CPRE 185 lab 1 homework

OLD COMPUTERS

1.1 MITS Altair 8800 – Users had to flip switches on the front panel, write their own programs, and watch LEDs on the front panel to observe their commands functioning

Min ram = 256 bits, 32 bytes .256 KB

Max ram = 512,000 bits, 64,000 bytes, 64KB

CPU = Intel 8080, 2.0 MHz

1.2 MOS KIM-1

Serial teletype/teleprinter used to interact. Data could be stored on cassette recorders or paper tape reader

Min/Max ram = 8192 bits, 1024 bytes, 1Kb

CPU = MOS 6502, 1MHz

1.3 Apple 1

The Apple 1 had a keyboard input and video output

Min ram = 32,000 bits, 4,000 bytes, 4KB

Max ram = 512,000 bits, 64,000 bytes, 64KB

CPU = MOS 6502, 1.0 MHz

1.4 IBM Personal Computer (PC) 5150

Cassette and keyboard as well as video output

Min ram = 128,000 bits, 16,000 bytes, 16Kb

Max ram = 5,120,000 bits, 640,000 bytes, 640Kb

CPU = Intel 8088, 4.77 MHz

1.5 Apple Macintosh

2 serial ports for mouse and keyboard and video output

Min ram = 1,024,000 bits, 128,000 bytes, 128Kb

Max ram = 4,096,000 bits, 512,000 bytes, 512KB

CPU = Motorola 68000, 7.83MHz

BASE CONVERSION

EXPLORATION

JOYSTICK CALIBRATION

Horizontal algebraic expression: xaxis = x / 128

Vertical algebraic expression  yaxis = y / 128

It should be near 0 but stick drift and variation has the joy sticks very slightly off center. You can try to place the sticks at 0 but they are slightly off. Using more accurate sensors to detect stick position. Or could possibly set a limit on stick positioning to maybe +/- 10. If within that range then then stick could output its position at 0.