
Home Challenge #3

2020/21

Prof. Cesana Matteo

Shalby Hazem Hesham Yousef (Personal Code: 10596243)

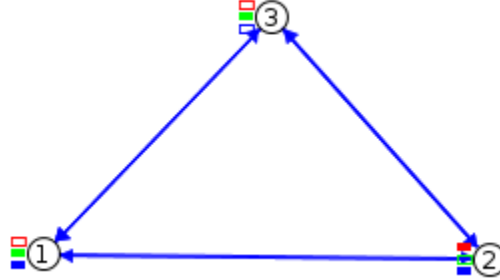
10 May 2021



POLITECNICO
MILANO 1863

1 Preparation

Move the three motes to put every device in communication with the other two.



2 Results

The First 20 values^[1] of the LEDs of mote #2 in binary form are the following^[2]:

000^[3], 100, 101, 001, 101, 001, 101, 001, 000, 100, 000, 100, 000, 100, 101,
000^[4], 100, 000, 100, 000

Since the considered Mote receive message from the Mote 3 (5Hz) and Mote 1 (1Hz), we had a Cycle in which in any iteration we receive 5 messages from Mote 3 and 1 from Mote 1.

The result starts with two message and not five of Mote 3 because the two devices (ID.1 and ID.3) have different boot time, but than the cycle described before is respected as long as the two devices run.

3 Implementation

The only thing worthy of note is the usage of three variable of type bool to get the status of three LEDs. This has been required because the Leds.get() function doesn't work as described in the documentation.

^[1]Each value represents the status of the mote after the reception of a message

^[2]The binary form is $b_2b_1b_0$ where b_i is 1 if the i-th LED is ON and 0 if is OFF

^[3]Here a reset has been done because the received message has `(counter mod 10) == 0`

^[4]Here a reset has been done because the received message has `(counter mod 10) == 0`