A demonstration program for GCBASIC.

TThe first lesson shows how to turn on a LED and discusses the I/O pin structures. This is the PIC microcontroller version of "Hello World".

The LEDs are connected to PORTD from RD0 to RD7 in common cathode configuration.

When one of these I/O pins drives high, the LED turns on. The I/O pins can be configured for input or output.

On start-up, the default is input. The TRIS Special Function Register bits use the convention of '0' for output and '1' for input.

Digital output is targeted, so these must be configured using the DIR command.

The PORTD register acts as buffer to the output value on the port pin in output configuration.

After setting PORTD as output port in the program, assigning logic '1' to the LATD0 bit of the LATD register turns LED on and vice versa.

The compiler sorts ouf the oscillator for you by setting to the fastest support internal frequency. This can be changed - see later demos. The compiler also set ports to be digital - the compiler does a lot for you.

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@license GPL
@version 1.00
@date 2024-08-17

```
********
*/
#chip 16F887
#option explicit
/*
       -----PORTA-----
       -7---6---5---4---3---2---1---0---
  Bit#:
       -----ANO--
  IO:
        -----
  IO:
       -----PORTB-----
       -7---6---5---4---3---2---1---0---
  Bit#:
       -----SW---
  IO:
  IO:
       _____
       -----PORTC-----
  Bit#:
       -7---6---5---4---3---2---1---0---
  IO:
       ______
  IO:
        -----
       -----PORTD-----
  Bit#:
       -7---6---5---4---3---2---1---0---
      -DS8-DS7-DS6-DS5-DS4-DS3-DS2-DS1--
  IO:
  IO:
*/
Dir PortD.0 Out
PortD.0 = 1
```

End
