

Day 14 of Learning Cyber Security**Platform: Kali Linux**

Name: Ayesha Nadeem

Topic: Android Penetration Testing



Contact Me: ayeshanm8@gmail.com

Date: 14th July, 2025

Andriller

⚠ This guide is intended for *educational and authorized forensic use only*. Extraction techniques and exposure of device identifiers (e.g., serial numbers) should only be performed on devices you own or have explicit permission to analyze. Unauthorized access or data handling may violate privacy laws and ethical standards. Use responsibly.

Initial Setup:

Command 1:

```
└─(ayeshanadeem㉿ayeshanadeem)-[~]
$ git clone https://github.com/den4uk/andriller.git

Cloning into 'andriller' ...
remote: Enumerating objects: 499, done.
remote: Counting objects: 100% (72/72), done.
remote: Compressing objects: 100% (30/30), done.
remote: Total 499 (delta 42), reused 42 (delta 42), pack-reused 427 (from 1)
Receiving objects: 100% (499/499), 1.31 MiB | 20.00 KiB/s, done.
Resolving deltas: 100% (302/302), done.

└─(ayeshanadeem㉿ayeshanadeem)-[~]
```

Command 2:

```
└─(ayeshanadeem㉿ayeshanadeem)-[~]
$ cd andriller
```

Command 3:

```
└─(ayeshanadeem㉿ayeshanadeem)-[~/andriller]
$ sudo chmod +x setup.py andriller-gui.py
```

Command 4:

```
└─(ayeshanadeem㉿ayeshanadeem)-[~/andriller]
$ pip install build
Defaulting to user installation because normal site-packages is not writeable
Collecting build
  Downloading build-1.2.2.post1-py3-none-any.whl.metadata (6.5 kB)
Requirement already satisfied: packaging >=19.1 in /usr/lib/python3/dist-packages (from build) (24.0)
Collecting pyproject_hooks (from build)
  Downloading pyproject_hooks-1.2.0-py3-none-any.whl.metadata (1.3 kB)
  Downloading build-1.2.2.post1-py3-none-any.whl (22 kB)
  Downloading pyproject_hooks-1.2.0-py3-none-any.whl (10 kB)
Installing collected packages: pyproject_hooks, build
  WARNING: The script pyproject-build is installed in '/home/ayeshanadeem/.local/bin' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed build-1.2.2.post1 pyproject_hooks-1.2.0
```

Command 5:

```
(ayeshanadeem㉿ayeshanadeem)-[~/andriller]
$ sudo apt install python3-venv
The following packages were automatically installed and are no longer required:
  cpp-13           ibverbs-providers  libboost-iostreams1.83.0  libcephfs2    libgfapi0  libg
  fonts-liberation2 libarmadillo12   libboost-thread1.83.0    libgdal34t64  libgfrpc0  libg
Use 'sudo apt autoremove' to remove them.

Upgrading:
blueman          libgnutls30t64    libsharpyuv0    onboard-data      py
curl             libpgp-error0     libsmbclient0  openssl          py
faraday          libpgpme11t64    libsnappy1v5   python-apt-common py
gdal-data        libgvc6          libssh2-1t64    python-matplotlib-data py
gdal-plugins     libgvpr2          libssl3t64     python-tables-data py
gnutls-bin       libhogweed6t64   libtalloc2     python3          py
graphviz         libicu-dev        libtdb1        python3-aardwolf py
icu-devtools     libjs-sphinxdoc  libtevent0t64   python3-aiohttp  py
ldap-utils       liblab-gamut1    libtiff6       python3-anyio    py
libavif16        libldap-common   libwbclient0   python3-apt      py
libbtlapi0.8     libldb2          libwebp7       python3-arc4     py
libbrotli1       libltdl7         libwebpdemux2  python3-bitstruct py
libcairo-gobject2 libnettle8t64   libwebspmux3   python3-bottleneck py
libcairo-script-interpreter2 libnewt0.52     libxaw7       python3-brlapi   py
libcairo2        libpathplan4    libxtst6       python3-brotli   py
libcdt5          libpng16-16t64   libyuv0        python3-cairo   py
libcgraph6        libpoppler-glib8t64 libzstd1      python3-cbor    py
libcurl3t64-gnutls libprotobuf32t64 mitmproxy     python3-cffi     py
libcurl4t64      libpython3-dev   onboard      python3-cffi-backend py
libgnutls-dane0t64 libpython3-stdlib  onboard-common  python3-contourpy py

Installing:
python3-venv
```

