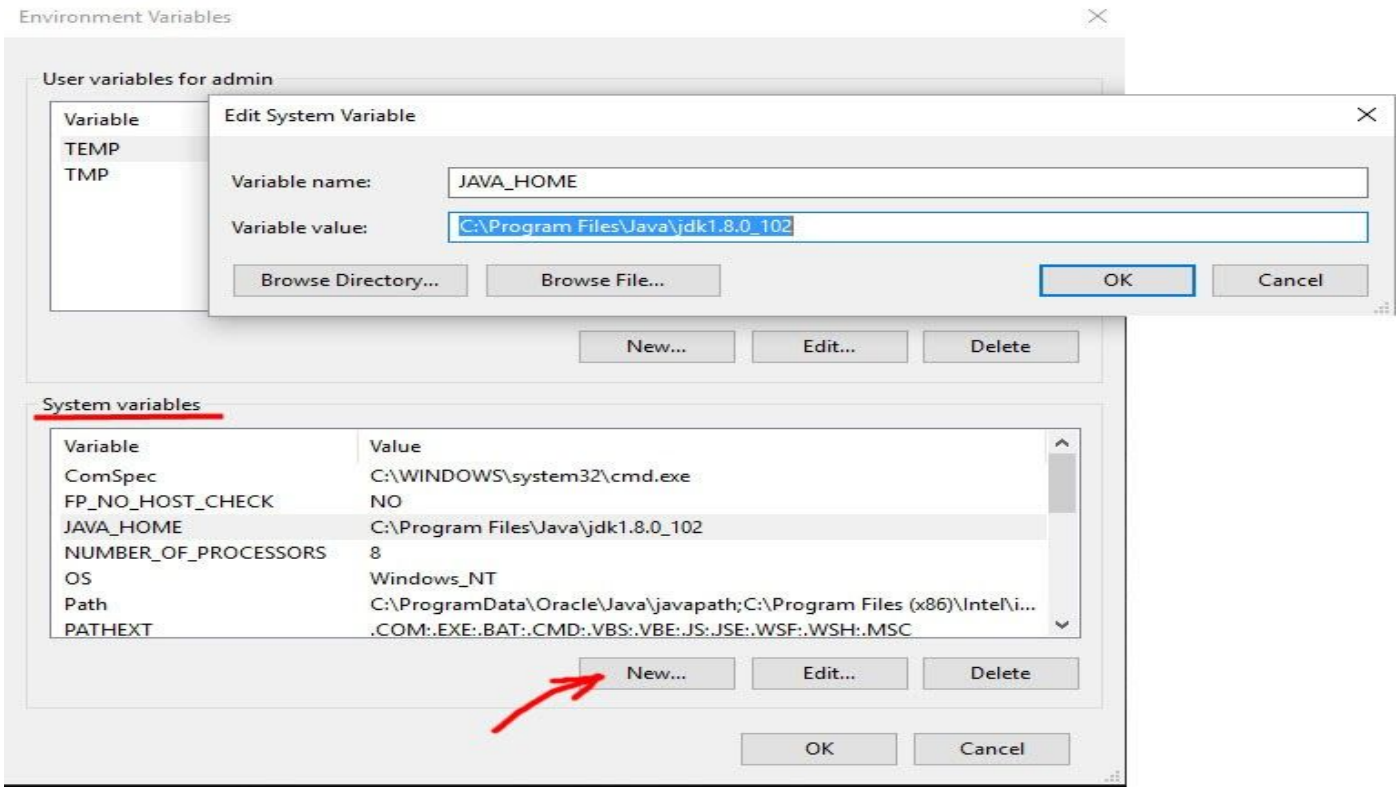


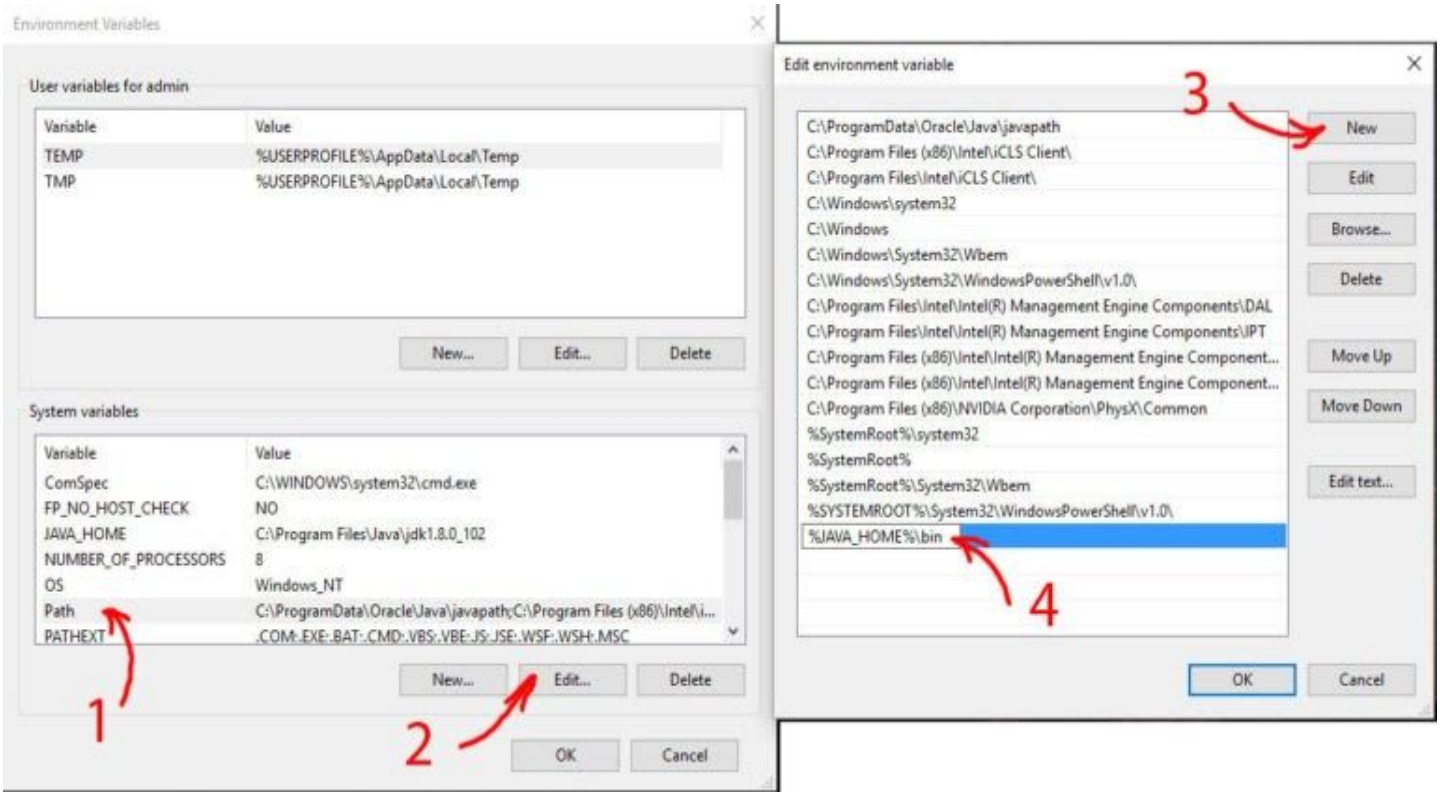
- **Step 4) Add JAVA to the environment path**




More
Best match
View advanced system settings
Control panel
Web
advanced system settings
advanced system settings windows 10
advanced system settings/performance
advanced system settings command line
advanced system settings shortcut
advanced system settings as admin
advanced system settings windows
advanced system settings path
2. click
1. type
advanced system settings


System Properties
Computer Name
Hardware
Advanced
System Protection
Remote
You must be logged on as an Administrator to make most of these changes.
Performance
Visual effects, processor scheduling, memory usage, and virtual memory
Settings...
User Profiles
Desktop settings related to your sign-in
Settings...
Startup and Recovery
System startup, system failure, and debugging information
Settings...
click
Environment Variables...
OK
Cancel
Apply


Environment Variables
User variables for admin
Variable
TEMP
TMP
Edit System Variable
Variable name:
JAVA_HOME
Variable value:
C:\Program Files\Java\jdk1.8.0_102
Browse Directory...
Browse File...
OK
Cancel
New...
Edit...
Delete
System variables
Variable
Value
ComSpec
C:\WINDOWS\system32\cmd.exe
FP_NO_HOST_CHECK
NO
JAVA_HOME
C:\Program Files\Java\jdk1.8.0_102
NUMBER_OF_PROCESSORS
8
OS
Windows_NT
Path
C:\ProgramData\Oracle\Java\javapath;C:\Program Files (x86)\Intel\i...
PATHEXT
.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
New...
Edit...
Delete
OK
Cancel

