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'-----Title-----
' File.....16F877A_railroad.pbp
' Started....6/1/05
' Microcontroller used:  Microchip Technology 16F877A
'                          microchip.com
' PicBasic Pro Code,  micro-Engineering Labs, Inc.
'                          melabs.com

'-----Program Description-----
' Two LED's flash like railroad crossing.

'-----Schematic-----
' See schematic at:
' http://www.cornerstonerobotics.org/schematics/pic16f877a\_railroad.pdf

'-----Related Lesson-----
' railroad.pbp (the 16F88 program) is used in the lesson
' INTRODUCTION TO PROGRAMMING 1 at:
' http://www.cornerstonerobotics.org/curriculum/lessons\_year2/eri111\_pic\_introduction\_programming1.pdf

'-----Revision History-----
' 11/17/08  Update to PIC16F88 and
' add 16F88 oscillator initialization
' 1/1/09   Change PIC16F88 to PIC16F877A

'-----Initialization-----

        TRISB = %11111100      ' Sets up pins RB0 & RB1 of PORTB as outputs
                                ' and pins RB2-RB7 of PORTB as inputs

'-----Main Code-----

loop:

        HIGH 0      ' Makes pin RB0 output HIGH(5 volts)

        LOW 1       ' Makes pin RB1 output LOW(0 volts)

        PAUSE 500   ' Pause 500 milliseconds (1/2 seconds) with LED on

        LOW 0       ' Makes pin RB0 output LOW 0 volts)

        HIGH 1      ' Makes pin RB1 output High(5 volts)

        PAUSE 500   ' Pause 500 milliseconds (1/2 seconds)with LED on

        GOTO loop   ' Jump to loop label and start all over again

        END
```