Command 6:

```
(ayeshanadeem㉿ayeshanadeem)-[~/andriller]
$ python3 -m venv venv

(ayeshanadeem㉿ayeshanadeem)-[~/andriller]
$ source venv/bin/activate
```

Command 7:

```
(venv)-(ayeshanadeem㉿ayeshanadeem)-[~/andriller]
$ pip install build
Collecting build
  Using cached build-1.2.2.post1-py3-none-any.whl.metadata (6.5 kB)
Collecting packaging≥19.1 (from build)
  Downloading packaging-25.0-py3-none-any.whl.metadata (3.3 kB)
Collecting pyproject_hooks (from build)
  Using cached pyproject_hooks-1.2.0-py3-none-any.whl.metadata (1.3 kB)
Using cached build-1.2.2.post1-py3-none-any.whl (22 kB)
  Downloading packaging-25.0-py3-none-any.whl (66 kB)
                                                 66.5/66.5 kB 109.9 kB/s eta 0:00:00
Using cached pyproject_hooks-1.2.0-py3-none-any.whl (10 kB)
Installing collected packages: pyproject_hooks, packaging, build
Successfully installed build-1.2.2.post1 packaging-25.0 pyproject_hooks-1.2.0
```

Command 8:

```
Successfully built andriller-3.6.3.tar.gz and andrill
└─(venv)─(ayeshanadeem@ayeshanadeem)─[~/andriller]
$ sudo rm -rf andriller.egg-info
[sudo] password for ayeshanadeem:
```

Command 9:

```
└─(venv)─(ayeshanadeem@ayeshanadeem)─[~/andriller]
$ sudo chown -R $ayeshanadeem:$ayeshanadeem ~/andriller
```

Command 10:

```
└─(venv)─(ayeshanadeem@ayeshanadeem)─[~/andriller]
$ pip install jinja2
WARNING: Retrying (Retry(total=4, connect=None, read=None, redirect=None, status=None)) after connect
          connection: [Errno -3] Temporary failure in name resolution': /simple/jinja2/
Collecting jinja2
  Downloading jinja2-3.1.6-py3-none-any.whl.metadata (2.9 kB)
Collecting MarkupSafe≥2.0 (from jinja2)
  Downloading MarkupSafe-3.0.2-cp313-cp313-manylinux_2_17_x86_64.manylinux2014_x86_64.whl.metadata (4
  Downloading jinja2-3.1.6-py3-none-any.whl (134 kB)
    ━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 134.9/134.9 kB 32.2 kB/s eta 0:00:00
  Downloading MarkupSafe-3.0.2-cp313-cp313-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (23 kB)
Installing collected packages: MarkupSafe, jinja2
Successfully installed MarkupSafe-3.0.2 jinja2-3.1.6
```

Command 11:

```
└─(venv)─(ayeshanadeem@ayeshanadeem)─[~/andriller]
$ pip install -r requirements.txt
Ignoring dataclasses: markers 'python_version == "3.6"' don't match your environment
Collecting dateutils (from -r requirements.txt (line 1))
  Downloading dateutils-0.6.12-py2.py3-none-any.whl.metadata (1.3 kB)
Collecting javaobj-py3≥0.4.3 (from -r requirements.txt (line 2))
  Downloading javaobj_py3-0.4.4-py2.py3-none-any.whl.metadata (17 kB)
Collecting pycryptodomex (from -r requirements.txt (line 3))
  Downloading pycryptodomex-3.23.0-cp37-abi3-manylinux_2_17_x86_64.manylinux2014_x86_6
Collecting python-dateutil (from -r requirements.txt (line 4))
  Downloading python_dateutil-2.9.0.post0-py2.py3-none-any.whl.metadata (8.4 kB)
Collecting XlsxWriter (from -r requirements.txt (line 5))
  Downloading XlsxWriter-3.2.3-py3-none-any.whl.metadata (2.7 kB)
Collecting Jinja2<3, ≥2.11.3 (from -r requirements.txt (line 6))
  Downloading Jinja2-2.11.3-py2.py3-none-any.whl.metadata (3.5 kB)
Collecting MarkupSafe=2.0.1 (from -r requirements.txt (line 7))
  Downloading MarkupSafe-2.0.1.tar.gz (18 kB)
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting wrapt-timeout-decorator=1.3.10 (from -r requirements.txt (line 8))
  Downloading wrapt_timeout_decorator-1.3.10-py3-none-any.whl.metadata (36 kB)
Collecting appdirs<2, ≥1.4.4 (from -r requirements.txt (line 9))
  Downloading appdirs-1.4.4-py2.py3-none-any.whl.metadata (9.0 kB)
Collecting requests (from -r requirements.txt (line 10))
  Downloading requests-2.32.3-py3-none-any.whl.metadata (4.6 kB)
```

