Lab 2:

Pre-Lab:

1. PortA => 12 Bidirectional Pins
2. PortB => 16 Bidirectional Pins
3. PortC => 8 Bidirectional Pins
4. PortD => 16 Bidirectional Pins
5. PortE => 10 Bidirectional Pins
6. PortF => 11 Bidirectional Pins
7. PortG => 10 Bidirectional Pins and 2 Input Pins

Registers are the quickest memory device. The function of a control register specifically is to control the pin settings. Registers configure the I/O pins for the desired application.

The three port registers are the TRIS, PORT, and LAT registers.

The TRIS (tri-state) registers determine wheteher a discrete PORT I/O pin is an input or an output. If you set a TRIS bit to ‘1’ then the pin is an input and if you set it to ‘0’ it is an output. By default all I/O port pins are set as inputs.

The PORT registers allow your I/O pins to be ‘read.’ When you write to a port register you essentially are writing to your PORT data latch or LAT register.

LAT registers (PORT data latch) contain date that you write to your I/O pins. It reads the values from your PORT registers.