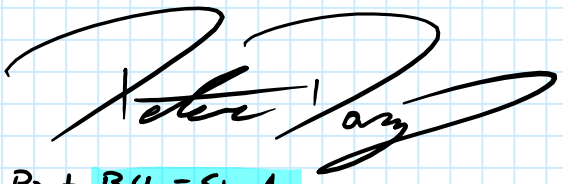
Lab 3 Notes

Tuesday, February 20, 2018 3:24 PM



Operations for B & C
- B will use Port B0 - B3
- C will use Port C0 - C3
- Port B4 = SW A
- Port B5 = SW B

Use Lecture 5 for proper port settings (TRIS settings) Slides 30 & 31

ex) `TRISCbits.RC5 = 1;` // setting Port C5 as input
or
`TRISC = 0b00001111;` // Setting ports for Port C as I/O

For **proper bit masking**, Use Lecture 7 - Slide 64
- TRIS setting for bit masking needs to be output

ex) **PORTD = PORTB & PORTC**
- This guarantees you are reading the number you are inputing

X = 0b01011101
Y = 0b00001111
masked X = 0b00001101

This is what **demo** should look like

SW A = 0
SW B = 0 — B + C = +20 — ex) B = 12 "1010", C = 8 "1000"

SW A = 0
SW B = 1 — B - C = +04 / B - C = -04 — ex) B = 8 "1000", C = 12 "1010"

SW A = 1
SW B = 0 — B AND C = 0000 — ex) B = 0101, C = 1010

SW A = 1
SW B = 1 — NOT(B) = 0110 — ex) B = 1001

Once done, **replace Addition with Multiplication**

SW A = 0
SW B = 0 — B * C = +225 — ex) B = 1111, C = 1111