ECE4144 Homework 1

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1. Atmel 32U4
   a. 8 bits
   b. 2.7 - 5.5V
   c. Internal sys clock speed is up to 16 MHz, we use 8 MHz.
   d. 16 bits
   e. 32 general purpose registers
      i. Five GPIO pins are available. They are Port B, C, D, E, F.
   f.
      i. One
      ii. One
      iii. One
      iv. Seven
      v. Four
      vi. One with 12 channels, 10-bit ADC
      vii. One 10-bit DAC
2. Memory
   a. 8 bits
   b.
      i. Type: 32 bytes General Purpose Registers; Addresses: 0x0000 - 0x001F
      ii. Type: Standard 64 bytes I/O Registers; Addresses: 0x0020 - 0x005F
          Type: External 160 bytes I/O Registers; Addresses: 0x0060 - 0x00FF
      iii. Type: Flash Program Memory; Addresses: 0x0000 - 0x7FFF
      iv. Type: 2.5KB internal SRAM; Addresses: 0x0100 - 0x0AFF
   c.

Address	Memory Type
0x0000 - 0x001F	General Purpose Registers
0x0020 - 0x005F	Standard I/O Registers
0x0060 - 0x00FF	External I/O Registers
0x0000 - 0x7FFF	Flash Program Memory (User Code)
0x0100 - 0x0AFF	Internal SRAM