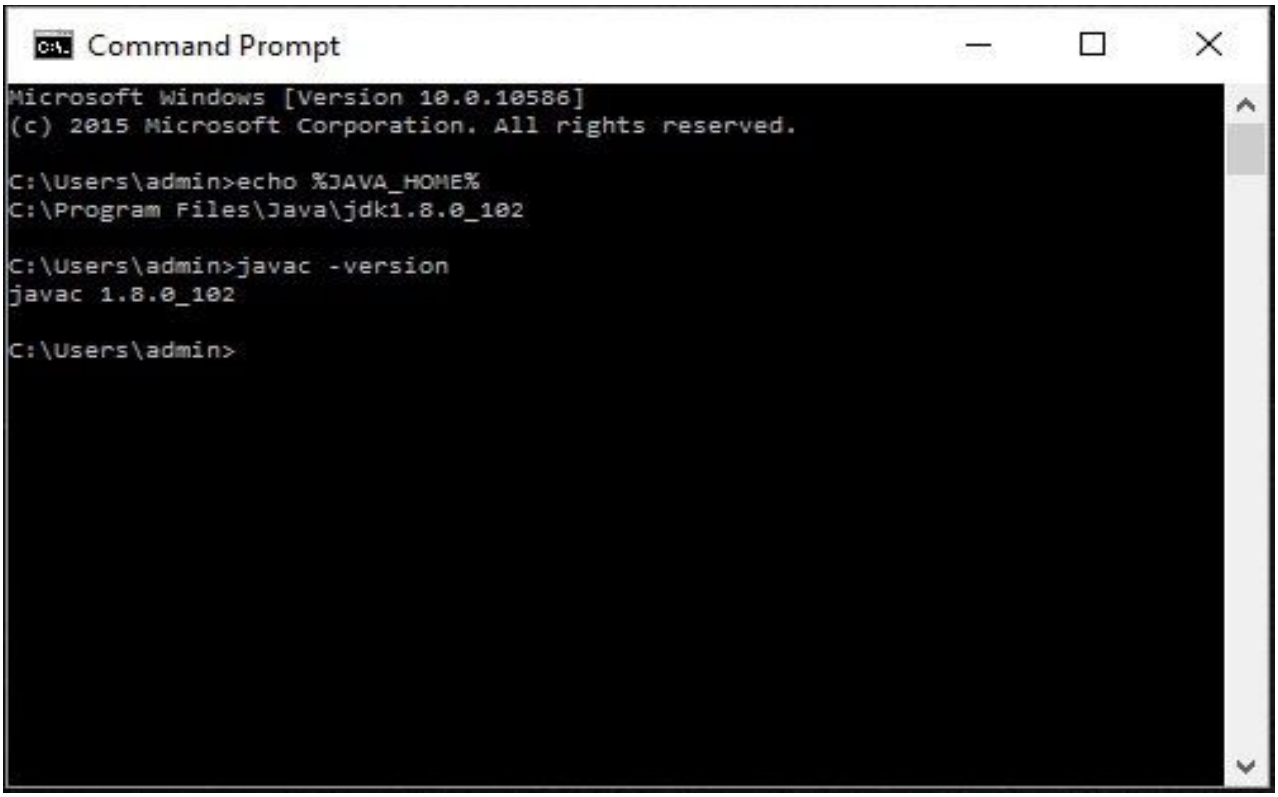


Test Java

Type this in command prompt to this the installed JAVA information

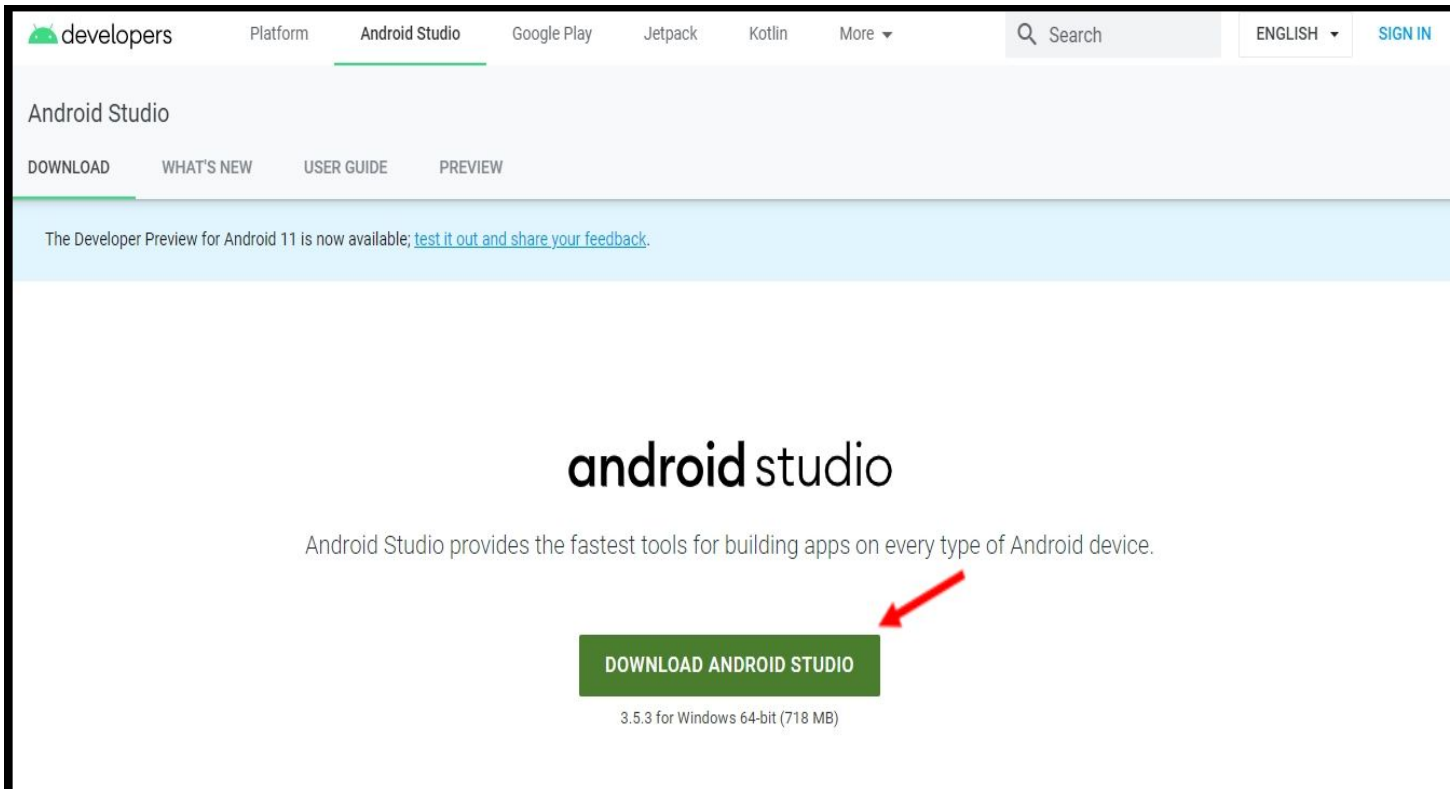
```
echo %JAVA_HOME%
```

```
javac -version
```


Command Prompt
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.
C:\Users\admin>echo %JAVA_HOME%
C:\Program Files\Java\jdk1.8.0_102
C:\Users\admin>javac -version
javac 1.8.0_102
C:\Users\admin>

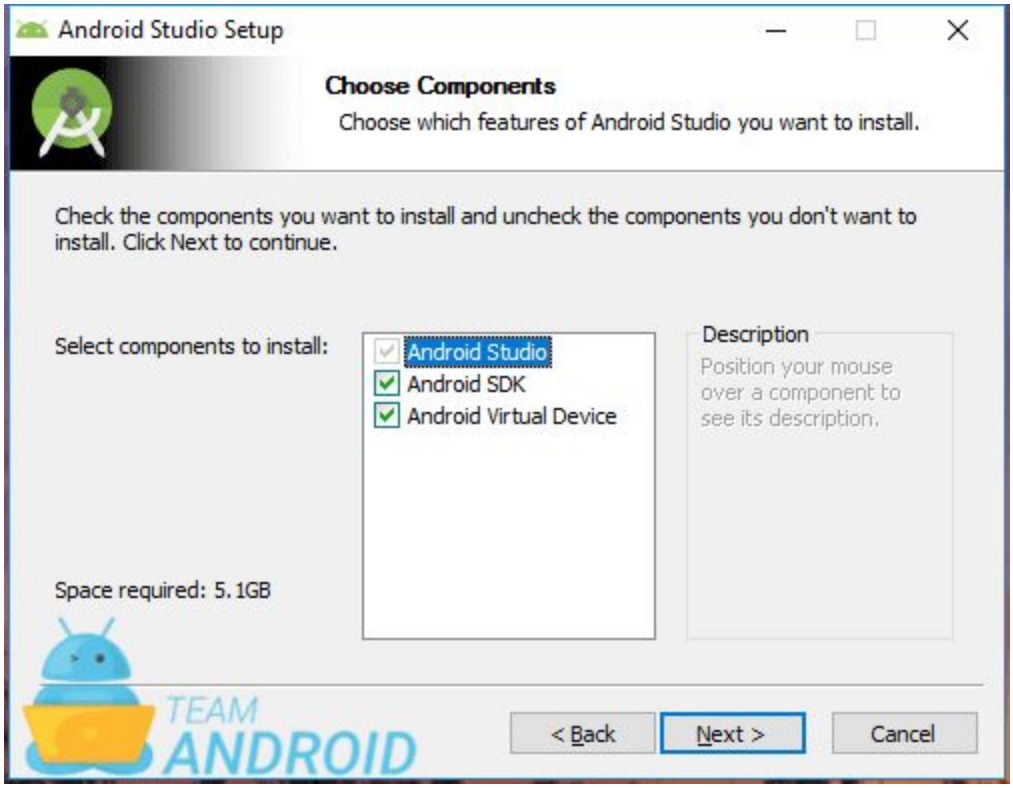
1.2 Install Android Studio

- **Download Android Studio**
  (android-studio-bundle-XX.XXXXXX-windows.exe) from the Android Developers website. This may take a while to download as the entire set up is about 2GB in size.

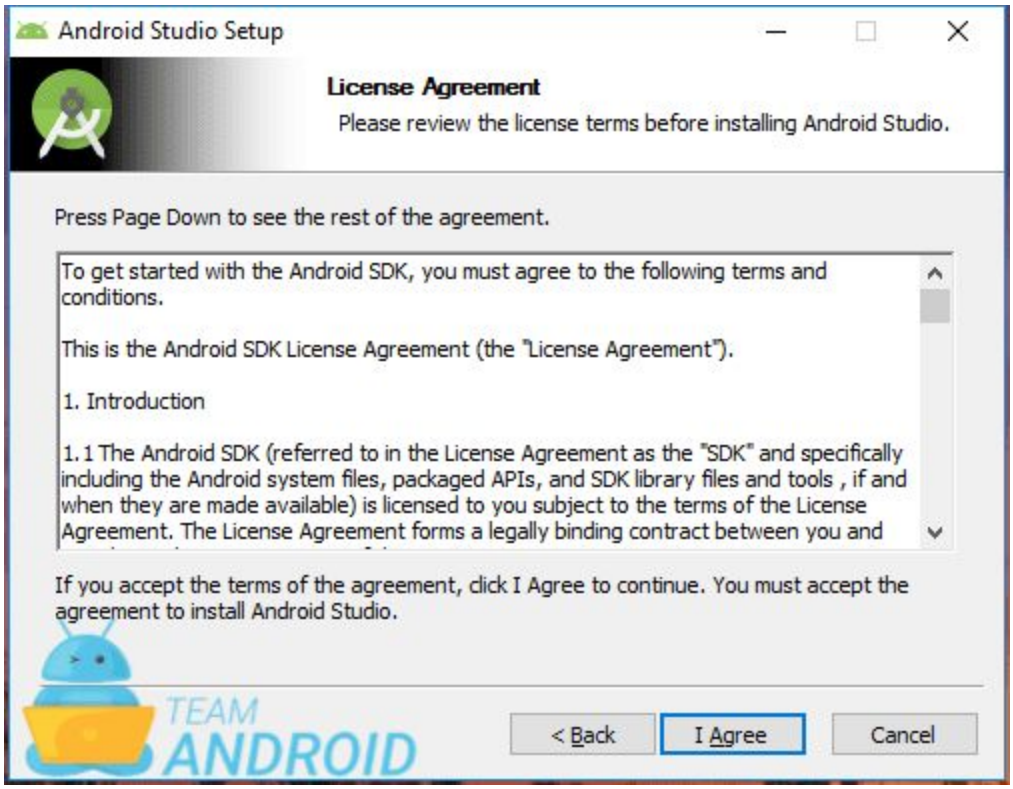


❖ **Run the EXE setup file you just downloaded. You should be greeted with a similar setup wizard screen as shown below. Click *Next* to begin!**