Command 12:

```
(venv)/ayeshanadeem@ayeshanadeem:[~/andriller]
$ pip install .
Processing /home/ayeshanadeem/andriller
  Installing build dependencies ... done
    Getting requirements to build wheel ... done
      Preparing metadata (pyproject.toml) ... done
Requirement already satisfied: dateutil in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (0.6.12)
Requirement already satisfied: javabobj-py3 ≥ 0.4.3 in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (0.4.4)
Requirement already satisfied: pycryptodomex in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (3.23.0)
Requirement already satisfied: python-dateutil in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (2.9.0.post0)
Requirement already satisfied: Jinja2<3, ≥ 2.11.3 in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (2.11.3)
Requirement already satisfied: MarkupSafe=2.0.1 in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (2.0.1)
Requirement already satisfied: wrapt-timeout-decorator=1.3.10 in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (1.3.10)
Requirement already satisfied: appdirs<2, ≥ 1.4.4 in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (1.4.4)
Requirement already satisfied: requests in ./venv/lib/python3.13/site-packages (from andriller==3.6.3) (2.32.3)
Requirement already satisfied: cli-exit-tools in ./venv/lib/python3.13/site-packages (from wrapt-timeout-decorator=1.3.10->andriller==3.6.3) (1.2.7)
Requirement already satisfied: lib-detect-testenv in ./venv/lib/python3.13/site-packages (from wrapt-timeout-decorator=1.3.10->andriller==3.6.3) (2.0.8)
Requirement already satisfied: dill in ./venv/lib/python3.13/site-packages (from wrapt-timeout-decorator=1.3.10->andriller==3.6.3) (0.4.0)
Requirement already satisfied: multiprocess in ./venv/lib/python3.13/site-packages (from wrapt-timeout-decorator=1.3.10->andriller==3.6.3) (0.70.18)
Requirement already satisfied: wrapt in ./venv/lib/python3.13/site-packages (from dateutil->andriller==3.6.3) (2025.2)
Requirement already satisfied: pytz in ./venv/lib/python3.13/site-packages (from requests->andriller==3.6.3) (1.17.0)
Requirement already satisfied: charset-normalizer<4, ≥ 2 in ./venv/lib/python3.13/site-packages (from requests->andriller==3.6.3) (3.4.2)
Requirement already satisfied: idna<4, ≥ 2.5 in ./venv/lib/python3.13/site-packages (from requests->andriller==3.6.3) (3.10)
Requirement already satisfied: urllib3<3, ≥ 1.21.1 in ./venv/lib/python3.13/site-packages (from requests->andriller==3.6.3) (2.4.0)
Requirement already satisfied: click >= 2017.4.17 in ./venv/lib/python3.13/site-packages (from cli-exit-tools->wrapt-timeout-decorator=1.3.10->andriller==3.6.3) (2025.4.26)
Requirement already satisfied: Building wheels for collected packages: andriller
  Building wheel for andriller (pyproject.toml) ... done
  Created wheel for andriller: filename=andriller-3.6.3-py3-none-any.whl size=1316054 sha256=8aa2cb90c493462075a8fd95c87f690cc6a9c923b0e9295e38095e2ee6f46a24
  Stored in directory: /tmp/pip-ephem-wheel-cache-rbbz82mo/wheels/27/ec/c7/e01bae9510e09d9fa818730707ad1126783a36ba520b9cadb8
Successfully built andriller
Installing collected packages: andriller
Successfully installed andriller-3.6.3
```

