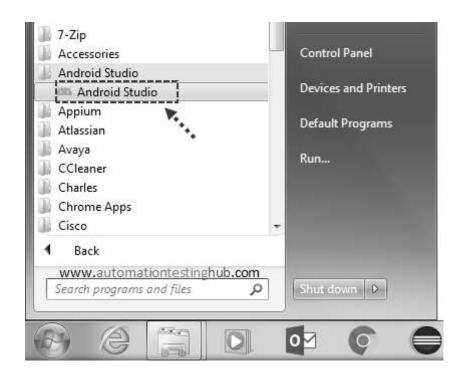
## Verify that all necessary components are already installed with Android Studio

First of all, please make sure that you have installed the latest version Android Studio bundle, which we have mentioned in our previous article on <u>downloading and installing Android</u>. Follow the steps given below to check if all the required SDK tools are already installed (you will have to open Android Studio to check this):

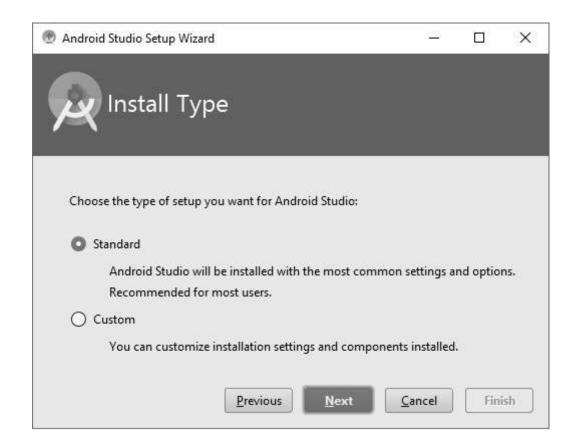
1. Go to Start > All Programs > Android Studio folder and then open Android Studio



2. Android Studio Welcome screen will be displayed as shown below

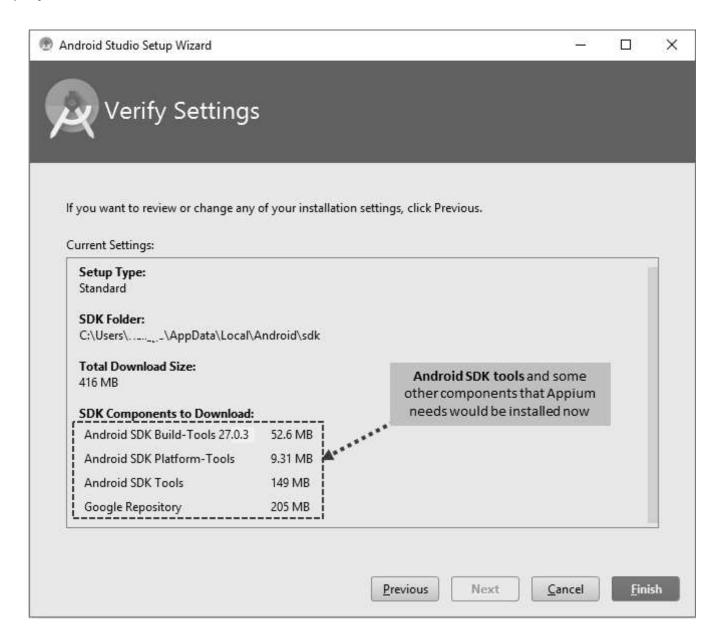


3. Click on Next button. You will be taken to Install Type screen



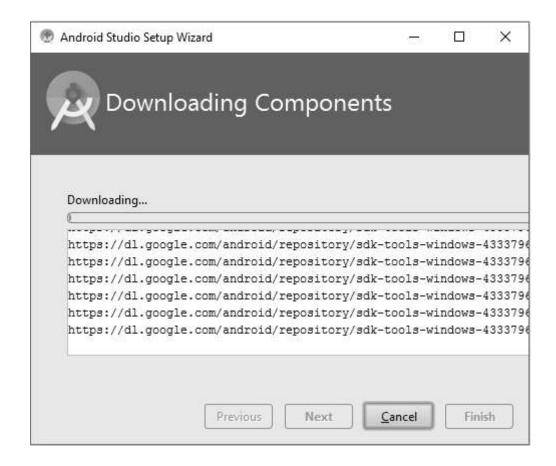
**4.** In the Install Type screen, let Standard option remain selected and then click on Next button. You will now be taken to the **Select UI Theme** screen.

