Refer to PIcaxe manual 2 and check up the following commands:

Readadc

If … then

Let

Goto

For … next

Pwmout

Pause

debug

Use the above commands (or even more) and write a programme to perform:

1. Ramp up and down an LED
2. Ramp up and down three LEDs of different colours
3. Ramp up and down an LED at different rates according to the ambient level of light (you may need to introduce a variable and go from there)

What is shown below may be part of your programme:

 for b0=0 to 255 step 10

 pwmout b.2, 64, b0

 debug b0

 next b0

 pause 100

Do your best and see how far you can go within a session.

When simulating your programme, those with Mac may need to join those with Window laptops as the MacAXEpad does not have a simulator.