Launch andriller-gui.py

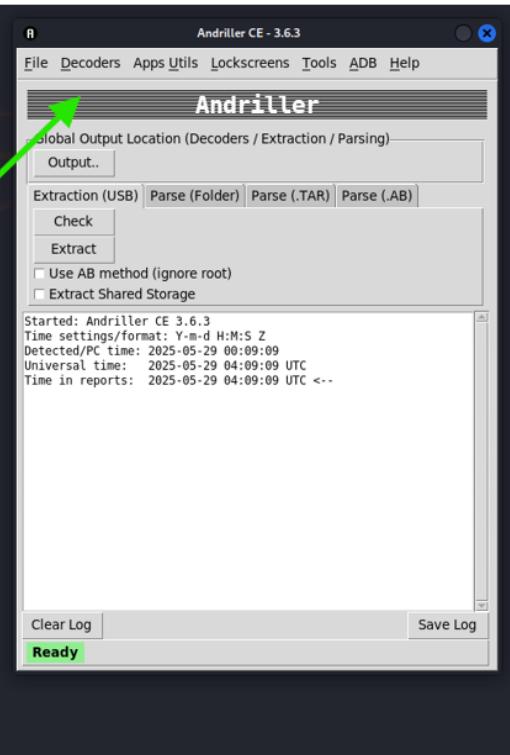
Command 13:

```
Selecting previously unselected package android-udev-rules_0-20250314+ds-5_all.deb ...
Preparing to unpack .../4-android-libziparchive_1%3a34.0.5-12_amd64.deb ...
Unpacking android-libziparchive:amd64 (1:34.0.5-12) ...
Selecting previously unselected package android-udev-rules ...
Preparing to unpack .../5-android-udev-rules_0-20250314+ds-5_all.deb ...
Unpacking android-udev-rules (0-20250314+ds-5) ...
Selecting previously unselected package adb ...
Preparing to unpack .../6-adb_1%3a34.0.5-12_amd64.deb ...
Unpacking adb (1:34.0.5-12) ...
Selecting previously unselected package android-libsparse:amd64 ...
Preparing to unpack .../7-android-libsparse_1%3a34.0.5-12_amd64.deb ...
Unpacking android-libsparse:amd64 (1:34.0.5-12) ...
Selecting previously unselected package fastboot ...
Preparing to unpack .../8-fastboot_1%3a34.0.5-12_amd64.deb ...
Unpacking fastboot (1:34.0.5-12) ...
Setting up android-liblog:amd64 (1:34.0.5-12) ...
Setting up android-libboringssl:amd64 (14.0.0+r45-2) ...
Setting up android-udev-rules (0-20250314+ds-5) ...
Setting up android-libbase:amd64 (1:34.0.5-12) ...
Setting up android-libziparchive:amd64 (1:34.0.5-12) ...
Setting up android-libcutlits:amd64 (1:34.0.5-12) ...
Setting up adb (1:34.0.5-12) ...
Setting up android-libsparse:amd64 (1:34.0.5-12) ...
Setting up fastboot (1:34.0.5-12) ...
Processing triggers for kali-menu (2023.4.7) ...
Processing triggers for libc-bin (2.38-10) ...
Processing triggers for man-db (2.12.1-1) ...

(venv)/ayeshanadeem@ayeshanadeem:[~/andriller]
$ adb version
Android Debug Bridge version 1.0.41
Version 34.0.5-debian
Installed as /usr/lib/android-sdk/platform-tools/adb
Running on Linux 6.12.25-amd64 (x86_64)

(venv)/ayeshanadeem@ayeshanadeem:[~/andriller]
$ python3 andriller-gui.py
INFO:andriller.gui.core:Started: Andriller CE 3.6.3
INFO:andriller.gui.core:Time settings/format: Y-m-d H:M:S Z
INFO:andriller.gui.core:Detected/PC time: 2025-05-29 00:08:38
INFO:andriller.gui.core:Universal time: 2025-05-29 04:08:38 UTC
INFO:andriller.gui.core:Time in reports: 2025-05-29 04:08:38 UTC ←

(venv)/ayeshanadeem@ayeshanadeem:[~/andriller]
$ python3 andriller-gui.py
INFO:andriller.gui.core:Started: Andriller CE 3.6.3
INFO:andriller.gui.core:Time settings/format: Y-m-d H:M:S Z
INFO:andriller.gui.core:Detected/PC time: 2025-05-29 00:09:09
INFO:andriller.gui.core:Universal time: 2025-05-29 04:09:09 UTC
INFO:andriller.gui.core:Time in reports: 2025-05-29 04:09:09 UTC ←
```



Verified the installation:

Close all previous terminals and in new terminal write these commands.

Command 14:

```
File Actions Edit View Help
(ayeshanadeem@ayeshanadeem)-[~]
$ cd andriller
```

Command 15:

```
(ayeshanadeem@ayeshanadeem)-[~/andriller]
$ python3 -m venv venv
source venv/bin/activate
python3 andriller/gui.py
INFO:andriller.gui.core:Started: Andriller CE 3.6.3
INFO:andriller.gui.core:Time settings/format: Y-m-d H:M:S Z
INFO:andriller.gui.core:Detected/PC time: 2025-05-29 00:10:22
INFO:andriller.gui.core:Universal time: 2025-05-29 04:10:22 UTC
INFO:andriller.gui.core:Time in reports: 2025-05-29 04:10:22 UTC <--
```

Andriller CE - 3.6.3

Global Output Location (Decoders / Extraction / Parsing)

Output...

