Hardware Security 2020 - Lab3 clarifications

We received several questions about Lab3 in the office hours! For fairness, we will re-elaborate the answers to the most common questions in this document!
We wish you best of luck with the Assignment!

Q) The Saleae reports that the device cannot keep up with this sample rate when I try to capture signals, what can I do?

Consider reducing the sample size of the capture or reduce the capture time. Additionally, try avoid using an USB-hub for the logic analyzer, If possible.

Q) I could decode the UART signal and read the message, but I can see framing errors, is this a problem?

Yes! If you see framing errors, your UART decoder settings are not 100% correct. Instead of bruteforcing the parameters, try looking at the signal (and the lecture slides) and figure out why you encounter these errors.

Q) When should I use the FTDI Adapter for Assignment 3B?

For Assignment 3B Part 1 the FTDI Adapter is **NOT** needed.
For Assignment 3B Part 2 the FTDI Adapter is needed.

Q) How can I verify that my firmware dump is correct?

The firmware you are interested in is stored in Flash Bank1 of the STM32L152RE MCU!
If you dumped the firmware correctly, you should find strings which you saw previously on the serial output, e.g.:

```
============================
==== HWSEC ASSIGNMENTS ====
============================
```

Furthermore, for additional verification here are the first bytes of the firmware to be dumped:

```
$ xxd dump.bin | head
00000000: 0040 0120 d902 0008 e102 0008 e901 0008  .@. ............
00000010: ed01 0008 f101 0008 f501 0008 0000 0000  ................
00000020: 0000 0000 0000 0000 0000 0000 4502 0008  ............E...
00000030: ed02 0008 0000 0000 b102 0008 c102 0008  ................
00000040: f302 0008 f302 0008 f302 0008 f302 0008  ................
00000050: f302 0008 f302 0008 f302 0008 f302 0008  ................
00000060: f302 0008 f302 0008 f302 0008 f302 0008  ................
00000070: f302 0008 f302 0008 f302 0008 f302 0008  ................
00000080: f302 0008 f302 0008 f302 0008 f302 0008  ................
00000090: f302 0008 f302 0008 f302 0008 f302 0008  ................
```

Q) What do I need to submit?

Please refer to the deliverable sections in the lab manual. You *can* arrange all flags and images in a report file if you want to do so. In any case, we expect a zip file containing all the asked deliverables. A technical writeup of what you did is not required (unless you think some of your actions need additional explanations).