

PICAXE BASICS



FOR NEXT LOOP / BLINK LED

Make a particular number of Blinking Loops using Variable "b1".

Syntax:

```
FOR variable = start TO end STEP increment  
(do something)  
NEXT variable
```

Code

```
TheLoop:  
for b1 = 10 to 250 step 20  
high 4  
pause b1  
low 4  
pause 200  
next b1  
goto TheLoop
```

Explained

The **For Next Loop** gives **Variable b1** a value of 10 through to 250 in steps of 20, each time through the 'for next loop'

high 4 turns on pin4, an LED

pause b1 keeps the LED On for the value of Variable b1

low 4 turns pin4 off

pause 200 keeps pin 4 turned Off for 200 milliseconds (1000ths)

next b1 go to beginning of For Next Loop and increase current value of b1 by step 20. When **b1** reaches 250 it exits the **For Next Loop**

Notes

The For Next Loop allows a more **efficient** way of coding. Rather than writing long repetitive lists of High/Pause/Low/Pause, you can create the same outcome using a much shorter For Next Loop.

Tinker

1 Change the steps, try "for b1 = 250 to 10 step -20 "

2 Change the range of b1 variable

3 Can you make the LED Blink OFF for the same Length it is ON?

Circuit



