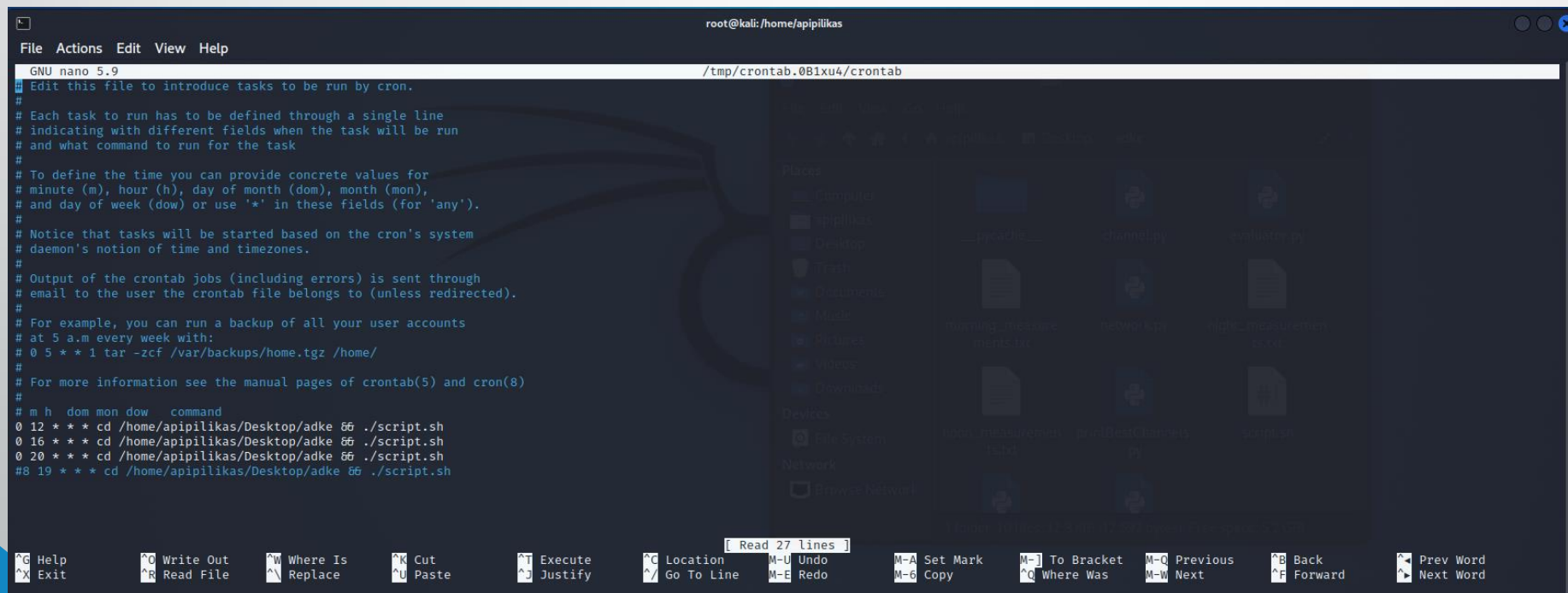


Algorithm execution demonstration

The script is executed at 12:00, 16:00 or 20:00. This is accomplished by writing the rules below in the crontab file:

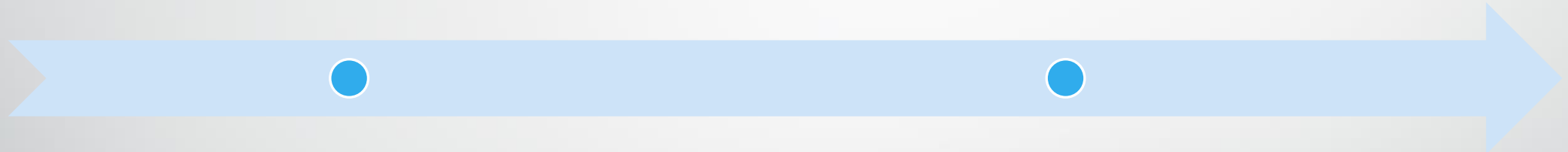


```
root@kali: /home/apilikas
File Actions Edit View Help
GNU nano 5.9 /tmp/crontab.0B1xu4/crontab
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
0 12 * * * cd /home/apilikas/Desktop/adke && ./script.sh
0 16 * * * cd /home/apilikas/Desktop/adke && ./script.sh
0 20 * * * cd /home/apilikas/Desktop/adke && ./script.sh
#8 19 * * * cd /home/apilikas/Desktop/adke && ./script.sh

[ Read 27 lines ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark  M-] To Bracket M-Q Previous  ^B Back       ^_ Prev Word
^X Exit      ^R Read File  ^N Replace    ^U Paste      ^J Justify    ^/_ Go To Line  M-E Redo      M-6 Copy      M-^ Where Was M-W Next      ^F Forward    ^_ Next Word
```

