

1. The light appears pink on the board, and the color is produced by variable rate flashing of the red and blue lights.
2.
  - a. The DCW statements put constants in memory, aligned at 16-bit intervals. In this implementation, they are used for addressing of variables and constants.
  - b. PF1 will toggle at around 6.7 MHz.
  - c. An address that points to PF1
  - d. use r1 in the first instruction instead of r0 to preserve it and not have to load it twice
  - e. Normally, read-modify-write cycles create critical sections. For example, if the thread in question reads port F, then another thread modifies another pin on port F, then the thread in question modifies PF2 and writes back, the second thread's changes will be discarded. The critical section can be avoided by disabling interrupts, putting the interrupt at a high enough priority, or using bit-specific addressing.