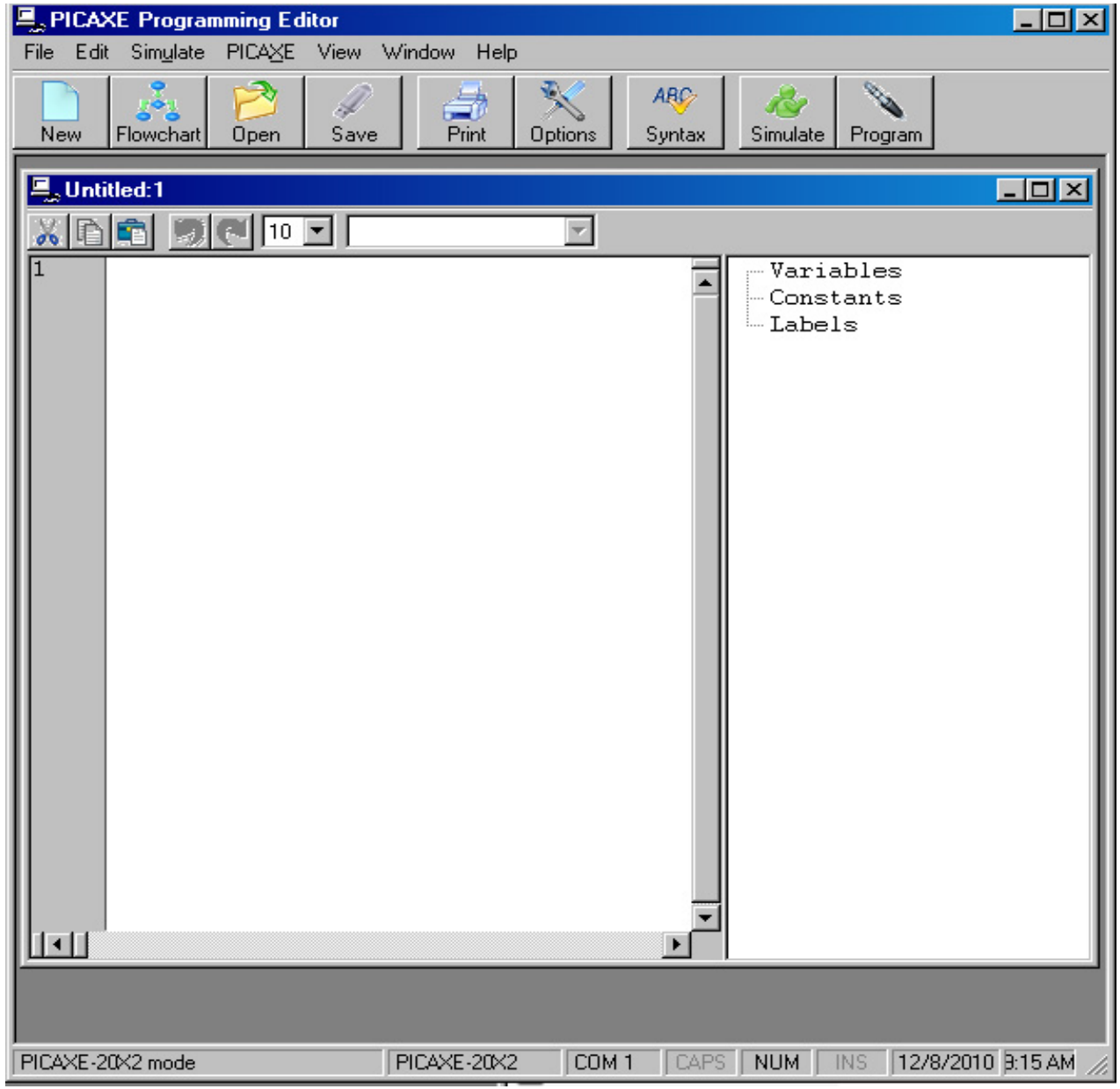
