ECE 375 PRELAB 2

Lab Time: Wednesday 12-2

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QUESTIONS

1. Suppose you want to configure Port B so that all 8 of its pins are configured as outputs. Which I/O register is used to make this configuration, and what 8-bit binary value must be written to configure all 8 pins as outputs?

    The DDRB register is used to configure Port B. The binary value to set Port B as output is b11111111.

2. Suppose all 8 of Port D's pins have been configured as inputs. Which I/O register must be used to read the current state of Port D's pins?

    To read from Port D we would look at the PIND register.

3. Does the function of a PORTx register differ depending on the setting of its corresponding DDRx register? If so, explain any differences.

    Yes, depending on if the DDRx is set to a 1 or 0 dictates whether the PORTx will store values or write values, respectively. If DDRx is a 1, then the port will store the value being outputted. If DDRx is 0, then PORTx is used to write values to other ports.

REFERENCE

Chapter 5. ECE 375 Textbook