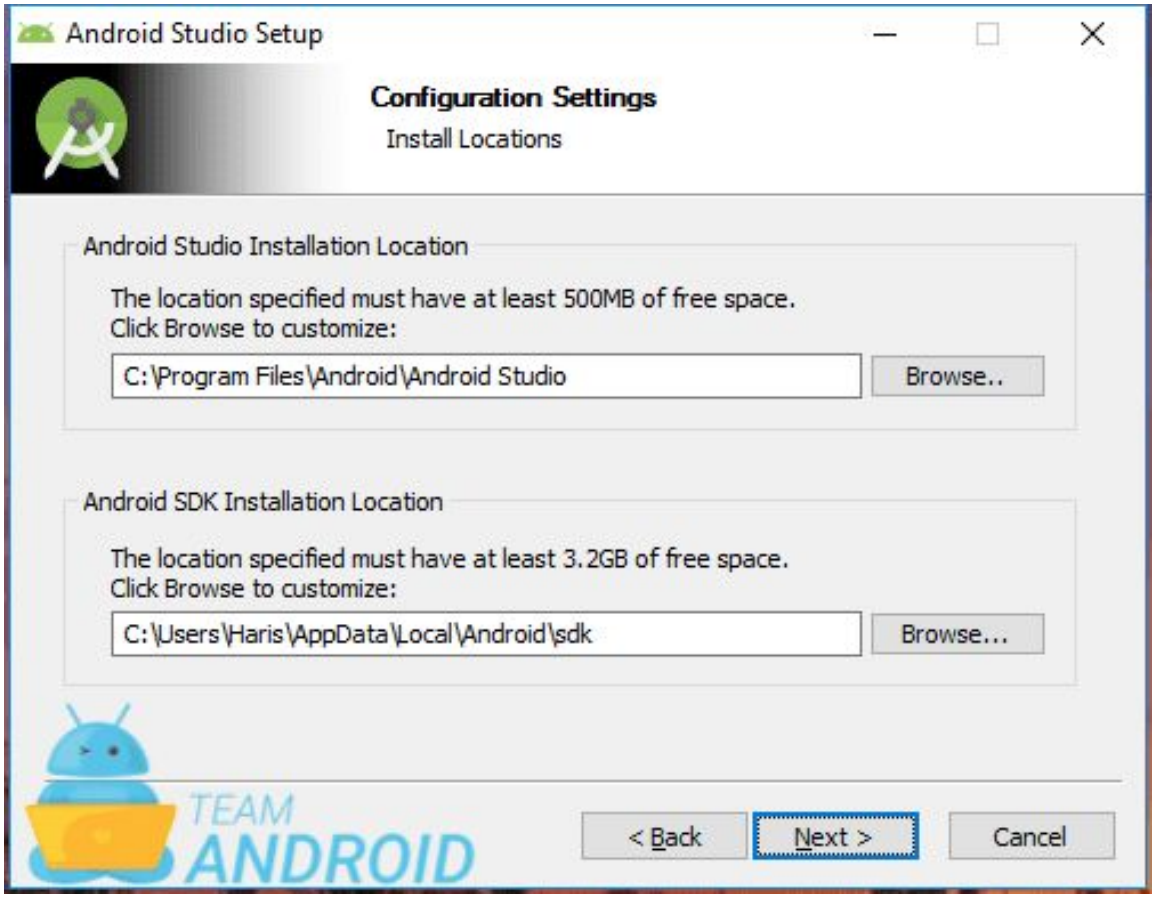
❖ **Keep the default components selected for installation. Click *Next*.**



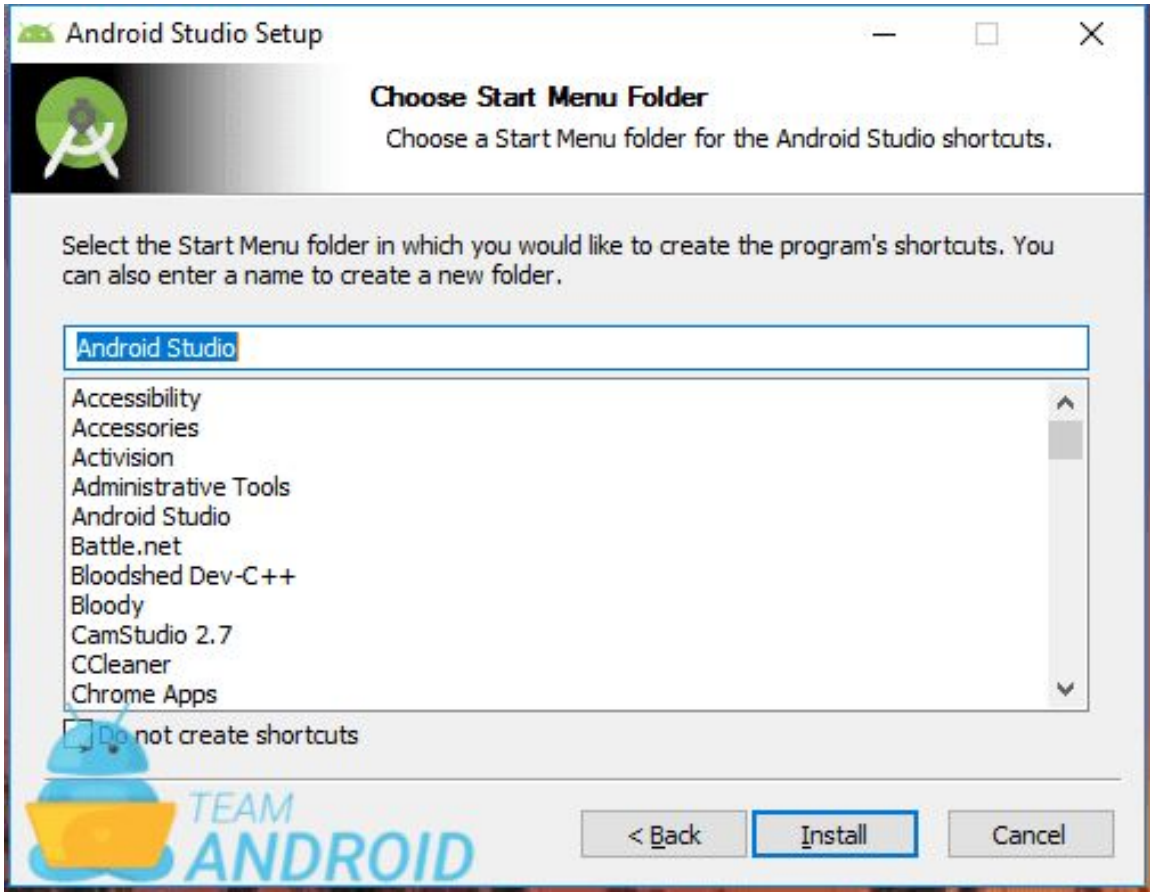
❖ **We are sure you would not want to read through the entire license agreement. Click *I Agree*.**



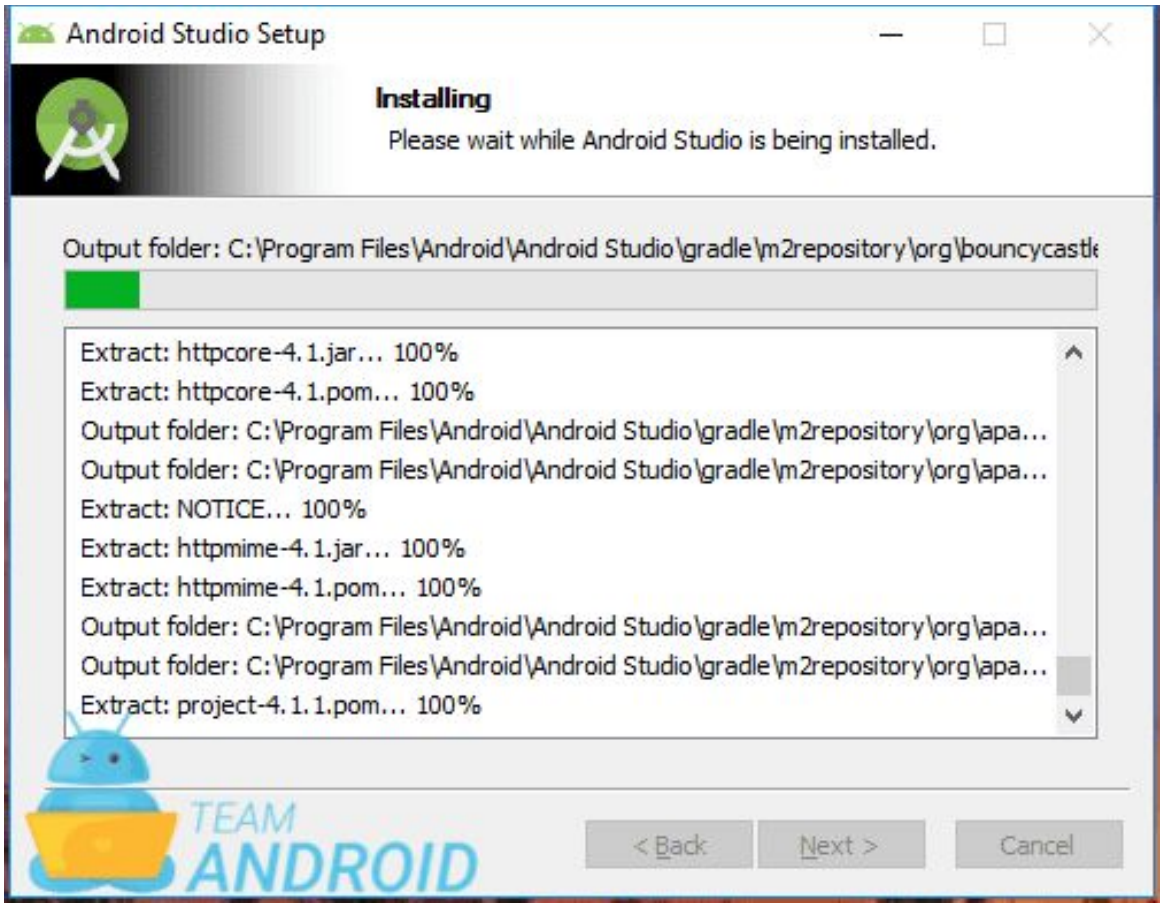
- **This is where you select the installation location for Android Studio and Android SDK. You may select another location/drive that has the required space available. Click *Next* to continue.**



