Lab 9
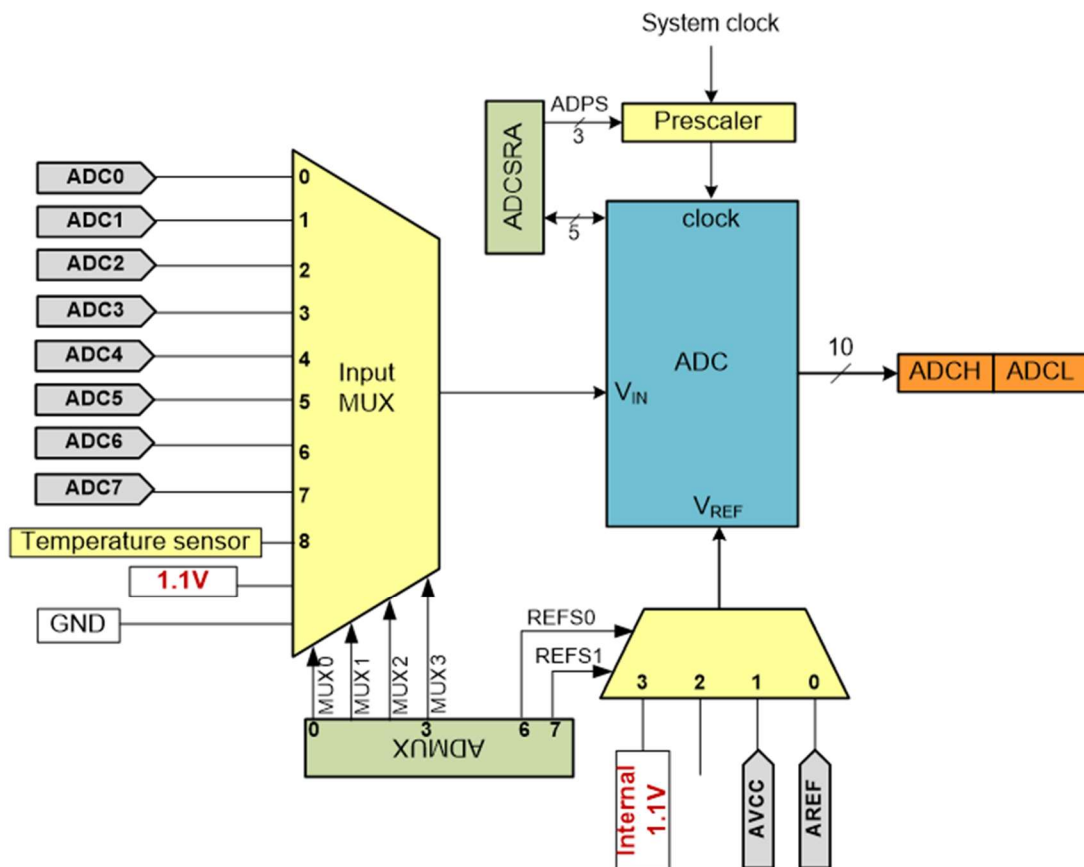
1- Connect a Voltage Generator to one of the Analog Pins, then read the input voltage, if Voltage greater than 2.5V then Turn on Built in LED else turn it off.

ADEN	ADSC	ADATE	ADIF	ADIE	ADPS2	ADPS1	ADPS0

ADEN- Bit7 ADC Enable

This bit enables or disables the ADC. Writing this bit to one will enable and writing this bit to zero will disable the ADC even while a conversion is in progress.

ADSC- Bit6 ADC Start Conversion

To start each coversion you have to write this bit to one.

ADATE- Bit5 ADC Auto Trigger Enable

Auto Triggering of the ADC is enabled when you write this bit to one.

ADIF- Bit4 ADC Interrupt Flag

This bit is set when an ADC conversion completes and the Data Registers are updated

ADIE- Bit3 ADC Interrupt Enable

Writing this bit to one enables the ADC Conversion Complete Interrupt.

ADPS2:0- Bit2:0 ADC Prescaler Select Bits

These bits determine the division factor between the XTAL frequency and the input clock to the ADC.