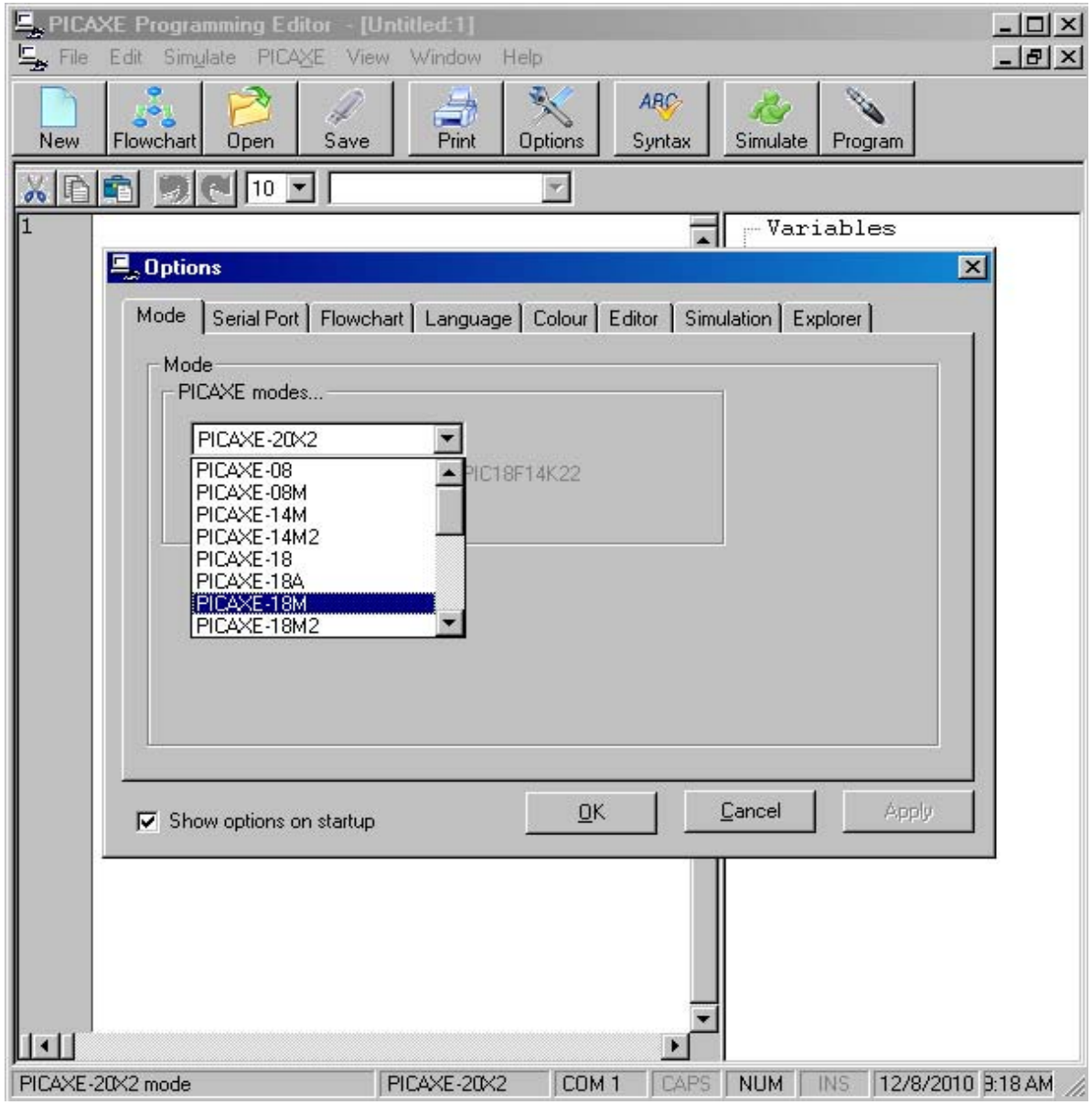
PICAXE Programming Editor