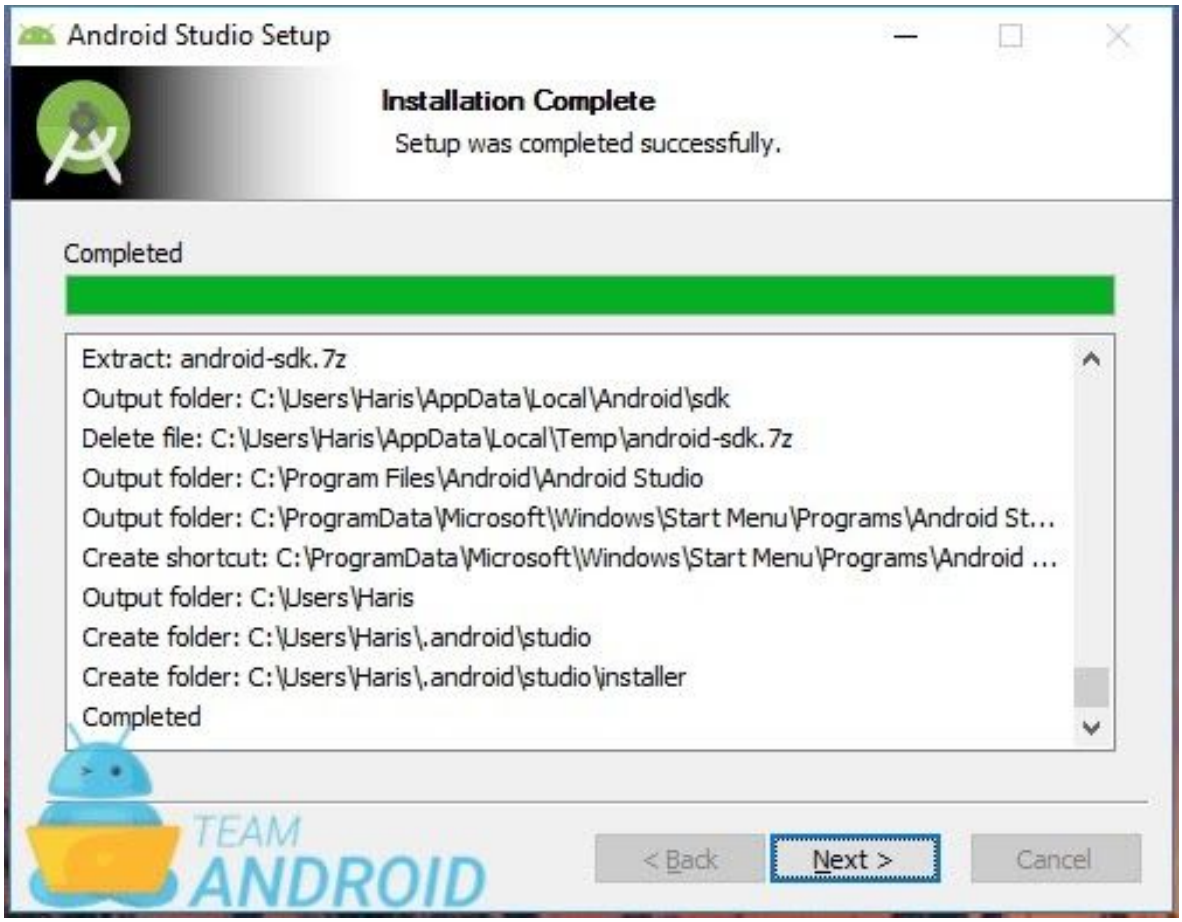
❖ **Yes, you would want to have a Start menu folder. Just click *Install* to continue.**



❖ **Installation should begin now. This may take a while for all the files to be extracted and installed on your computer.**



❖ **Once the installation is completed, click *Next*.**

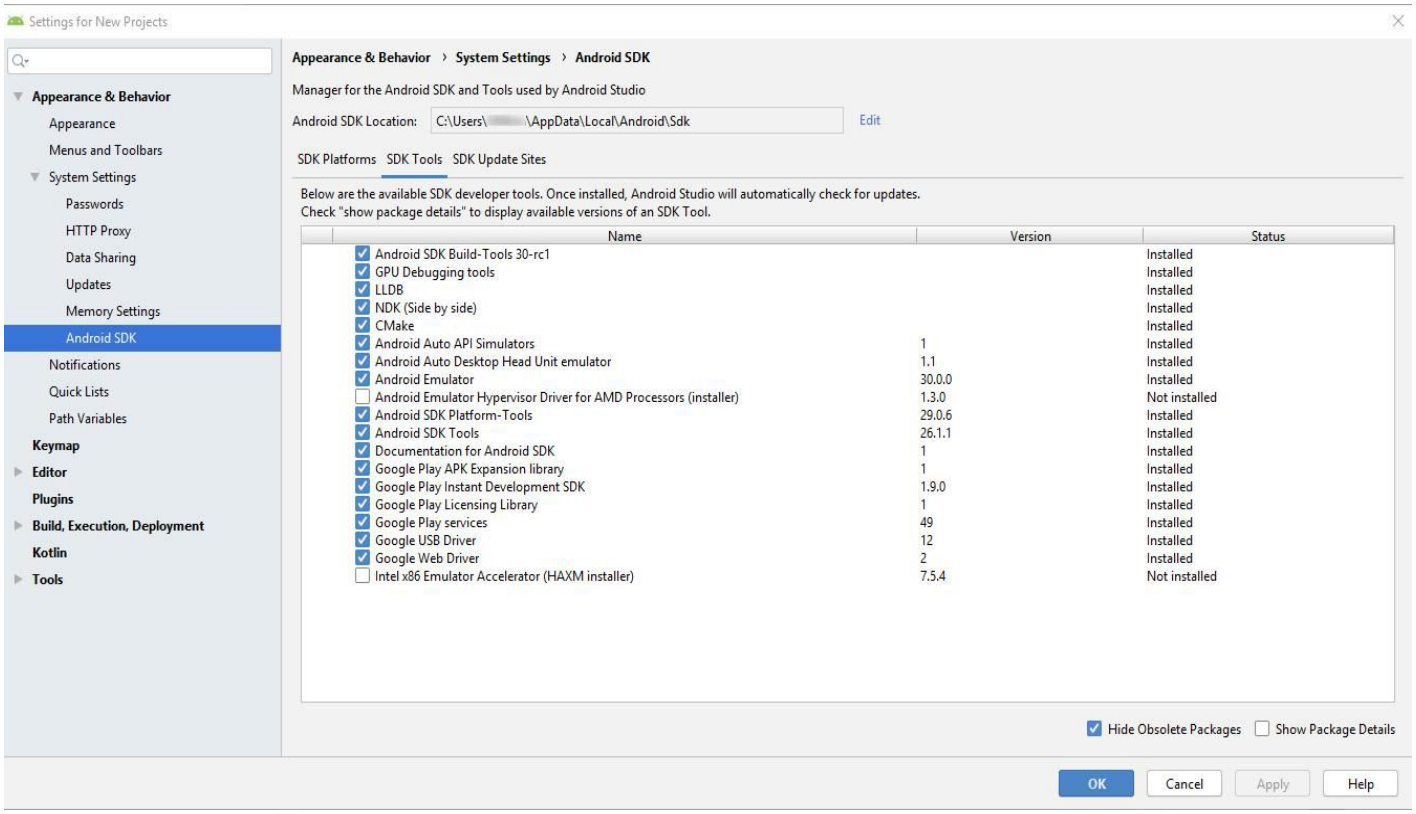


- **You are all set to launch Android Studio for the first time. Click *Finish* to proceed.**

NB:- Install Additions SDK that is compatible with your device if you test in Actual android phone

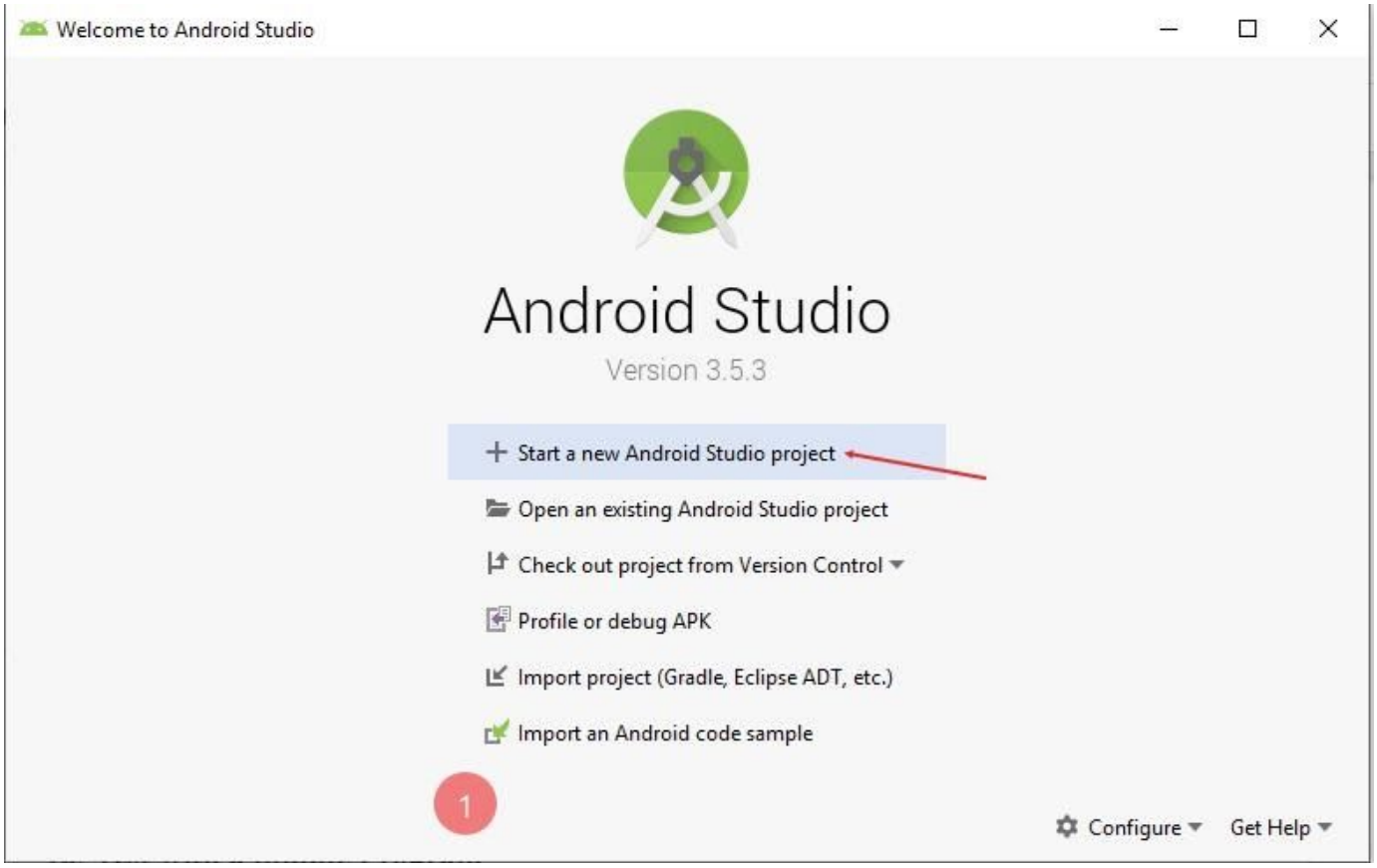
❖ Add SDK tools

Click on SDK tools tabs select on the desired tool and click on Apply button (if downloaded and installed all checkboxes will be marked and status will be installed)