Select any theme here and click on Next button. **Verify Settings** screen would now be displayed. **This is where Android SDK Tools will be installed.** 

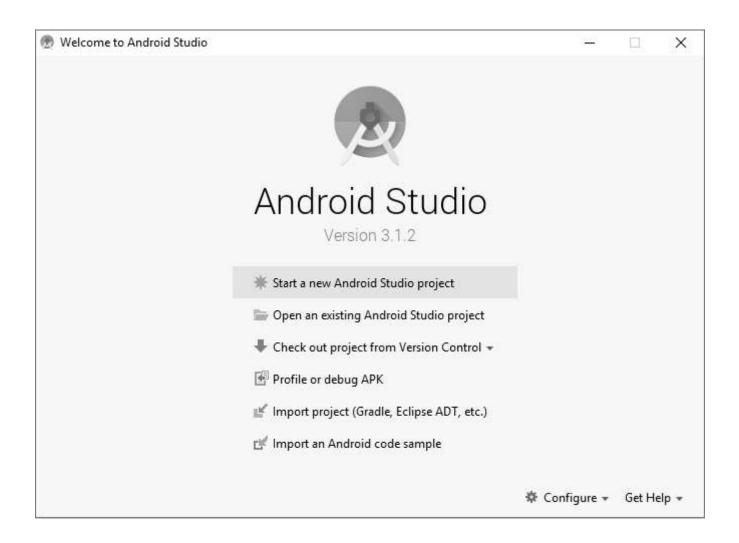


Don't worry if you see a different list in **SDK Components to Download** section. This list depends on what version of Android Studio you install, and also if you had previously installed some older version as well. Whatever list of items you see on your machine wou work fine.

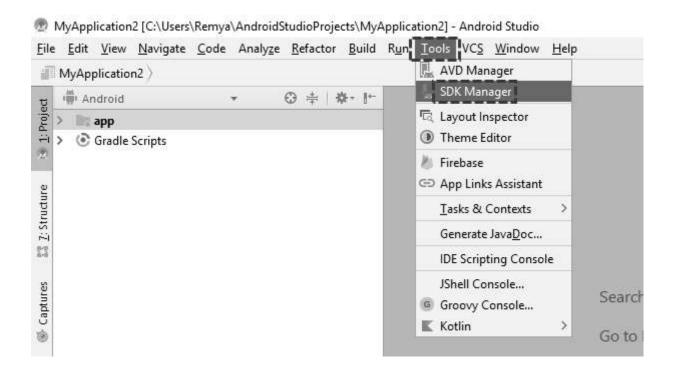
5. Click on Finish button. Android Studio will now start downloading these components



**6.** When downloading is complete then click on Finish button. You will now see **Welcome Android Studio** screen



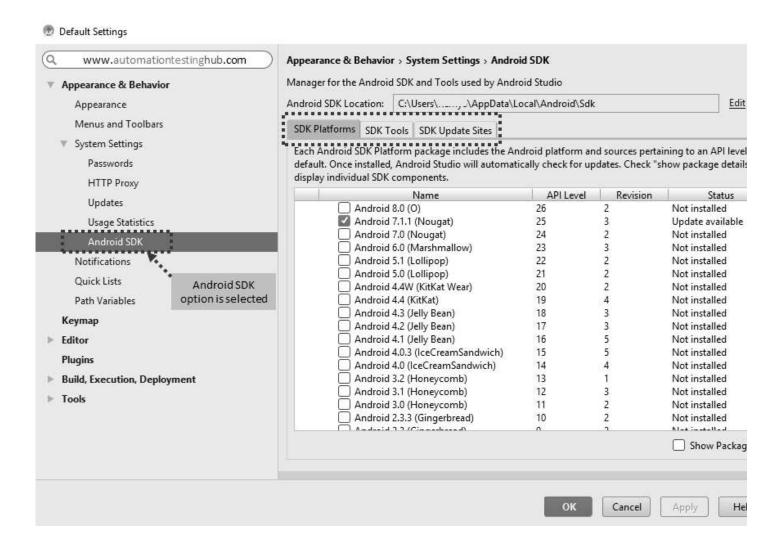
- **7.** Open any existing project in Android Studio, or create a new sample project (if you hav never used Android Studio before, then you can follow this quick guide on <a href="https://example.com/how-to-create">how to create</a> <a href="https://example.com/how-to-create">project in Android Studio</a>)
- **8.** Once your Android Studio project is opened, go to **Tools > SDK Manager** (in older versions of Android Studio, this option was **Tools > Android > SDK Manager**)



If you don't see SDK Manager option in Tools menu, then please wait for a couple c minutes. Android Studio takes some time to setup all the necessary components when you open it for the first time. After 2-3 minutes you would start seeing this Android option in Tools menu.

