


Stefany Cruz
Lab 1 submission

Part1 : Programming nRF52840DKwith blink, buttons, printf, and error

I was successfully able to program the basic apps on the nRF52840DK. The following are pictures of the outputs from the print app and error app.



```
Co In
Fi In
Ha Fo Iteration: 7
S/ DP Iteration: 8
Li Sc Iteration: 9
VT AP Iteration: 10
Ta AP Iteration: 11
De AP Iteration: 12
It AP Iteration: 13
AP Iteration: 14
Co AP Iteration: 15
In CP Iteration: 16
In Fo Iteration: 17
Fo FP Iteration: 18
DP Co Iteration: 19
Sc RO Iteration: 20
AP RO Iteration: 21
AP RO Iteration: 22
AP RO Iteration: 23
It RO Iteration: 24
AP RO Iteration: 25
AP RO Iteration: 26
CP Co Iteration: 27
Fo J- Iteration: 28
FPUNT Iteration: 29
CoreS Iteration: 30
ROMTb Iteration: 31
ROMTb Iteration: 32
ROMTb Iteration: 33
ROMTb Iteration: 34
ROMTb Iteration: 35
ROMTb Iteration: 59
ROMTb Iteration: 60
Corte Iteration: 61
Reset Iteration: 62
Reset Iteration: 63
Reset Iteration: 64
Reset Iteration: 65
Reset Iteration: 66
Downl Iteration: 67
J-Lin Iteration: 68
J-Lin Iteration: 69
J-Lin Iteration: 70
```

Picture of print app

```

###RTT Client: *   Solutions for real time microcontroller applications   *
###RTT Client: *****
###RTT Client: *
###RTT Client: *   (c) 2012 - 2016 SEGGER Microcontroller GmbH   *
###RTT Client: *
###RTT Client: *   www.segger.com   Support: support@segger.com   *
###RTT Client: *
###RTT Client: *****
###RTT Client: *
###RTT Client: * SEGGER J-Link RTT Client   Compiled Jan 14 2021 11:48:33 *
###RTT Client: *
###RTT Client: *****

###RTT Client: -----
###RTT Client: Connecting to J-Link RTT Server via localhost:22759 ...
###RTT Client: Connected.

SEGGER J-Link V6.94a - Real time terminal output
J-Link OB-SAM3U128-V2-NordicSemi compiled Mar 17 2020 14:43:00 V1.0, SN=683881041
Process: JLinkExe
Log initialized! Erroring in a second.
<error> hardfault: HARD FAULT at 0x000002F4
<error> hardfault:   R0: 0xFFFFFFFF R1: 0x2003FA65 R2: 0x00000000 R3: 0x20040000
<error> hardfault:   R12: 0x200009F4 LR: 0x000002EF PSR: 0x61000000
<error> hardfault: Cause: The processor has attempted to execute an undefined instruction.

```

Picture of error app

Part 2: Creating an app

I successfully created a simple app that toggles LED1 and LED4 with a delay of 500 ms and LED2 and LED3 at 1000 ms.