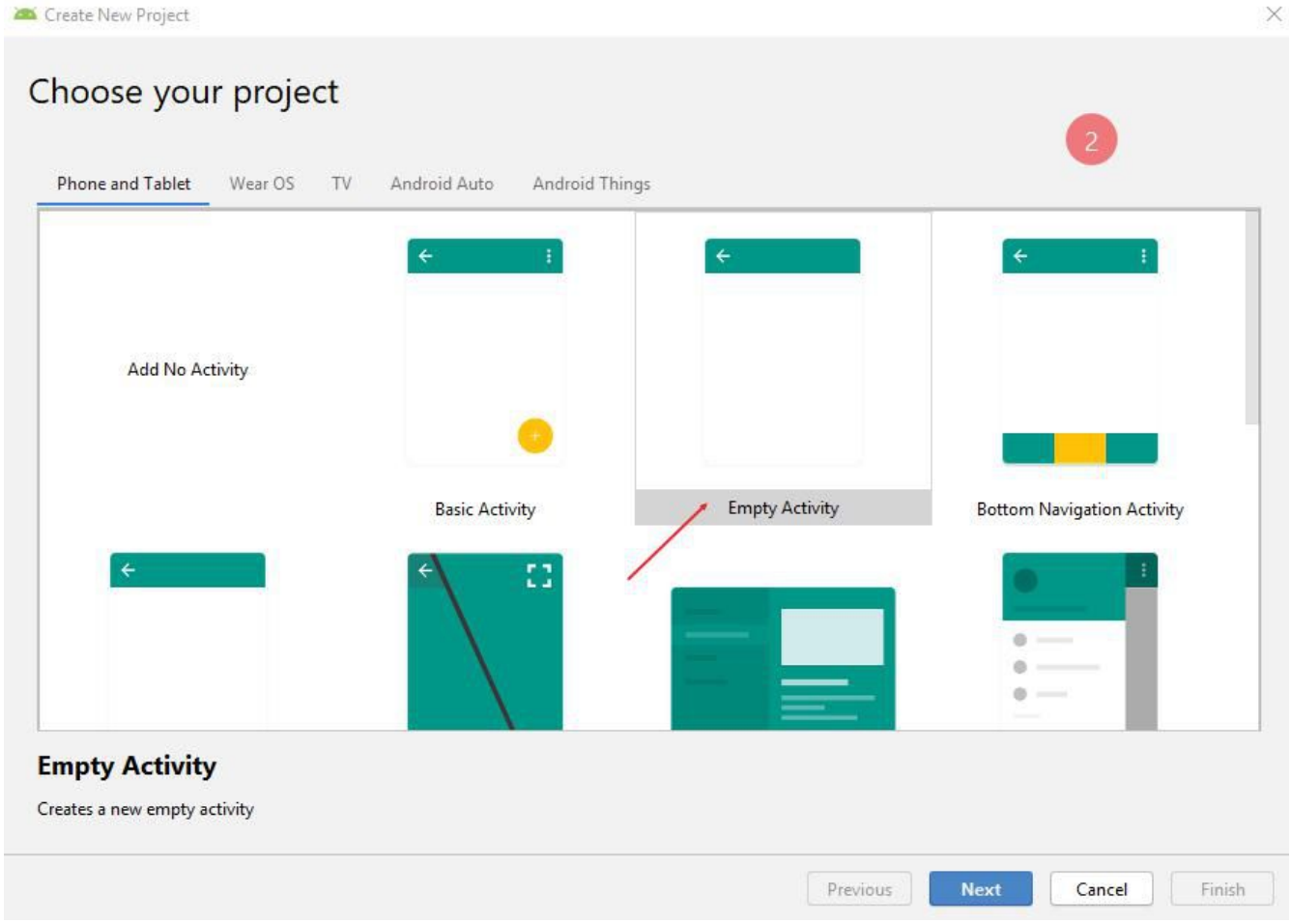


1.3 Test with a Simple Program

Step 1) Click on Start new Android Studio Project

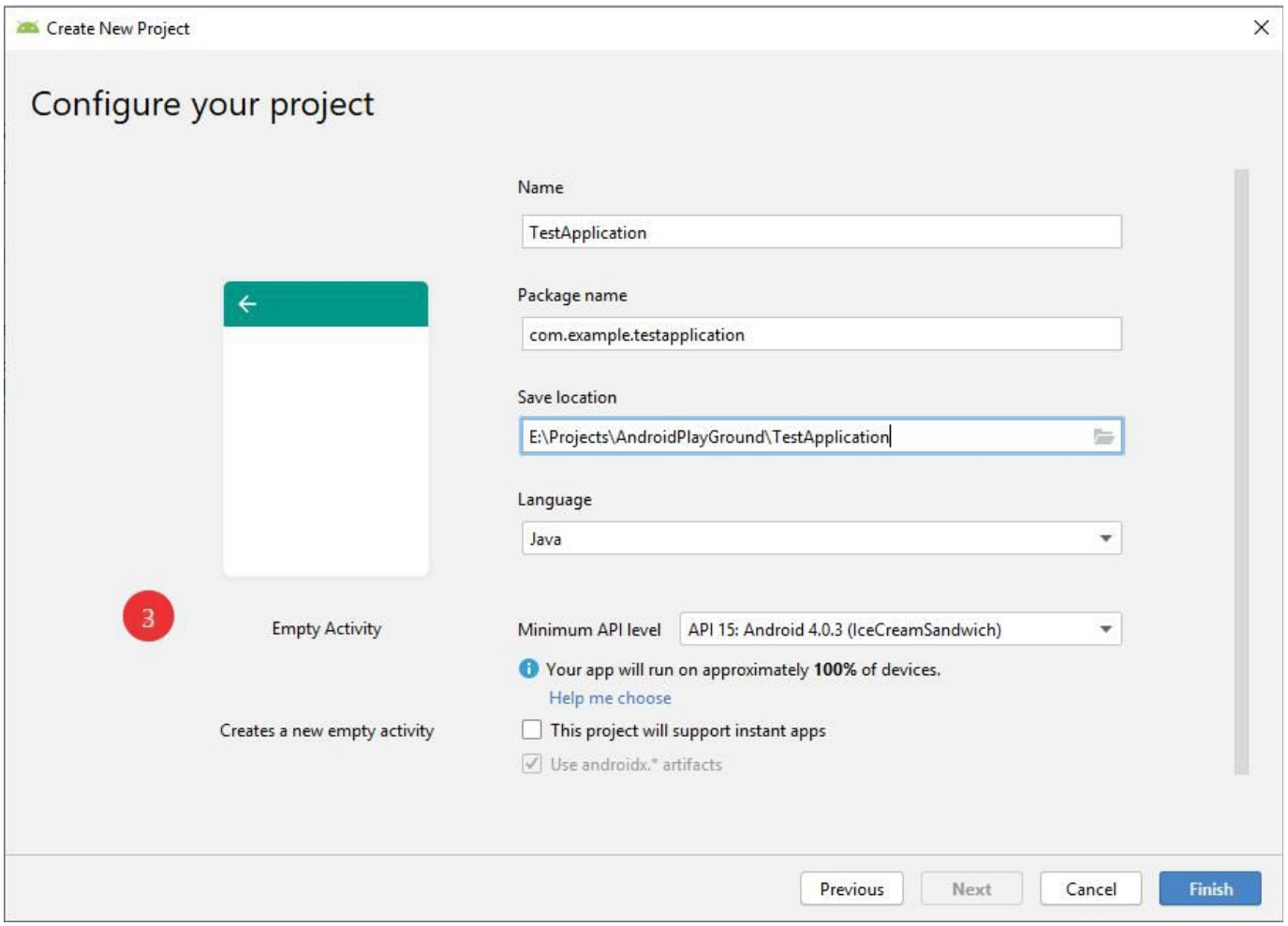


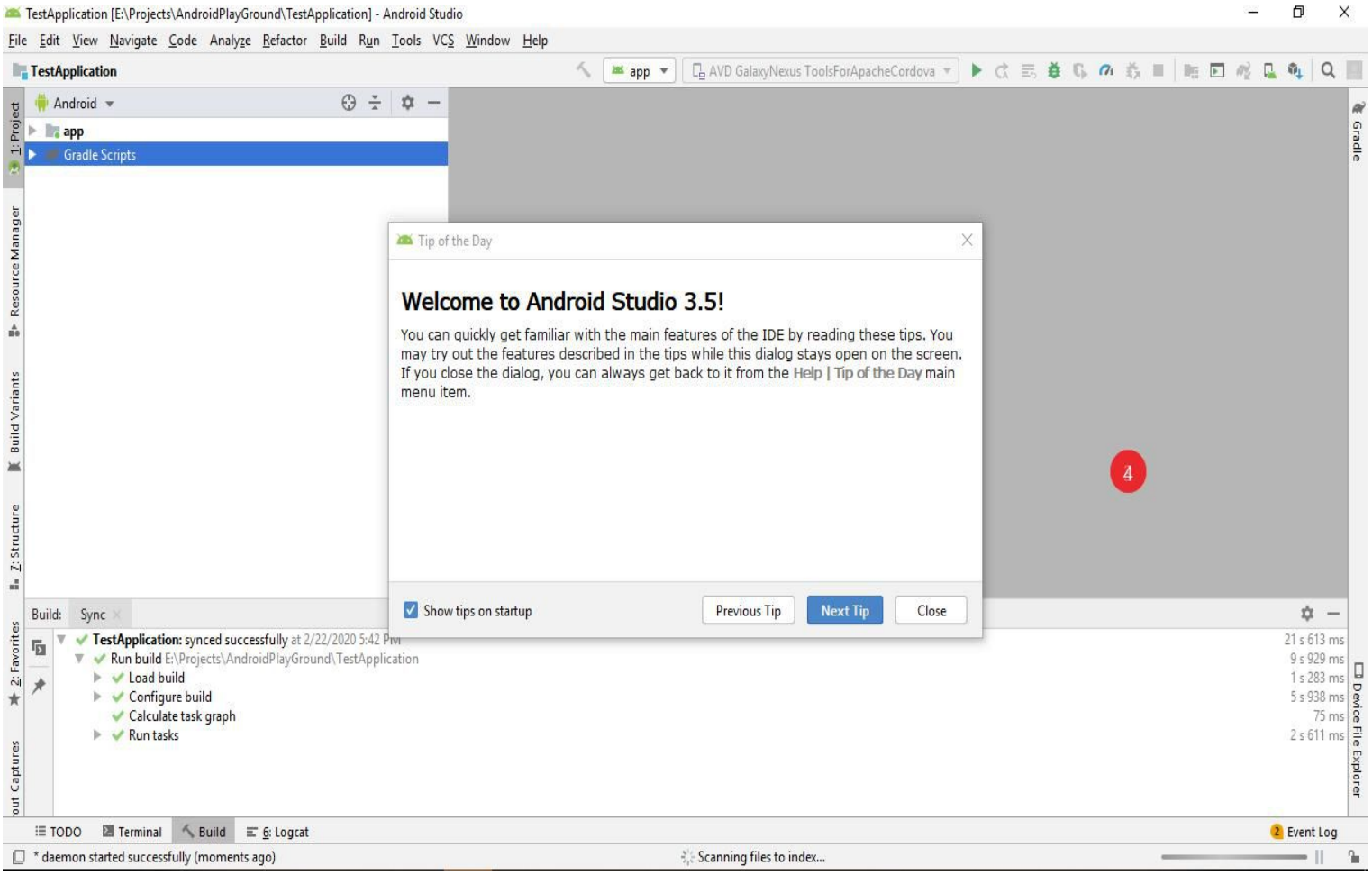
Step 2) Choose a project from phone and tablet tab



