

# ADB assignment

Indranee Kashyap PS-99008091

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## 1 ADB command training assignment

- Android Debug Bridge (adb) is a versatile command-line tool that lets you communicate with a device. The adb command facilitates a variety of device actions, such as installing and debugging apps, and it provides access to a Unix shell that you can use to run a variety of commands on a device
- list of connected devices: `adb devices -l`
- take screenshot : `adb shell screencap /sdcard/screen.png`
- take recording : `adb shell screenrecord /sdcard/demo.mp4`
- install an app on device : `adb install example.apk`
- simulate battery parameters : `adb shell dumpsys battery set level 1`
- obtain log files : `adb logcat`
- perform touch or swipe : `adb shell input tap 500 400` `adb shell input swipe 500 1000 500 1000`
- launch activities : `adb shell am start com.android.settings`
- clear application data : `adb shell pm clear com.google.android.deskclock`
- components of ADB : The components of ADB are: A client, a daemon, a server
- How ADB works : When we start an adb client, the client first checks whether there is an adb server process already running. If there isn't, it starts the server process. When the server starts, it binds to local TCP port 5037 and listens for commands sent from adb clients—all adb clients use port 5037 to communicate with the adb server. The server then sets up connections to all running devices. It locates emulators by scanning odd-numbered ports in the range 5555 to 5585, the range used by the first 16 emulators. Where the server finds an adb daemon (adbd), it sets up a connection to that port.

- how to enable adb debugging in device : To use adb with a device connected over USB, you must enable USB debugging in the device system settings, under Developer options. On Android 4.2 and higher, the Developer options screen is hidden by default. To make it visible, go to Settings > About phone and tap Build number seven times. Return to the previous screen to find Developer options at the bottom
- send commands to a specific device : `adb -s emulator-5555 install helloWorld.apk`
- To copy a file or directory and its sub-directories from the device : `adb pull remote local`
- To copy a file or directory and its sub-directories to the device, do the following: `adb push local remote`
- ADB shell : ADB shell is Android Debug Bridge shell which is a command line utility included with Google's Android SDK. An Android device where it is connected to a computer using a USB can control by the terminal interface. ADB can use to run shell commands, transfer files, install/uninstall apps, and more.
- ADB shell commands example : ADB devices ADB kill-server
- Activity : An activity provides the window in which the app draws its UI.
- start an activity on device : `adb shell am start com.android.settings`
- Package : A package is basically the directory (folder) in which the source code resides. Normally, this is a directory structure that uniquely distinguishes the android application; such as `com. example. app`
- find the list of all packages installed in the device : `adb shell cmd package list packages`
- command to uninstall a package : `adb uninstall [package-name]`