Programming Using Flow Charts

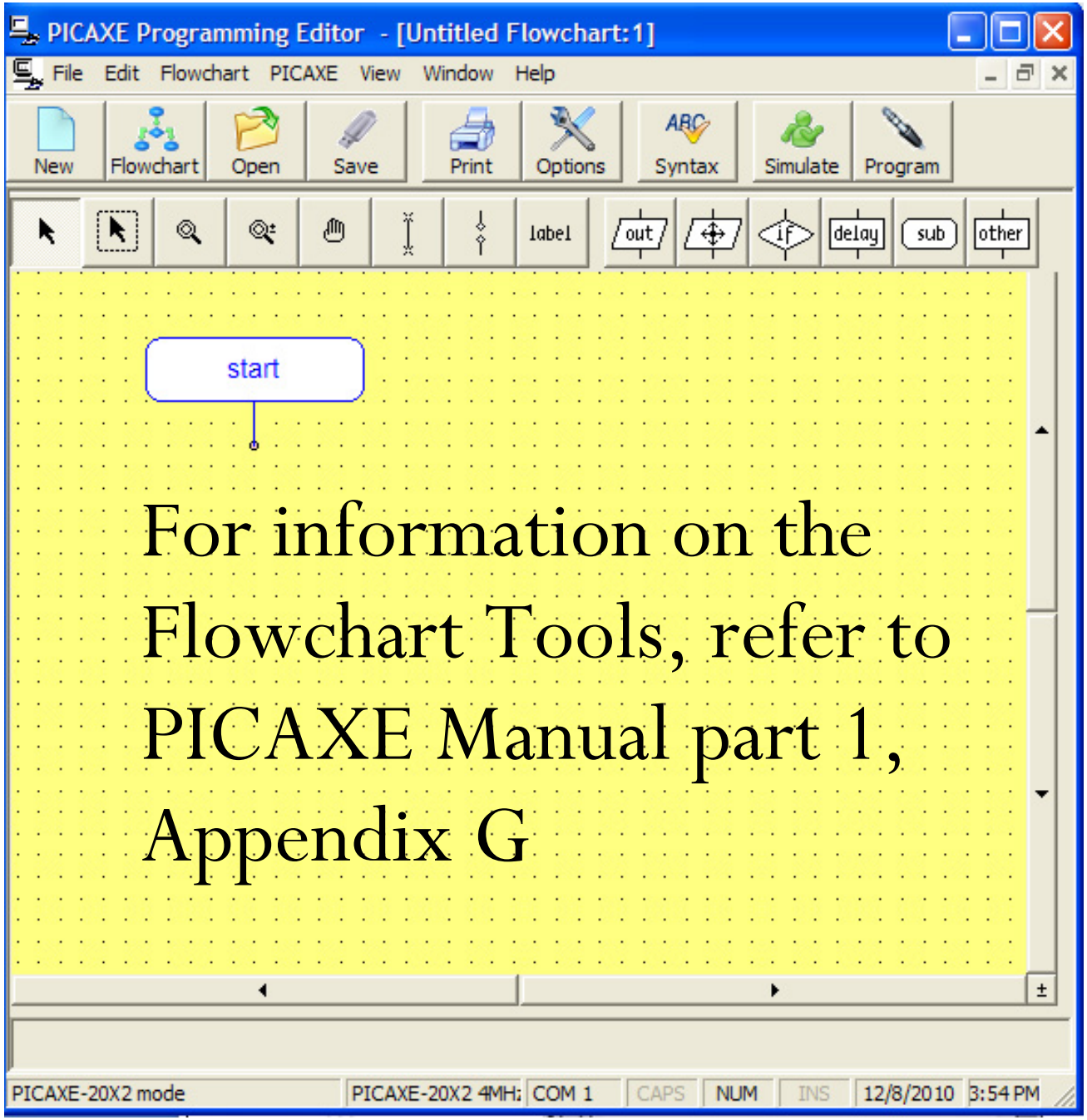
The Work-space



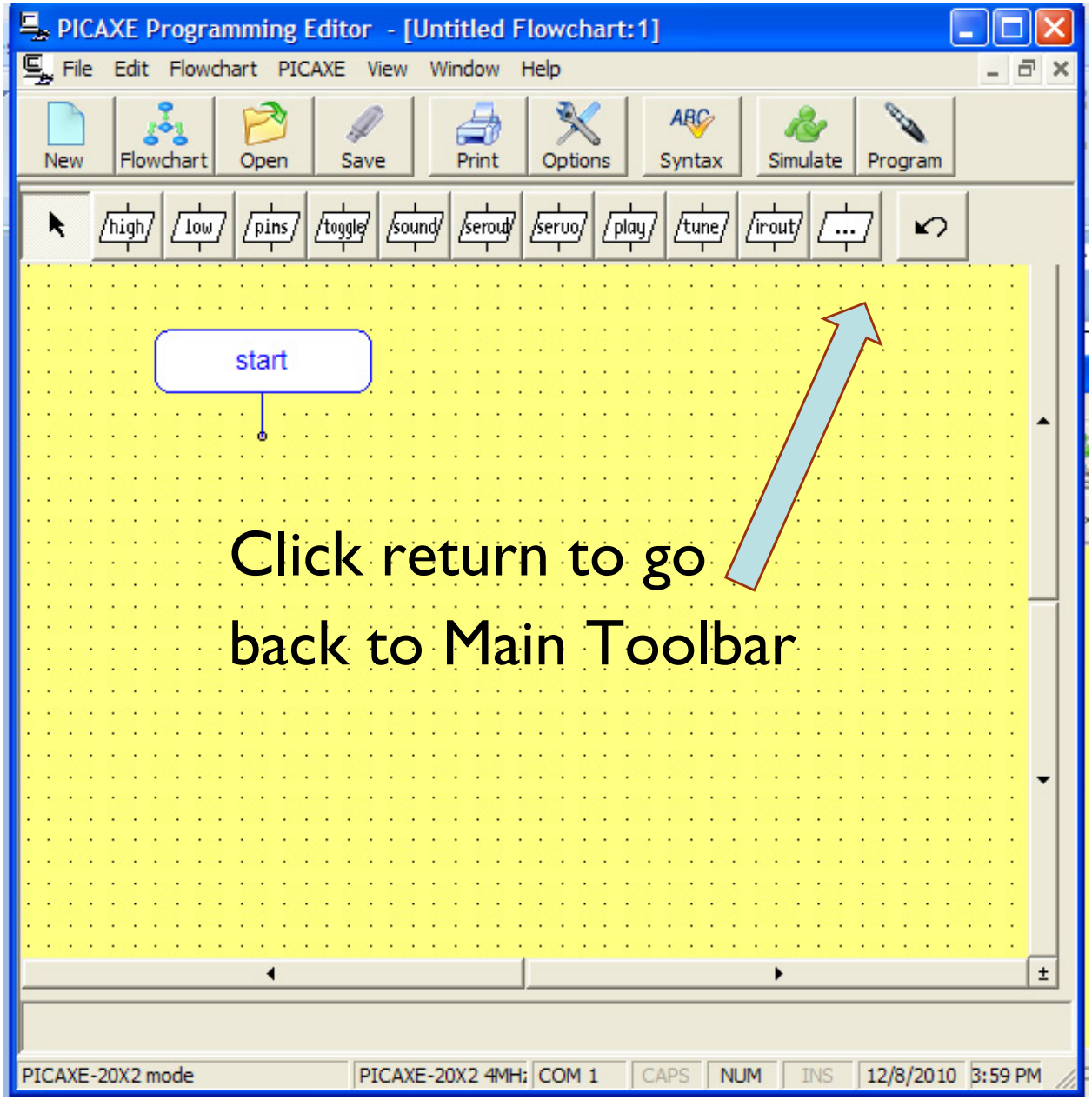
Select PICAXE Version



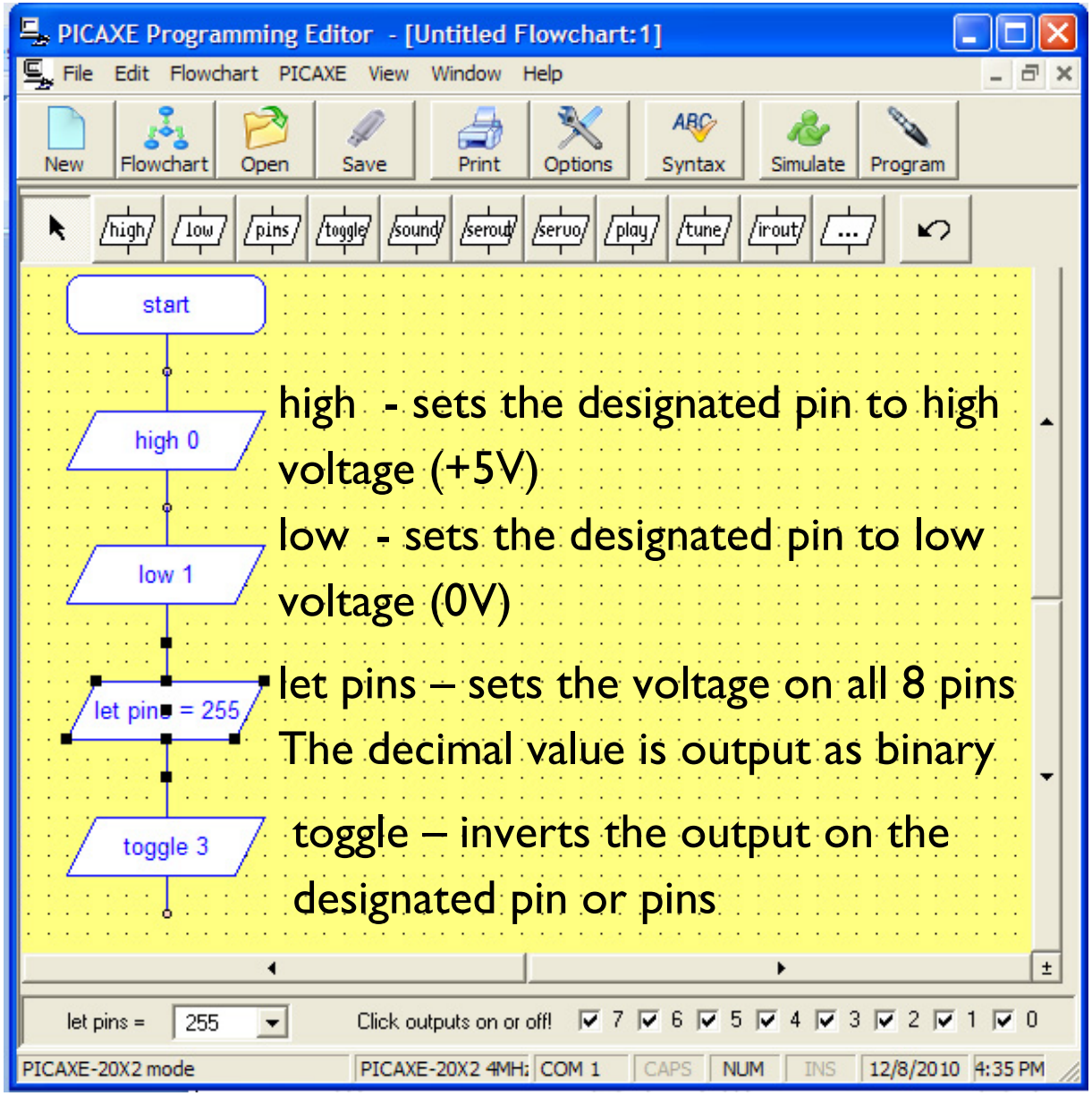
New Flow-chart



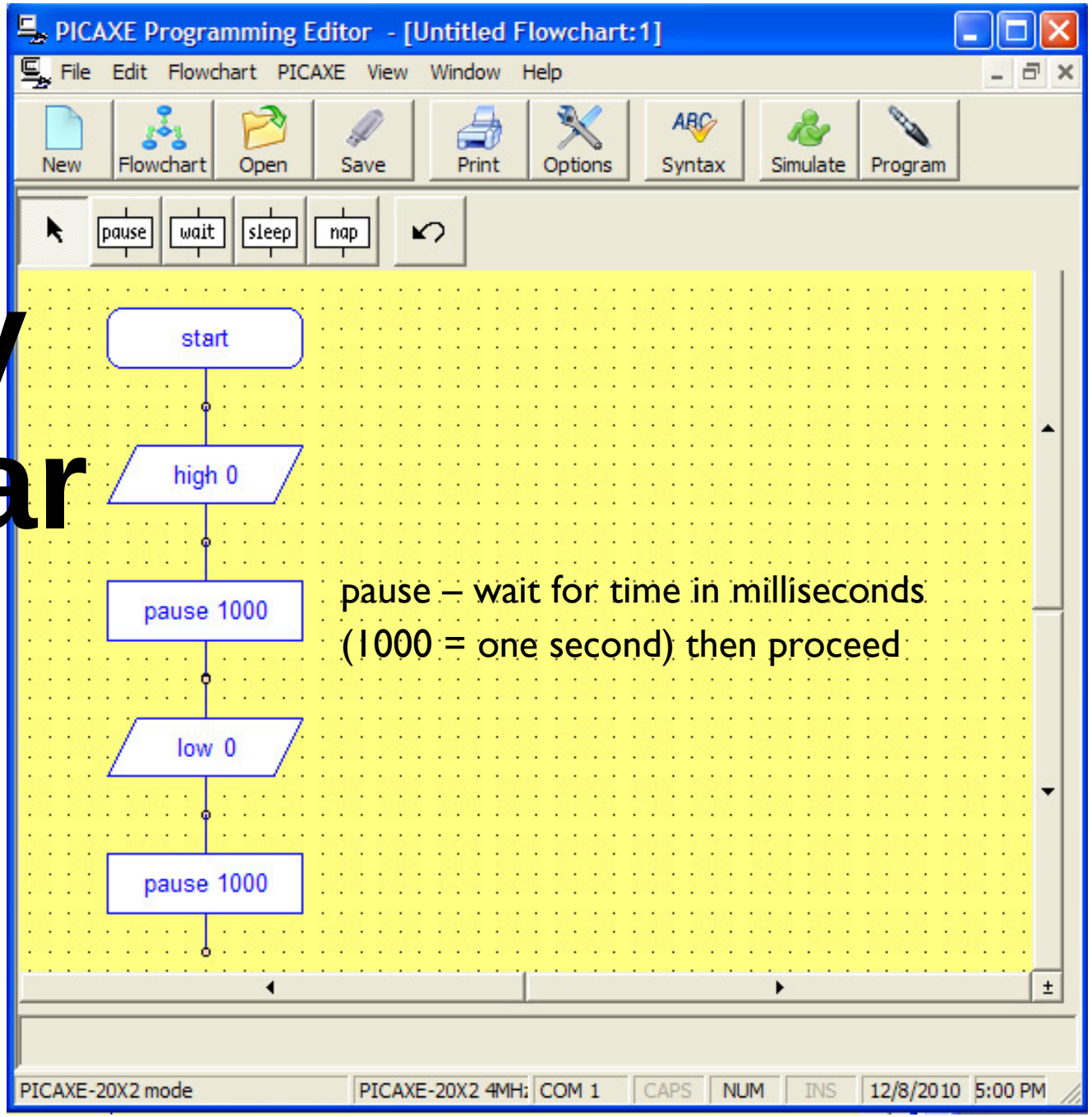