Step 3) Configure your project

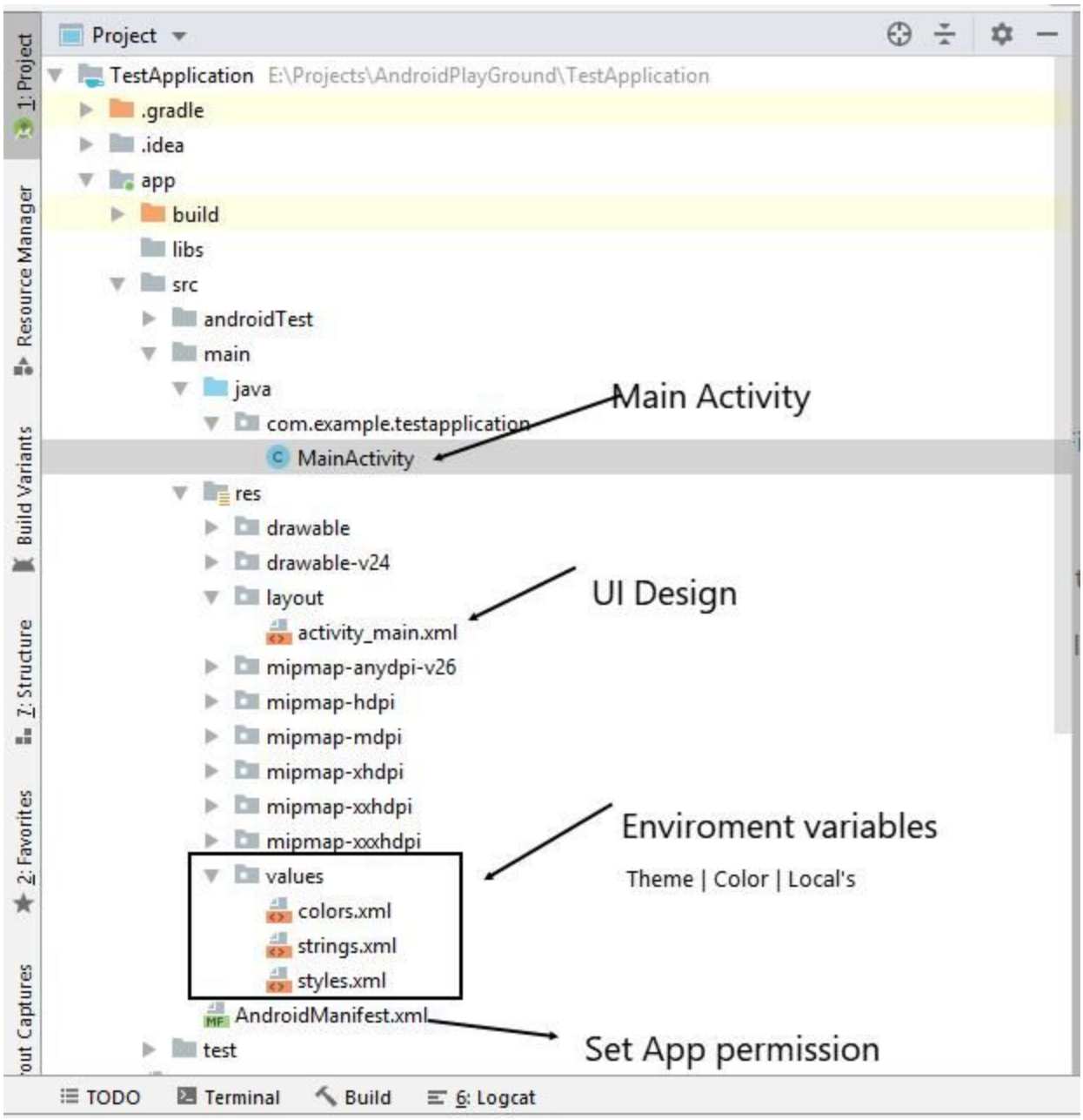
Choose Application name, package name, minimum API version, Choose a language (Java)





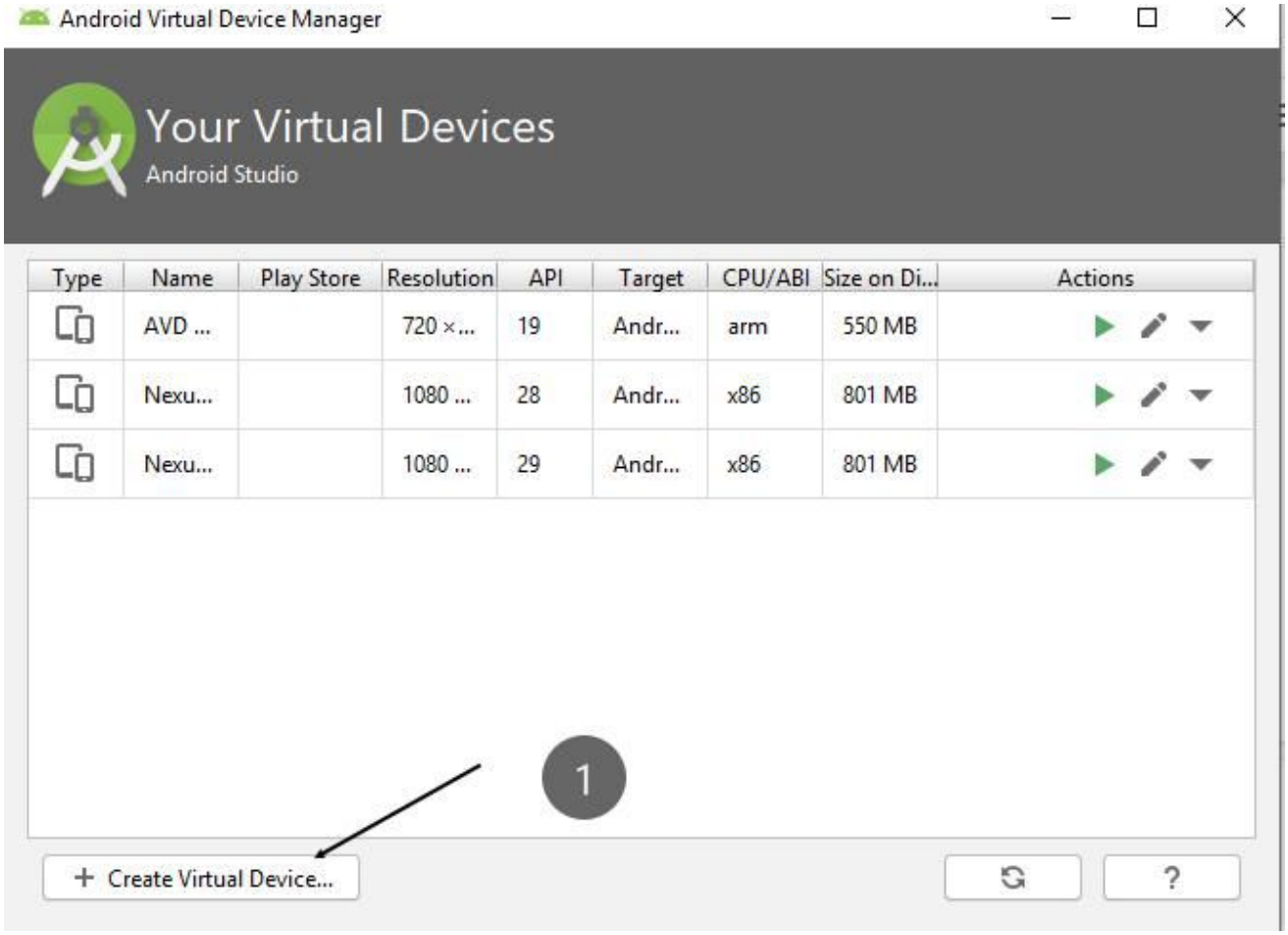
Click Finish and wait for Gradle to sync

