- 4. (1 mark) What is the name of the subroutine that is executed when an interrupt occurs?
- 5. (1 mark) The **eret** instruction is used to return from the interrupt "subroutine". What must first be done to ensure that the NIOS II processor returns to the proper instruction?

Name: \_\_\_\_\_ Student #: \_\_\_\_\_ Signature: \_\_\_\_\_

6. (1 mark) What does the term **interrupt latency** refer to?

7. (4 marks) Using a conditional branch instruction, write the assembly code to repeat a block of code 5 times. The code needs to initially store a value in register r6 and then loop through decrementing that value and repeating the loop until the value in r6 is zero (include comments):

8. (4 marks) Write assembly language code to accomplish each of the following *separate* tasks described in C-Language. Maximum 3 lines of code for each part.

unsigned char mycode [4] = {3,2,0,1};

d = d \* 0.75; // assume r7 is the value of unsigned integer d

Do not use the multiply or divide instruction in this answer. No loops allowed.