Output Toolbar



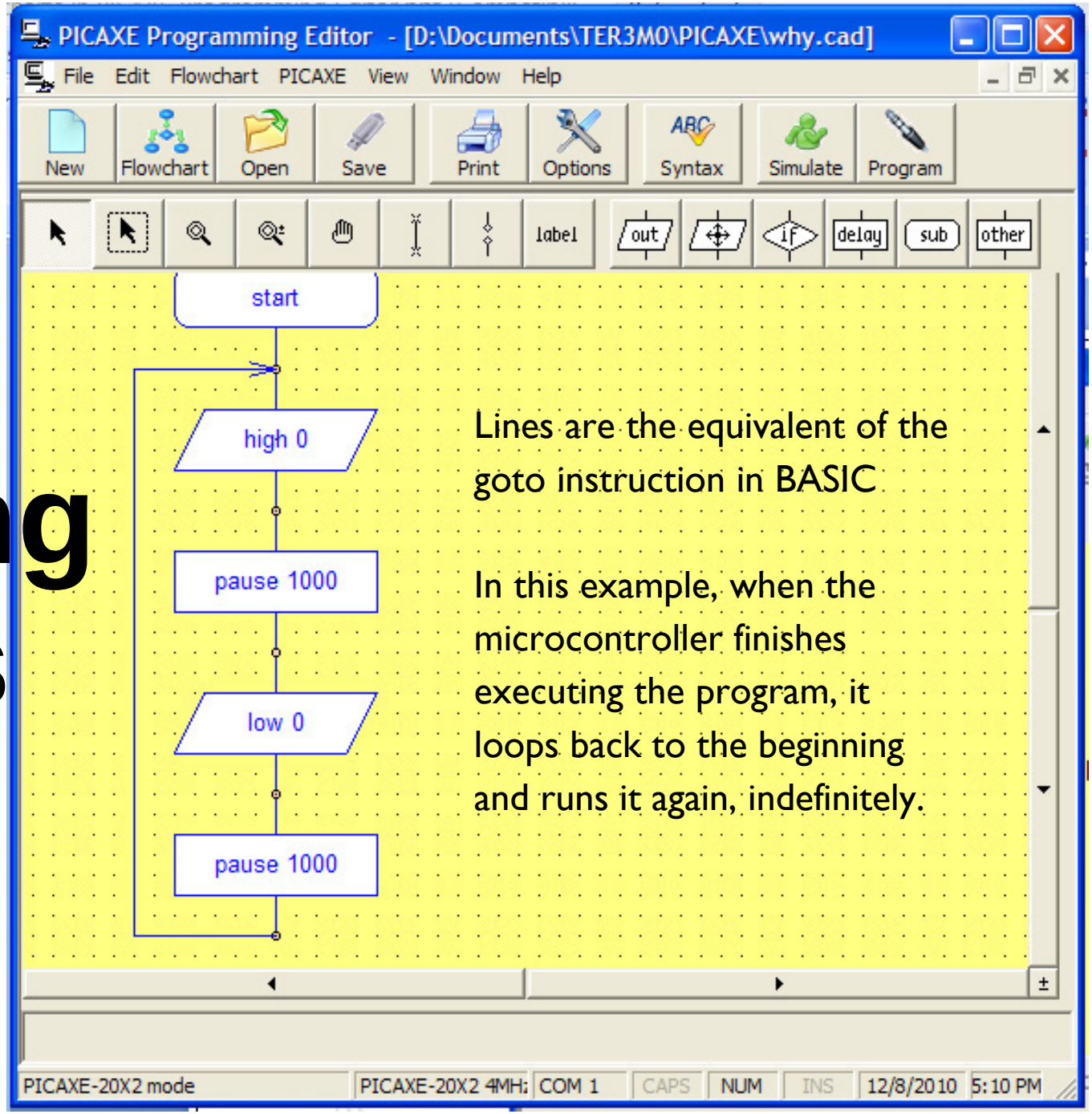
Outputs


PICAXE Programming Editor - [Untitled Flowchart:1]
File Edit Flowchart PICAXE View Window Help
New Flowchart Open Save Print Options Syntax Simulate Program
high low pins toggle sound serout seruo play tune irout ...
start
high 0
low 1
let pins = 255
toggle 3
high - sets the designated pin to high voltage (+5V)
low - sets the designated pin to low voltage (0V)
let pins – sets the voltage on all 8 pins
The decimal value is output as binary
toggle – inverts the output on the designated pin or pins
let pins = 255
Click outputs on or off! 7 6 5 4 3 2 1 0
PICAXE-20X2 mode
PICAXE-20X2 4MH: COM 1
CAPS NUM INS
12/8/2010 4:35 PM