❖ **Folder layout**

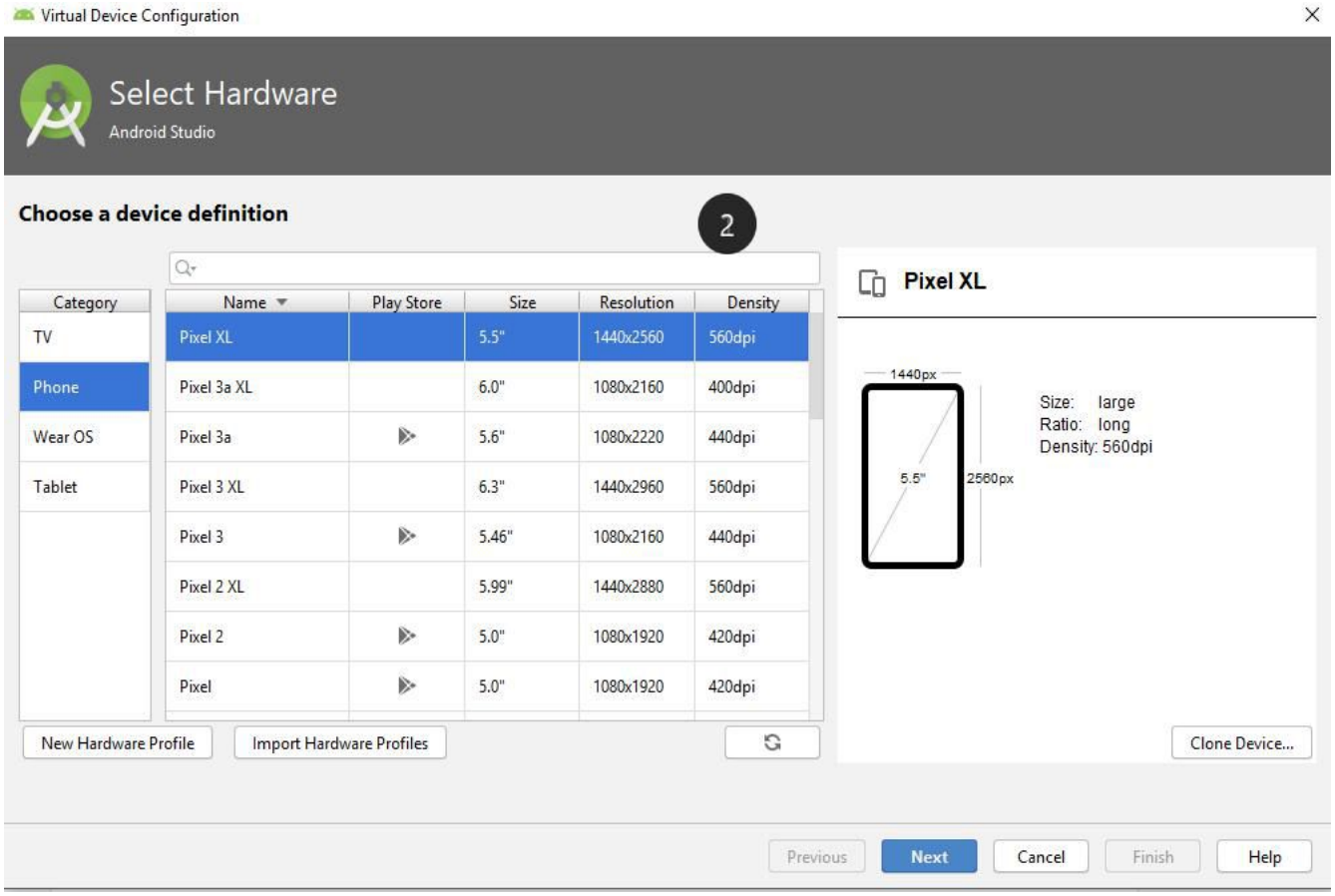


Create AVD

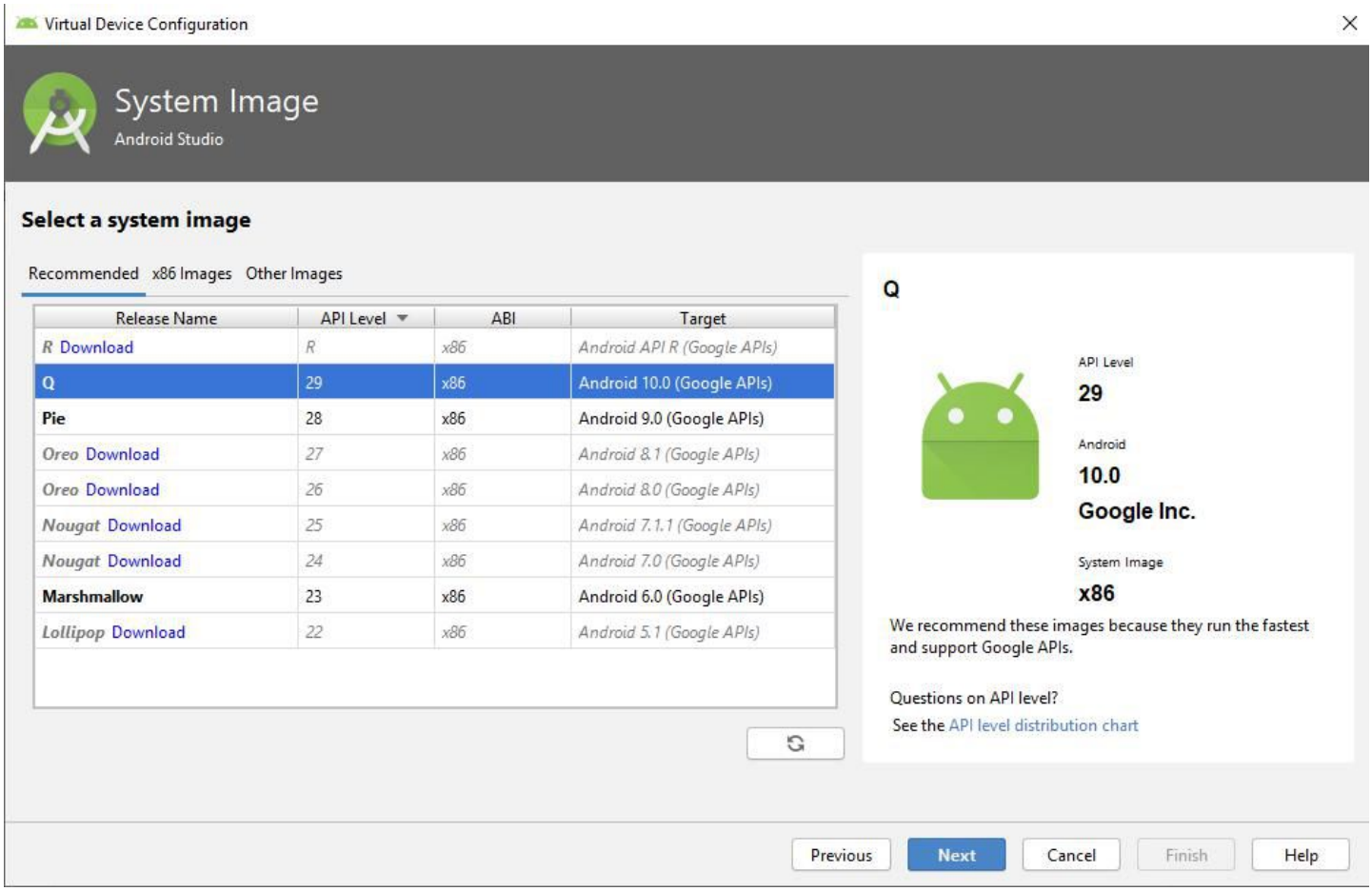
➢ **Open Avd Manager from the drop-down**



