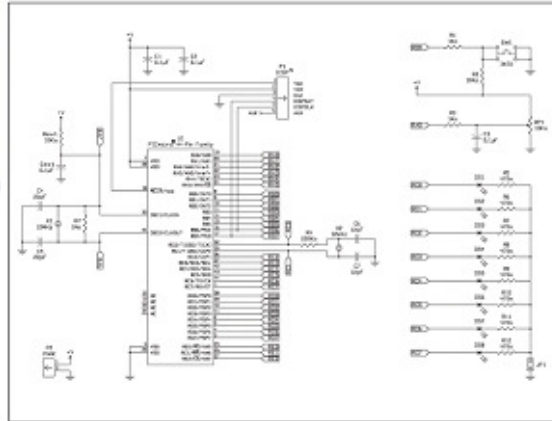
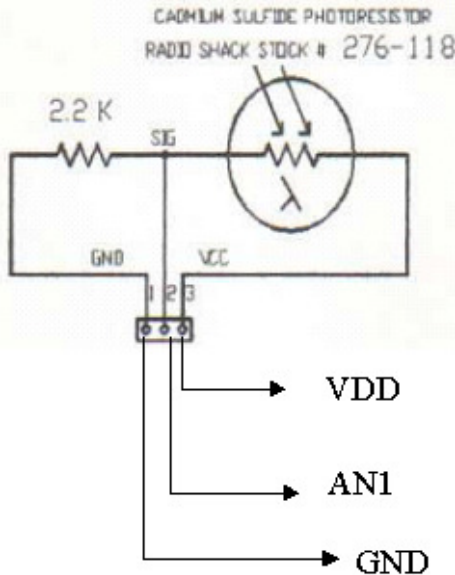


The following adcphoto.mco is offered to be used .

Program#1 Hooking up the photocell sensor and recording light/dark levels

Modify program #1 to read AN1 versus AN0 and have the following circuit constructed . Have instructor verify circuit before power up. Instructor Signoff _____



The photocell varies it's internal resistance based upon available light. As a result you should get a digital output for both normal and dark conditions observing the LEDs and covering and uncovering the photo sensor. Use provided program and make sure the following line is uncomment. The LEDs should output the contents of the photocell output

```
//part 1 comment out when done
PORTD = ADRESH;
```

Record the two levels. You will need them for the next program.

Normal_____

Dark_____

Program #3 Implemented a Light Controlled LED

Implement a program, modifying what has been done so far, that uses the photocell dark condition to turn on the most significant LED and then turn off automatically the same LED when light returns to normal. Enter your values for light and dark as measured

```
#define light 0x40
#define dark 0x80
```

Make sure the following lines are comment and uncommented as shown

```
//part 1 comment out when done
// PORTD = ADRESH;
```

```
//make decision part 2 comment out above statement and uncomment out  
if (ADCValue <= dark) RD7 =1;  
else RD7 =0;
```

Demo to instructor. Instructor Signoff _____.

Program 3 Flowchart