Extraction (USB) Parse (Folder) Parse (.TAR) Parse (.AB)

Check Extract

Use AB method (ignore root)

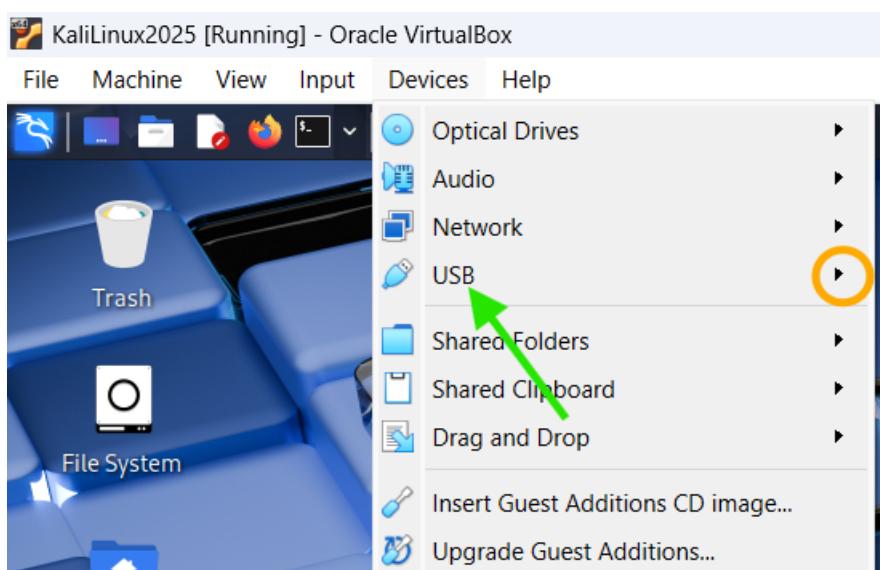
Extract Shared Storage

Started: Andriller CE 3.6.3
Time settings/format: Y-m-d H:M:S Z
Detected/PC time: 2025-05-29 00:10:22
Universal time: 2025-05-29 04:10:22 UTC
Time in reports: 2025-05-29 04:10:22 UTC <--

Verified device connectivity:

Connect your android device with help of data cable with laptop/computer.

Then go to Device > USB > [your device]



Click on your respective device.

Command 16:

```
(ayeshanadeem㉿ayeshanadeem)~]$ lsusb
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 001 Device 002: ID 80ee:0021 VirtualBox USB Tablet
Bus 001 Device 005: ID 04e8:6860 Samsung Electronics Co., Ltd Galaxy series, misc. (MTP mode)
Bus 002 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
```

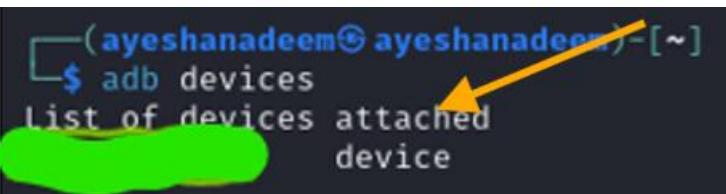
Command 17:



```
(ayeshanadeem㉿ayeshanadeem)~]$ adb devices
List of devices attached
unauthorized
```

To recognize device in andriller, you need to enable developers mode from your mobile.