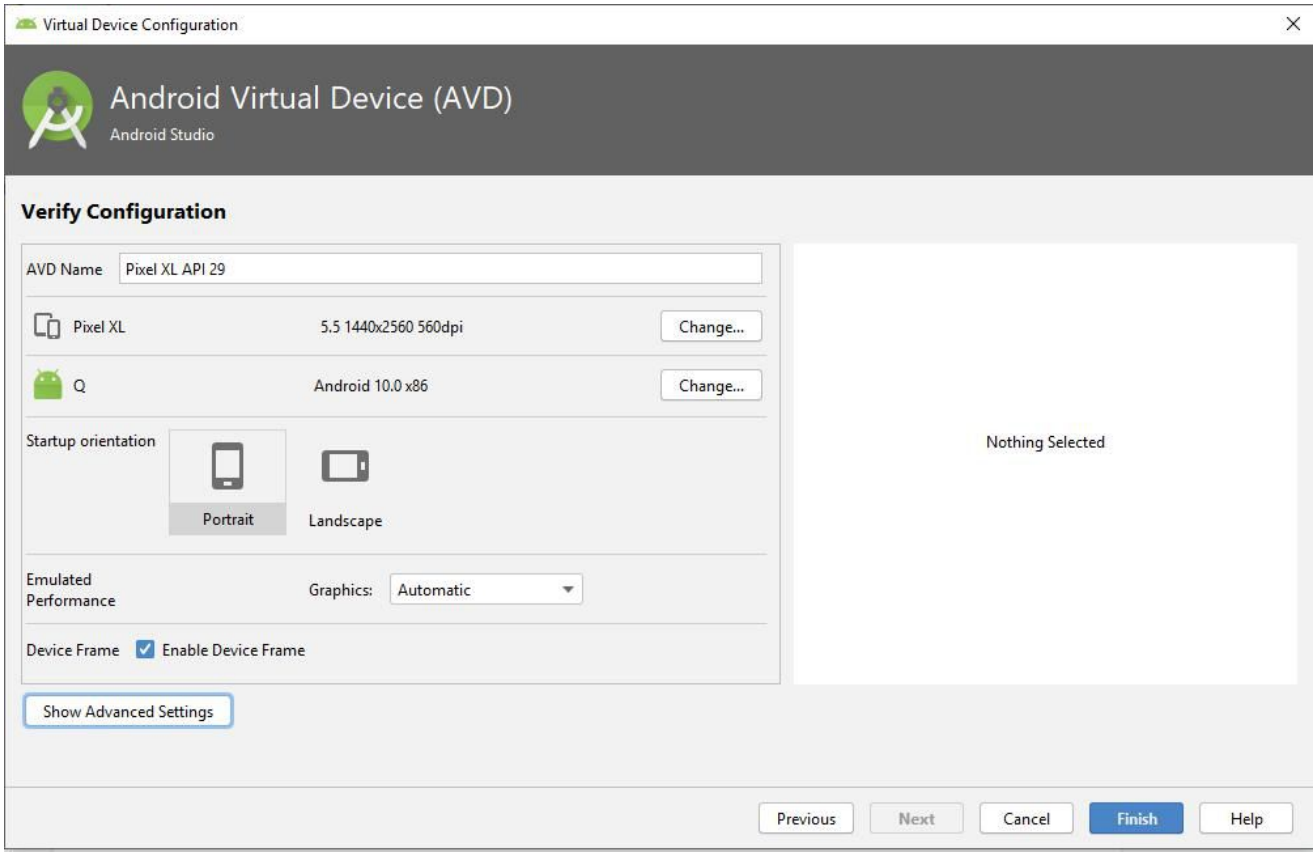
Choose devise definition



Select System Image

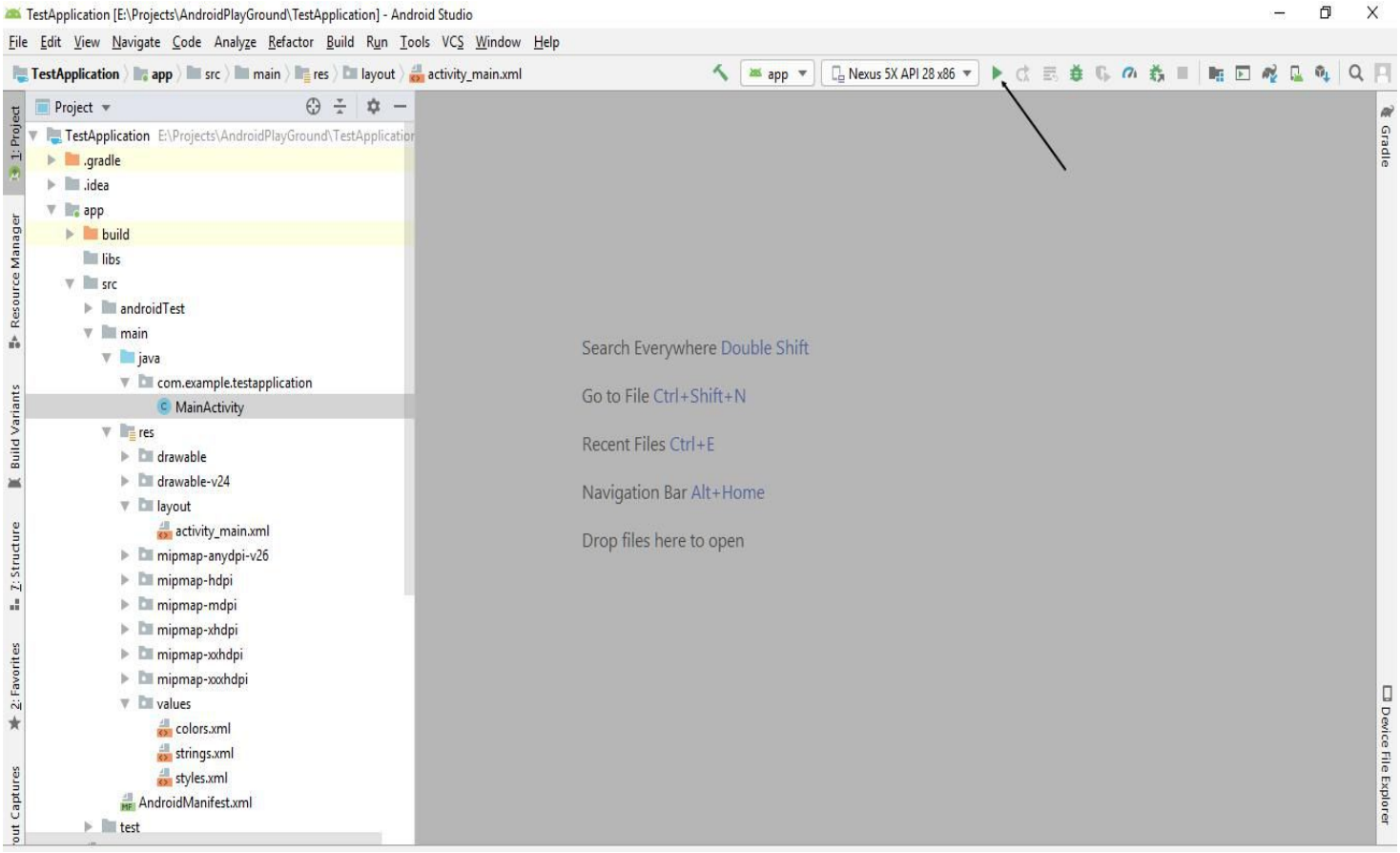


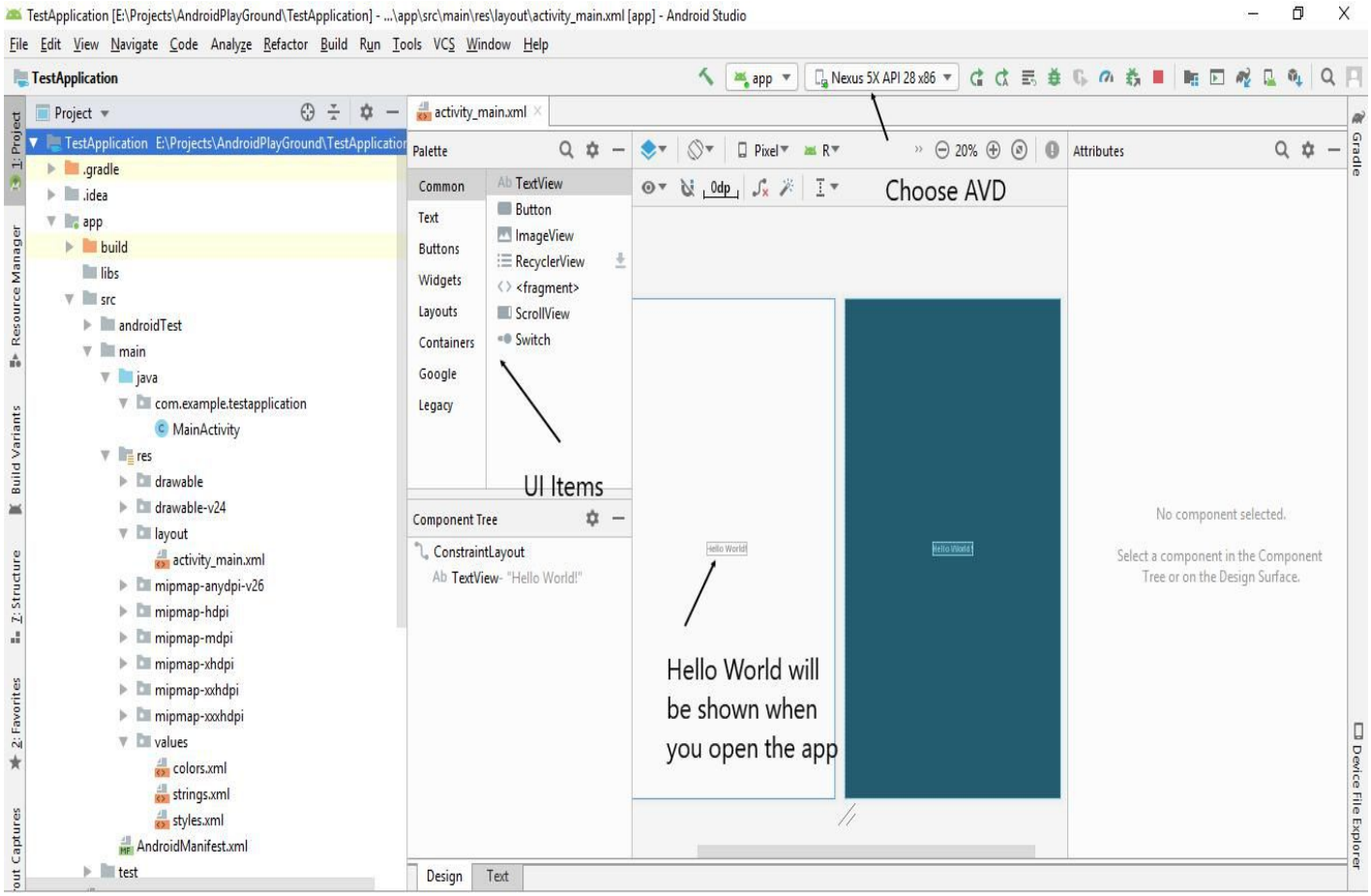
Configure AVD



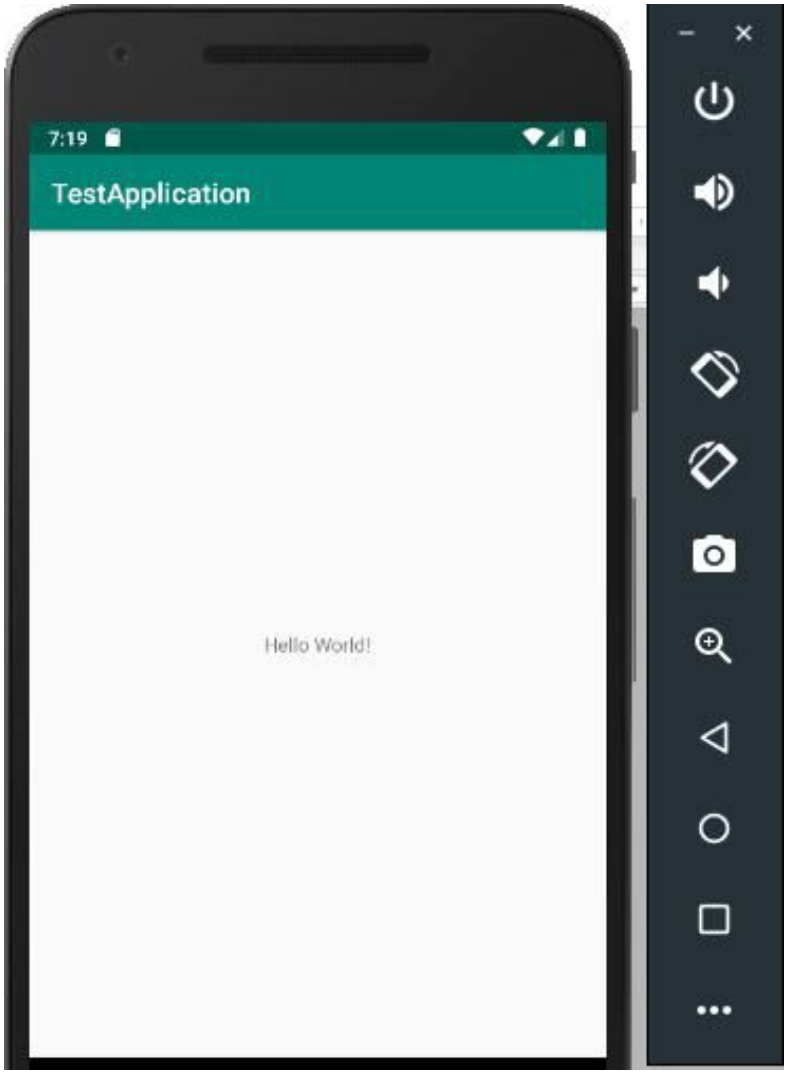
Click Finish and you will see the new virtual device in the AVD list

Click on the Run button




TestApplication [E:\Projects\AndroidPlayGround\TestApplication] - ...\app\src\main\res\layout\activity_main.xml [app] - Android Studio
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
TestApplication
app
Nexus 5X API 28 x86
Project
TestApplication E:\Projects\AndroidPlayGround\TestApplicatior
.gradle
.idea
app
build
libs
src
androidTest
main
java
com.example.testapplication
MainActivity
res
drawable
drawable-v24
layout
activity_main.xml
mipmap-anydpi-v26
mipmap-hdpi
mipmap-mdpi
mipmap-xhdpi
mipmap-xxhdpi
mipmap-xxxhdpi
values
colors.xml
strings.xml
styles.xml
AndroidManifest.xml
test
activity_main.xml
Palette
Common
Text
Buttons
Widgets
Layouts
Containers
Google
Legacy
TextView
Button
ImageView
RecyclerView
<fragment>
ScrollView
Switch
UI Items
Component Tree
ConstraintLayout
TextView- "Hello World!"
Pixel
R
20%
0dp
Choose AVD
Hello World
Hello World will be shown when you open the app
Attributes
No component selected.
Select a component in the Component Tree or on the Design Surface.
Design
Text
1: Project
Resource Manager
Build Variants
7: Structure
2: Favorites
Gradle
Device File Explorer

AVD will launch (may take a few minutes to start)



Additional Resources

1. Youtube Video
2. **Youtube video (Ubuntu)**
3. **Guides**