Expected / Projected / Actual Class Progression

Week 1 - 2/1

- Syllabus
- What's already assigned
- Install
- Questions
- Recording

Week 2 - 2/6 2/8

- Tuesday's Recording
- Thursday's Recording
- Apple Silicon
- Windows
- Intel Mac - get the distro, get QEMU, follow instructions for Windows except use your plain old terminal instead of WSL.
- Binary
- Powers of 2 up to 216
- Signed and Unsigned Integers
- 1's Complement and 2's Complement
- Registers
    - Integer Registers w & x
    - Why Have Registers
        * Speed of Processors Relative to RAM
    - *Up to this point was Tuesday 2/6. Thursday's class follows.*
    - Special Registers
        * Program Counter - pc
        * Stack Pointer - sp
    - Floating Point Registers h, s, d, v & q
    - Floating Point Construction

Week 3 - 2/13 2/15

- Floating Point Registers **h**, s, d, v & q
    - h are half floats - not used much - are least significant half of s
    - s are single precision values - there are 2 to a d register
    - d are double precision values - are least significant half of v
    - v is a vector of something
    - q is a single 128 bit value
- Floating Point Construction
    - Floats / Doubles are approximations
    - Normalized scientific notation
        * Sign
        * Exponent
        * Mantissa
    - Single Precision - how above are implemented
    - Double Precision - how above are implemented
- Why Have Registers (Continued)
    - Steps Needed to Execute an Instruction
    - Pipelined Execution
    - Special Registers (other than the *really* special registers)
        * Frame Pointer - x29
        * Link Register - x30
    - Aside:
        * Bit fields in C/C++
        * Unions in C/C++

Week 4 - 2/20 2/22

Week 5 - 2/27 2/29

Week 6 - 3/12 3/14

Week 7 - 3/19 3/21

Week 8 - 3/26 3/28

Week 9 - 4/2 4/4

Week 10 - 4/9 4/11

Week 11 - 4/16 4/18

Week 12 - 4/23 4/25

Week 13 - 4/30 5/2

Week 14 - 5/7 5/9