



# PyroElectro.com - PyroEDU

*Introduction To Digital Electronics – Lesson 10: Design An LED Chaser*

## HOMEWORK

The following homework questions are meant to go with the online lesson found here:  
[http://www.pyroelectro.com/edu/digital/led\\_chaser/](http://www.pyroelectro.com/edu/digital/led_chaser/)

### HOMEWORK QUESTION 1

What role does the shift register play in this LED chaser design?

### HOMEWORK QUESTION 2

What tells the state machine to trigger to state0? state1?

### HOMEWORK QUESTION 3

How could we make the LED chaser run faster? slower?

### HOMEWORK QUESTION 4

What additional circuitry would be required to make the LED chaser have 8 LEDs instead of only 4 LEDs?

### ADDITIONAL INFORMATION

To get feedback on your homework or to ask additional questions related to this lesson, please post your homework answers or your questions in the online forums at:  
<http://www.pyroelectro.com/forums/viewforum.php?f=21>