

Homework 14

Question 1 [1 pt]

A device was discovered to have the IMEI number: 352030111704822.

- a) What is the device model?
- b) Which network bands and technologies does the device support?
- c) What GNSS systems are supported?
- d) Which Wi-Fi frequency band(s) can the device use?

Question 2 [1 pt]

The file `simple_scan_hw14.pcap` contains a capture of some GSM data on two different downlink frequencies. Answer the following questions based on this file.

- a) Assuming the ARFCN for the first cell tower was 978, what is the ARFCN for the second cell tower? [0.125 pts]
- b) What is the downlink frequency for both cell towers? [0.5 pts]
- c) Who is the network operator for both cell towers? [0.125 pts]
- d) What is the LAC and CID for both cell towers? [0.25 pts]

Question 3 [1 pt]

The file `sim_card_scan.json` contains the file system information for a SIM card. Answer the following questions based on this file.

- a) What is the subscriber identifier for the cellular network?
- b) Who is the network provider for the SIM card?
- c) What would be the mobile number for the device using this SIM card?
- d) What is the value for the key used in GSM phone call encryptions?

Due Date: Check Moodle for date

Late Submission Deadline: Check Moodle for date (usually 1 week after due date)

Submission Files: A file containing the answers to the questions

Location: Moodle Homework14 link