Algorithm execution demonstration

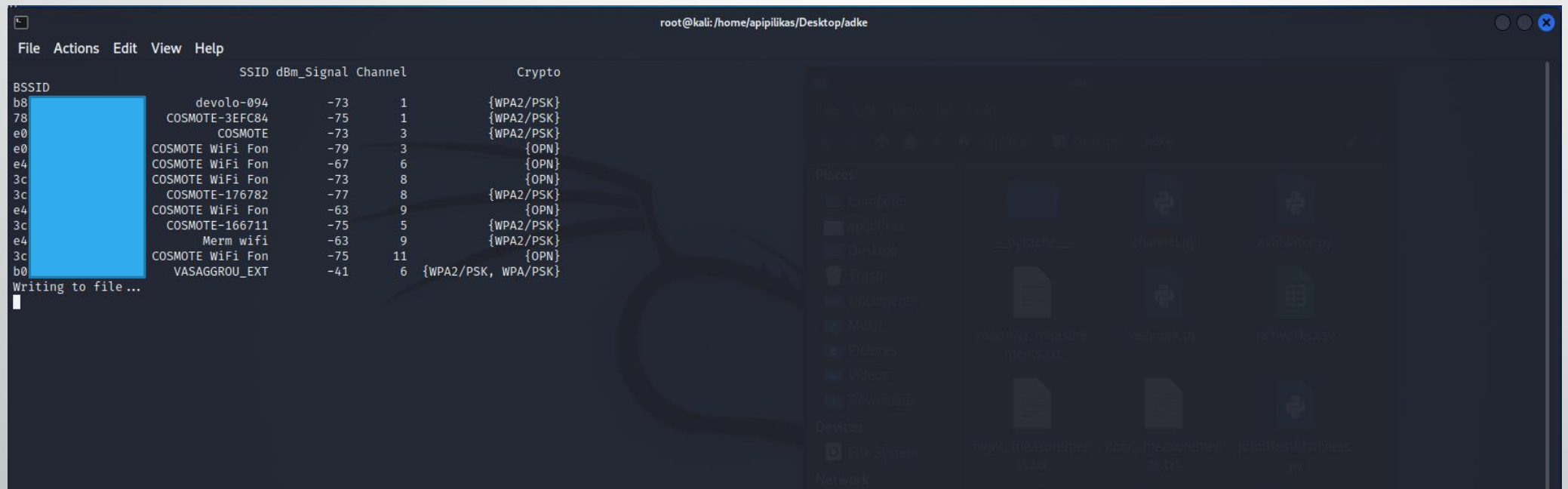
20:00



script.sh is triggered

```
# Example to the user the crontab file belongs to (optional redirection)
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
0 12 * * * cd /home/apipilikas/Desktop/adke && ./script.sh
0 16 * * * cd /home/apipilikas/Desktop/adke && ./script.sh
0 20 * * * cd /home/apipilikas/Desktop/adke && ./script.sh
#8 19 * * * cd /home/apipilikas/Desktop/adke && ./script.sh
```

Algorithm execution demonstration



```
root@kali: /home/apipiliakas/Desktop/adke
```

BSSID	SSID	dBm_Signal	Channel	Crypto
b8	devolo-094	-73	1	{WPA2/PSK}
78	COSMOTE-3EFC84	-75	1	{WPA2/PSK}
e0	COSMOTE	-73	3	{WPA2/PSK}
e0	COSMOTE WiFi Fon	-79	3	{OPN}
e4	COSMOTE WiFi Fon	-67	6	{OPN}
3c	COSMOTE WiFi Fon	-73	8	{OPN}
3c	COSMOTE-176782	-77	8	{WPA2/PSK}
e4	COSMOTE WiFi Fon	-63	9	{OPN}
3c	COSMOTE-166711	-75	5	{WPA2/PSK}
e4	Merm wifi	-63	9	{WPA2/PSK}
3c	COSMOTE WiFi Fon	-75	11	{OPN}
b0	VASAGGROU_EXT	-41	6	{WPA2/PSK, WPA/PSK}

Writing to file...

Algorithm execution demonstration

```
root@kali: /home/apipilikas/Desktop/adke
File Actions Edit View Help
night_measurements.txt
Writing to night_measurements.txt
Channel 1 0.06999999999999999
Channel 2 0
Channel 3 0.06999999999999999
Channel 4 0
Channel 5 0
Channel 6 0.5963636363636363
Channel 7 0
Channel 8 0.10318181818181818
Channel 9 0.16045454545454546
Channel 10 0
Channel 11 0
Channel 12 0
Channel 13 0
Channel 14 0
-----
Channel 1 0.0392
Channel 2 0.0168
Channel 3 0.0392
Channel 4 0.0084
Channel 5 0.07156363636363636
Channel 6 0.33396363636363635
Channel 7 0.08394545454545455
Channel 8 0.07703636363636364
Channel 9 0.10223636363636364
Channel 10 0.019254545454545455
Channel 11 0.0
Channel 12 0.0
Channel 13 0.0
Channel 14 0.0
[11, 12, 13, 14]
```

Channel evaluation algorithm results

Neighboring channel evaluation algorithm results and history log

Best Channels

(root@kali) - [/home/apipilikas/Desktop/adke]

Comparison with Android Channel evaluator application

Our algorithm

```
File Actions Edit View Help
night_measurements.txt
Writing to night_measurements.txt
Channel 1 0.06999999999999999
Channel 2 0
Channel 3 0.06999999999999999
Channel 4 0
Channel 5 0
Channel 6 0.5963636363636363
Channel 7 0
Channel 8 0.10318181818181818
Channel 9 0.16045454545454546
Channel 10 0
Channel 11 0
Channel 12 0
Channel 13 0
Channel 14 0
-----
Channel 1 0.0392
Channel 2 0.0168
Channel 3 0.0392
Channel 4 0.0084
Channel 5 0.07156363636363636
Channel 6 0.33396363636363635
Channel 7 0.08394545454545455
Channel 8 0.07703636363636364
Channel 9 0.10223636363636364
Channel 10 0.019254545454545455
Channel 11 0.0
Channel 12 0.0
Channel 13 0.0
Channel 14 0.0
[11, 12, 13, 14]

(root@kali)-[/home/apipilikas/Desktop/adke]
```

Wifi Analyzer (Android)

