Ports and Hardware Registers

All of the PICmicro registers, including the ports, can be accessed just like any other byte-sized variable. This means that they can be read from, written to or used in equations directly:

```
    PORTA = %01010101  ' Write value to PORTA

    VAR1 = WRD * PORTA          ' Multiply variable WRD with the contents of PORTA
```

The compiler can also combine16-bit registers such as TMR1 into a **WORD** type variable. Which makes loading and reading these registers simple: -

```
    DIM TIMER1 AS TMR1L.WORD       ' Combine TMR1L, and TMR1H into WORD variable TIMER1

    TIMER1 = 12345                          ' Load TMR1 with value 12345
or
    WRD1 = TIMER1                  ' Load WRD1 with contents of TMR1
```

The **.WORD** extension links registers TMR1L, and TMR1H, (which are assigned in the .LBP file associated with relevant PICmicro used).
Any hardware register that can hold a 16-bit result can be assigned as a **WORD** type variable: -

```
    DIM TIMER3 AS TMR3L.WORD           ' Combine TMR3L, and TMR3H into WORD variable TIMER3
    DIM AD_RESULT AS ADRES.WORD        ' Combine ADRESL, and ADRESH into WORD variable AD_RESULT
    DIM MUL_PROD AS PRODL.WORD         ' Combine PRODL, and PRODH into WORD variable MUL_PROD
```