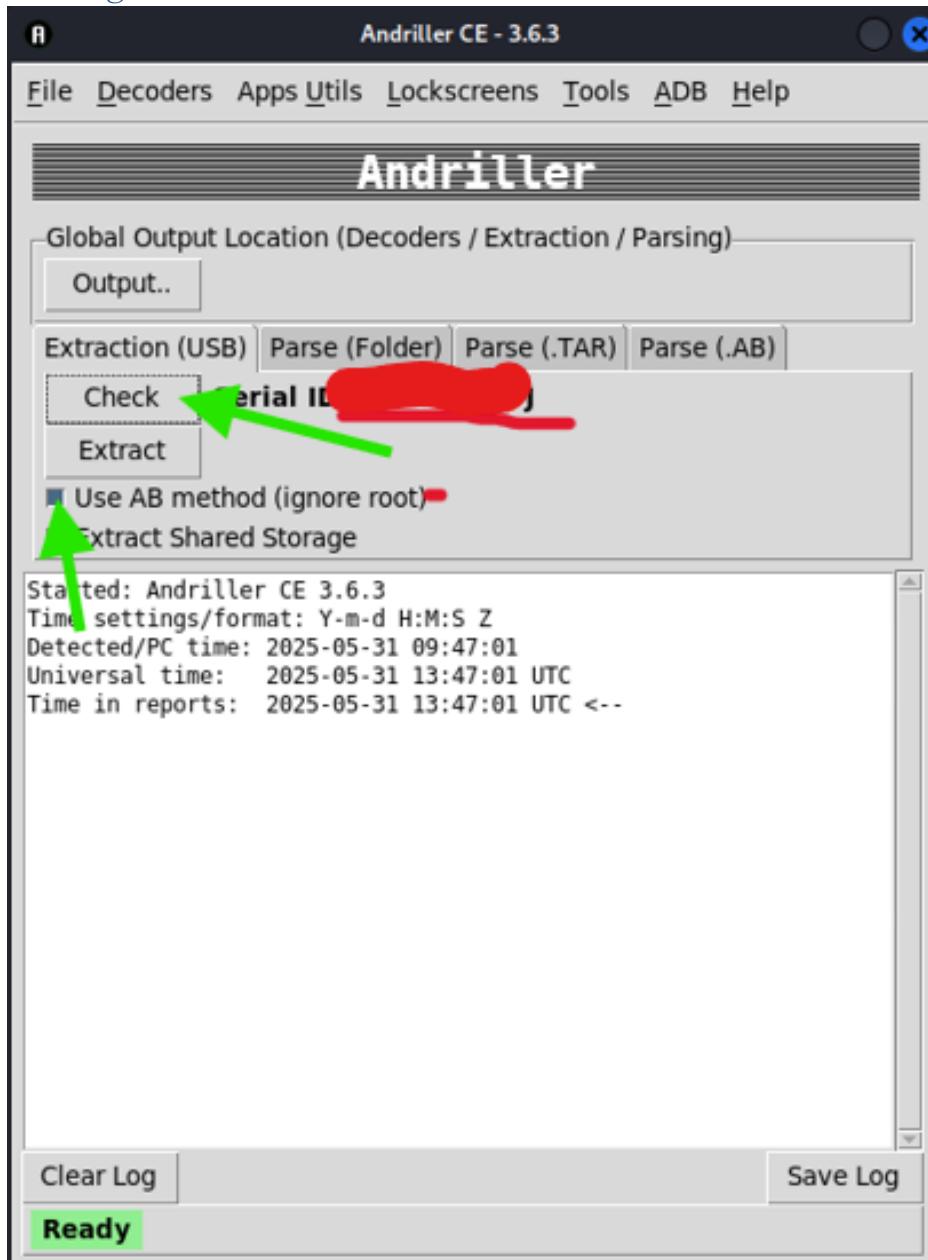
Command 18:



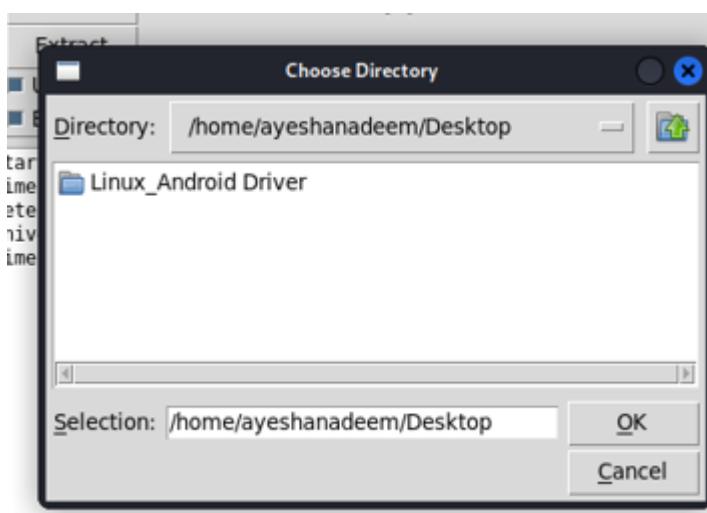
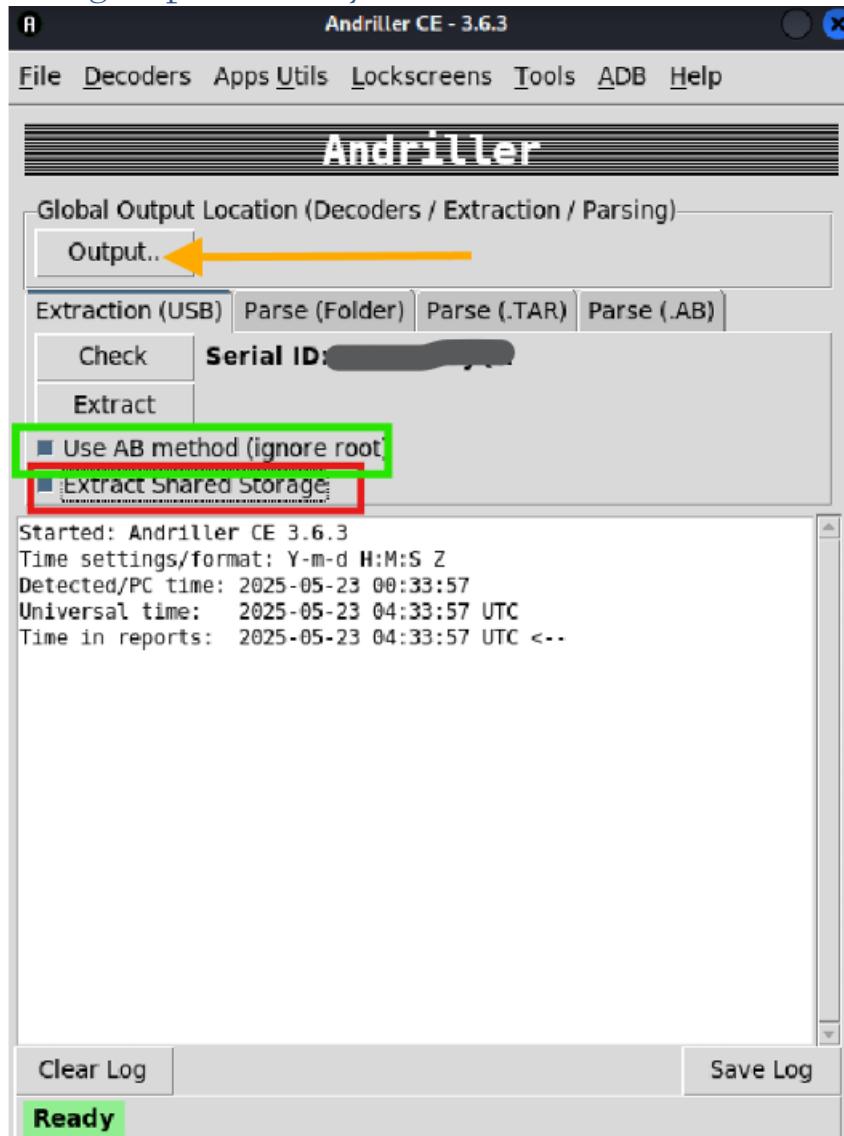
```
(ayeshanadeem㉿ayeshanadeem)~]$ adb devices
List of devices attached
device
```

Starting Penetration Test:

Getting serial ID

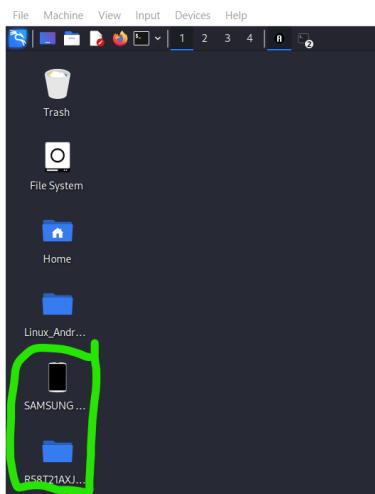


Saving output directory:



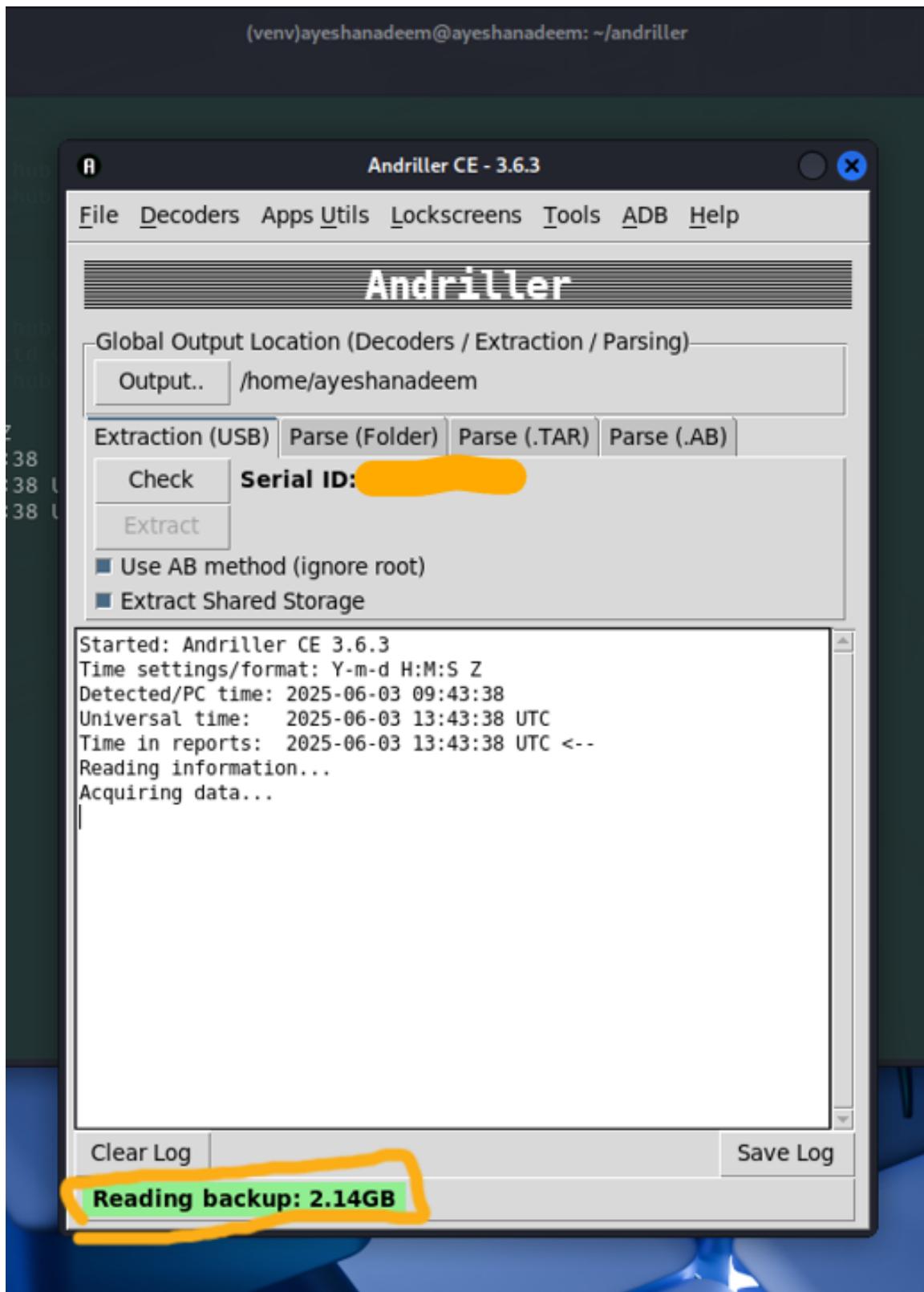
Save it to desktop, so when all data is extracted from android device it will save here.

Note: Use a device having less amount (GBs) data for testing, making extraction faster.



Extract Data:





Final Result in andriller browser

This report was generated using Andriller CE # (This field is editable in Preferences)

[Andriller Report]

Type	Data
Serial	[REDACTED]
Status	device
Permissin	shell
Wifi Mac	02:00:00:00:00:00
Local_Time	[REDACTED]
Device_Time	[REDACTED]
Accounts	<ul style="list-style-type: none"> • com.esp.app.signin: [REDACTED] • com.samsung.android.mobileservice: [REDACTED] • com.samsung.android.coreapps: [REDACTED] • com.google: [REDACTED] • com.whatsapp: WhatsApp • com.twitter.android.auth.login: [REDACTED] • com.facebook.auth.login: Facebook • com.facebook.auth.login: [REDACTED] • com.whatsapp.w4l: [REDACTED] • org.telegram.messenger: [REDACTED] • com.yandex.passport: [REDACTED] • com.google.android.apps: [REDACTED] • com.imo.android.imoim: imo • com.microsoft.workaccount.itw: [REDACTED] • com.microsoft.workaccount.itw: [REDACTED] • im.thebot.messenger: [REDACTED] • com.microsoft.skydrive: [REDACTED] • com.microsoft.office: [REDACTED] • com.facebook.messenger: [REDACTED] • www.instagram.com: [REDACTED] • com.esp.app.signin: [REDACTED]

andriller.com # (This field is editable in Preferences)