

**EE 308 – Homework 3**  
**Due 2-26-07**

1. For the homework problems which follow assume you have included the files hcs12.h and Dbug12.h in your C program. Thus, you can refer to PORTB when you want to access a byte at address 0x0001. Where it is asked for "some code", just write that part of a C program which will do the task. Where it is asked for "a program" write a complete program, include the #include "hcs12.h" and #include "Dbug12.h" lines, the declaration of variables, the main() function, etc.
  
2. Write some C code which will make bits 5, 3, 1 and 0 of PORTB output and the other bits of PORTB input.
  
3. Write some C code which will set bits 7 and 3 of the eight-bit register at address 0x0075 while leaving the other bits unchanged.
  
4. Write some C code which will clear bits 6 and 4 of the eight-bit register at address 0x0076 while leaving the other bits unchanged.
  
5. Write a C program which makes PORTA an input, PORTB an output. Then write an infinite loop which reads PORTA, and writes an 0xAA to PORTB if Bit 4 of PORTA is high, and write an 0x33 to PORTB if Bit 4 of PORTA is low. It is required to print to the screen the value of the PORTB too.