



Homework 4

Homework must be done on video and submitted to the corresponding submitting portal on iLearn! The video must show the functionality AND before or later your face without a scene switch (cut). The video should not exceed 100MB. Staying under one minute is totally fine.

Additional, upload the assembler text file also on iLearn!

Exercise 1:

Construct an OR circuit analog to the AND circuit of the quiz practice. Hint: This time the transistors must be parallel instead of serial. The pins A and B must be controlled by the Arduino, which is sending sequentially in a frequency of 500 ms a signal (AB): 00, 01, 00, 10 and repeat.

Exercise 2:

Construct a “knight rider” LED light.

Use at least 4 LEDs (the more the better, but remember the limitations are your digital output switches) and sweep the active light through them:

- Start at a corner.
- Go to the other corner.
- Go back to the start corner.
- Repeat.
- Only one LED should be active at a time!

