Section 3

- Lecture 6 Android Studio
 - <u>https://developer.android.com/studio</u>
 - Move extracted android studio to path:
 - mv <download path> <destination path>
 - Run android studio:
 - Go to <destination path> and run: ./studio.sh
- Lecture 9 ADB
 - Go to adb shell path:
 - cd <home>/Android/Sdk/platform-tools
 - Run adb shell:
 - adb shell
- Lecture 10 Apktool
 - Install apktool
 - sudo apt-get install apktool
- Lecture 11 JD-GUI/Enjarify
 - <u>http://java-decompiler.github.io/</u>
 - <u>https://github.com/google/enjarify</u>
 - Run jdgui:
 - java -jar <path to jdgui>
 - Run enjarify on apk:
 - ./enjarify.sh <path to apk>
- Lecture 12 Bytecodeviewer
 - <u>https://bytecodeviewer.com/</u>
- Lecture 13 Androguard
 - Install androguard
 - sudo apt install androguard
- Lecture 14 Objection
 - <u>https://github.com/sensepost/objection</u>
 - Pre-requisites:
 - sudo apt install zipalign
 - <u>https://ibotpeaches.github.io/Apktool/</u>
 - Follow installation instructions
 - Install objection
 - pip3 install -U objection
- Lecture 15 Tamer
 - <u>https://androidtamer.com/</u>



- General: make sure you have your environment variables configured for:
 - Jdk bin
 - Sdk platform tools path (Android/Sdk/platform-tools)
 - Sdk tools path (Android/Sdk/tools)
 - Sdk emulator path (Android/Sdk/emulator)
 - Path to apktool
 - Path to objection (should be done automatically with objection install script)



Section 5

- Lecture 32 ADB
 - adb commands
 - adb devices
 - touch myfile.txt
 - adb push myfile.txt /sdcard/
 - adb pull /sdcard/myfile.txt
 - adb shell
 - pm list package
 - pm list package | grep flipcortex
 - exit
 - Download apk extractor
 - Eg: <u>https://m.apkpure.com/apk-extractor/com.ext.ui</u>
 - Drag and drop onto emulator
 - Extract APK
 - Pull apk
 - Adb pull <path to extracted apk>
 - Eg:
 - adb pull

/storage/emulated/0/ExtractedApks/Helloworld_com.flipcortex.helloworld. apk

- Lecture 33 Static Analysis: APKtool
 - Rename apk to flipcortex.apk
 - mv <apk path> flipcortex.apk
 - Run apktool on app
 - apktool d flipcortex.apk
 - Open manifest/layout
 - cd flipcortex
 - nano AndroidManifest.xml
 - nano /res/layout/activity_main
 - Find postman-echo
 - grep -r postman-echo
- Lecture 34 Static Analysis: Bytecodeviewer
 - Run bytecodeviewer
 - java -jar <path to bytecodeviewer)
- Lecture 35 Static Analysis: Androguard
 - Run apk on androguard



- androguard analyze flipcortex.apk
- Run analysis commands
 - a.get_permissions()
 - a.get_receivers()
- Lecture 36 Dynamic Analysis: Objection
 - Run objection against app
 - objection patchapk --source <path to apk> --gadget-version 12.7.24
 - Install new apk
 - adb install <path to new generated apk>
 - Run app
 - Run objection
 - Objection explort
 - Hook onto method
 - android hooking watch class_method
 - com.flipcortex.helloworld.SmsReceiver.httpPost --dump-args --dump-backtrace --dump-return
 - Send sms to analysis device



Section 6

- Lecture 42 Simplocker: Running on Emulator
 - DISABLE NETWORK
 - Run emaultor
 - Go to Android/Sdk/emulator
 - ./emulator <name of emulator>
 - Enable SD card
 - Pull image
 - adb pull /sdcard/Pictures/DemoPicture.jpg
 - DISABLE NETWORK
 - Install simplocker
 - adb install <path to simplocker>
 - Uninstall simplocker
 - adb uninstall org.simplelocker
 - Pull encrypted file
 - adb pull /sdcard/Pictures/DemoPicture.jpg.enc
- Lecture 43 Simplocker: Static Analysis
 - Run enjarify on app
 - cd <enjarify path>
 - ./enjarify.sh <path to simplocker>