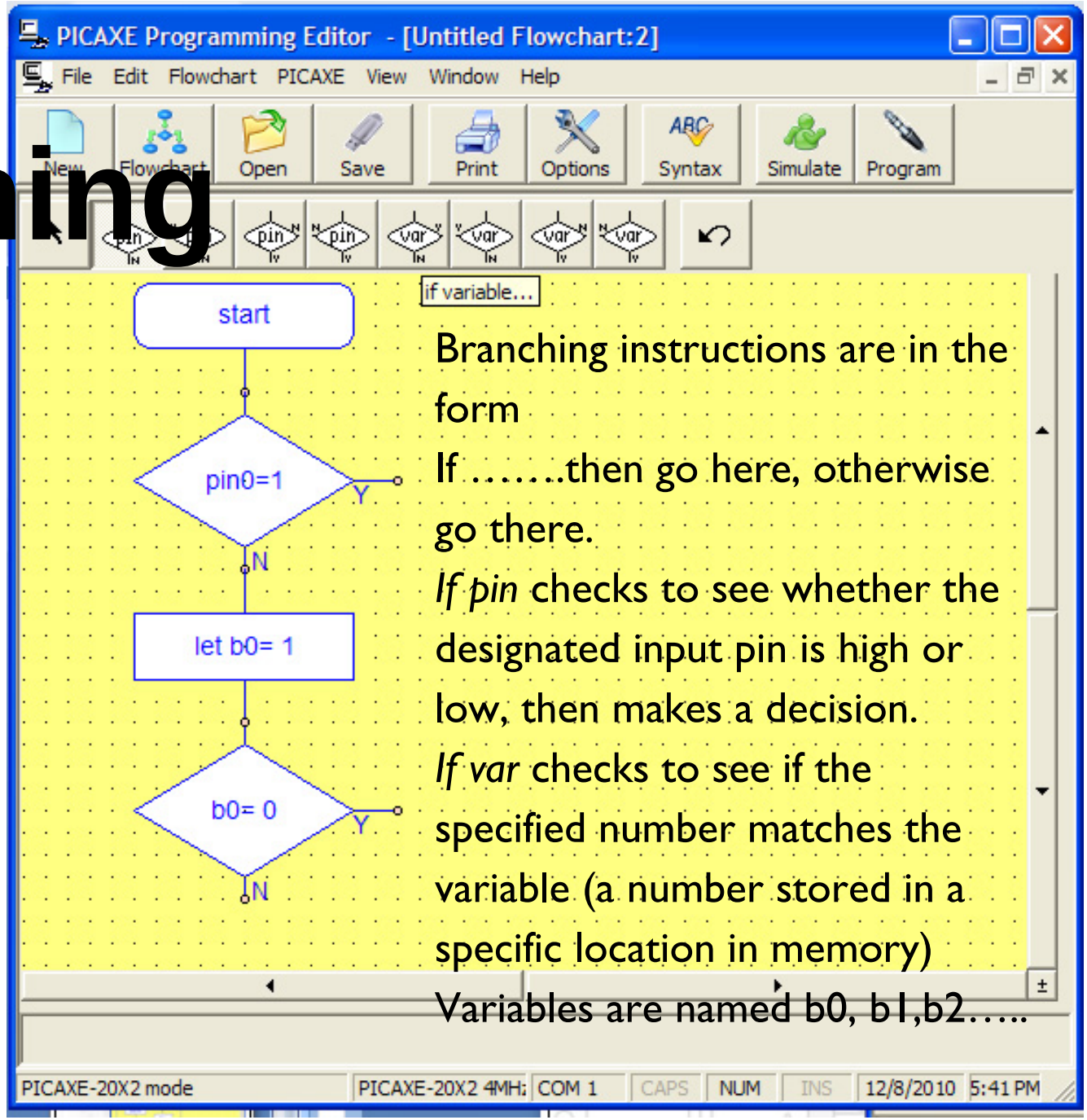
Delay Toolbar



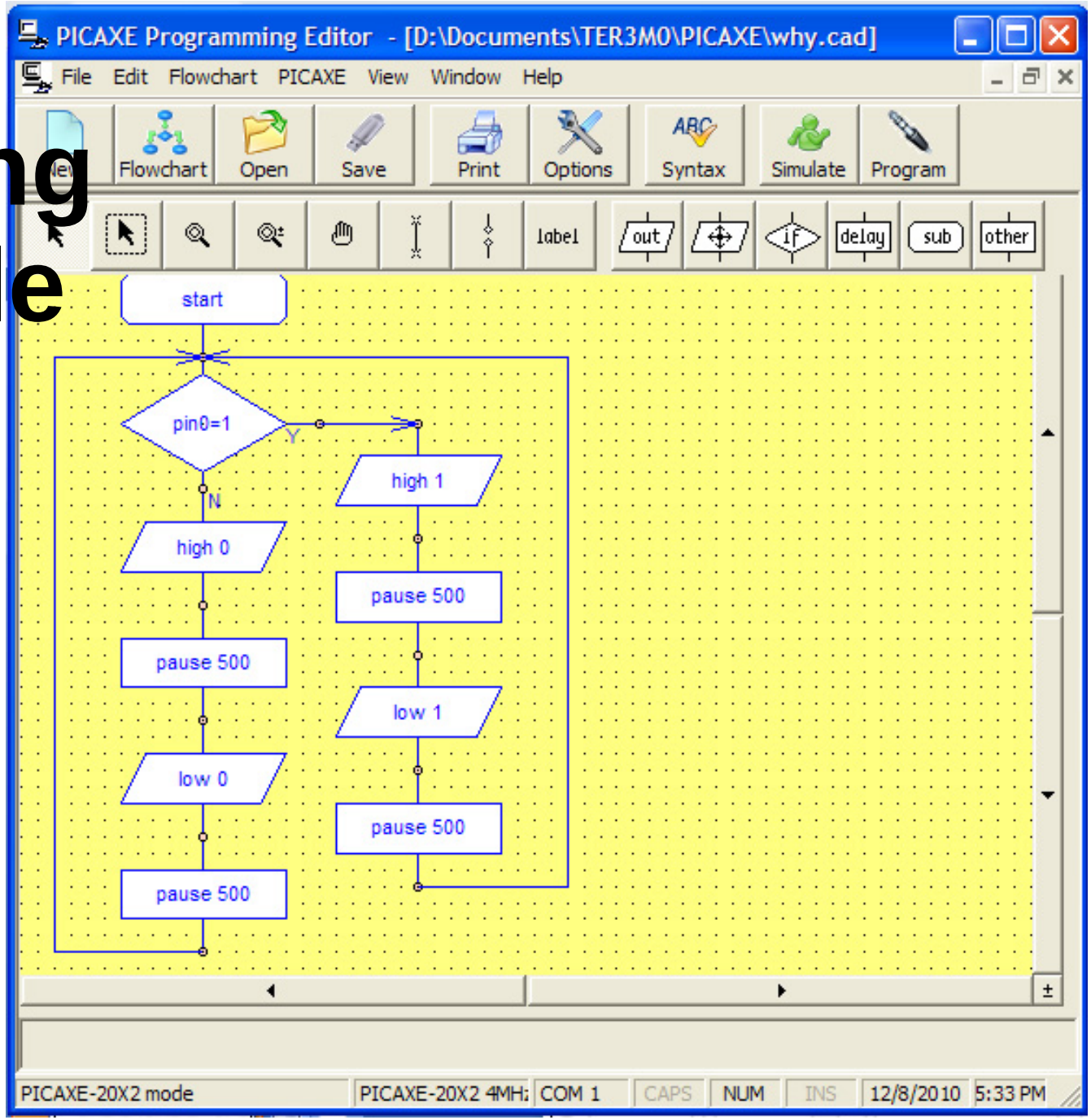
Drawing Lines



Branching


PICAXE Programming Editor - [Untitled Flowchart:2]
File Edit Flowchart PICAXE View Window Help
New Flowchart Open Save Print Options Syntax Simulate Program
if variable...
start
pin0=1
Y
N
let b0= 1
b0= 0
Y
N
Branching instructions are in the form
If …….then go here, otherwise go there.
If pin checks to see whether the designated input pin is high or low, then makes a decision.
If var checks to see if the specified number matches the variable (a number stored in a specific location in memory)
Variables are named b0, b1,b2…..
PICAXE-20X2 mode
PICAXE-20X2 4MH:
COM 1
CAPS
NUM
INS
12/8/2010
5:41 PM

Branching Example



1. write a program that makes B.0 high.

2. write a program that makes four LEDs flash on and off at the same time

3. write a program that makes all four LEDs turn on and off one at a time at intervals of .25 sec.

4. rewrite the first three programs using the “pins instruction”

5. Write a program that causes LED 0 to flash when input C.0 is high and LED 1 to turn on when it is low.

6. Add more code to program 5 to make LED 2 flash when input C.1 is high and LED 3 turn on when it is low.

7. Write a program to make 8 LEDs turn on one at a time in a sequence. Make the pattern repeat continuously.

8. Modify program 7 so that the LEDs follow one pattern when C.0 is high, and a different pattern when C.0 is low.