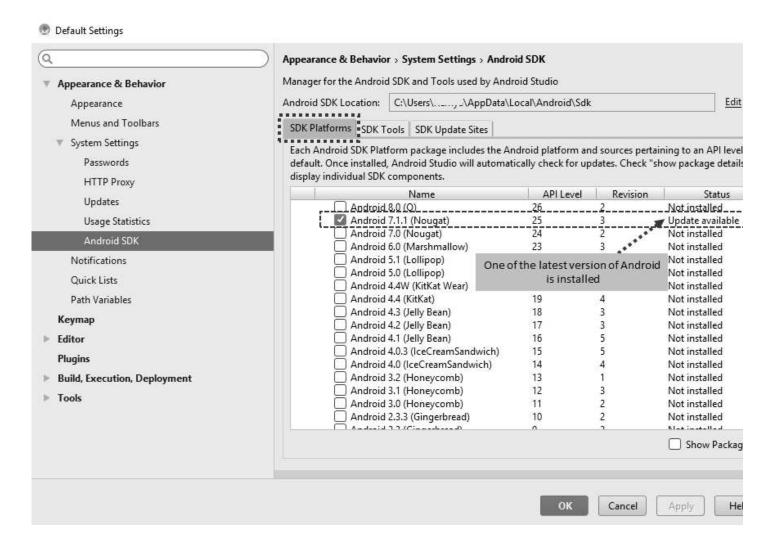
You can check the bottom right corner of Android Studio. It would usually show so progress bar and some text as well. This indicates that Android Studio is still settin up things for first use.

**9.** Once you select SDK Manager option, **Default Settings** screen would be opened with **Android SDK** option selected by default, as shown in the below image. Also, please note that there are 3 main tabs in this screen – **SDK Platform, SDK Tools and SDK Upd Sites**. We will be checking only the first two tabs – SDK Platform and SDK Tools



**10.** In **SDK Platform** tab, check that the latest version of Android is installed. Even if it she Update available, it means that the version is installed. It's just that a new update is also available.

If you are working on real android devices then it doesn't matter if your device's OS versic doesn't match with the OS version installed in Android SDK. For example, in the below screenshot Android 7.1.1 is shown as installed, but you can use your real device even if it runs on any other version, say Android 6.0.



But if you want to run your scripts on an emulator, then you would need to install the OS version which you want in your emulator. For example, if you want to create an emulator of Android 5.1, then you need to install Android 5.1 from this Android SDK screen. If you into use real device, leave this screen as it is. But if you want to use some emulator, then select the Android version you want to install on that emulator.

For now, let us not install any other Android version. We will get to it later when we start working on emulators.

**11.** Click on **SDK Tools** tab. Verify that the components highlighted in the red boxes in the below image are already installed.

	Check "sh	ow package details" to display available versions of an S	DK Tool.	* *
	1	Name Android SDK Build-Tools 28-rc2	Version	Status Update Available: 28.0.0 rc2
check that all the components that are in the red box are installed / updated	4	GPU Debugging tools		Not Installed
		☐ CMake		Not Installed
		LLDB		Not Installed
	:	Android Auto API Simulators	1	Not installed
		Android Auto Desktop Head Unit emulator	1.1	Not installed
	II∮ ∏	Android Emulator	26.0.3	Update Available: 27.2.9
		✓ Android SDK Platform-Tools	27.0.1	Installed
		✓ Android SDK Tools	26.1.1	Installed
		✓ Documentation for Android SDK	11	Installed
	1 3 7	Google Play APK Expansion library	1	Not installed
		Google Play Licensing Library	1	Not installed
		Google Play services	49	Not installed
	1	Google USB Driver	11	Not installed
		Google Web Driver	2	Not installed
	*.	Instant Apps Development SDK	120	Not installed
	71.	✓ Intel x86 Emulator Accelerator (HAXM installer)	6.2.1	Installed
	r	NDK	17.0.4754217	Not installed
	~			
	i i	✓ ConstraintLayout for Android		Installed
	l i	✓ Solver for ConstraintLayout	0200398277	Installed
	į	✓ Android Support Repository	47.0.0	Installed
	į į	✓ Google Repository	58	Installed

Please note that some of the components would be marked as installed, and some others would be marked as Update Available. Update Available only means that an older version of the component is installed currently. As of now, it is fine if it's in Installed or Update Available state

- **12.** For you, if all the components that are marked with red box in the above image are installed or in Update Available status, then you can click on OK button to close this scree If any of these components is not installed, then you can click on the checkbox against the component and then click on Apply button to install the component.
- **13.** You now have all the necessary SDK tools and platforms installed on your machine. Y can now close Android Studio.

This completes our article on installing additional Android SDK tools. You would have observed that most of the components that we were looking for were already installed in Android Studio. This is one important feature with the newer versions of Android Studio, where it has all the important components already installed.

Let us know if you found this article useful. Feel free to contact us if you had any issues w any of the steps mentioned here. There might be a chance that some of the steps might be different depending upon the version of Android Studio that you use. Your feedback woulk help us improve our content and make it more helpful for all our readers.