ECE 375 Lab 3

Introduction to Debugging

Lab Time: Thursday 4-6

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TA Signature

1 Additional Questions

1. What is the initial value of DDRB?
   The initial value of DDRB is going to be 0x00

2. What is the initial value of PORTB? **The initial value for PORTB will be 0x00**

3. Based on the initial values of DDRB and PORTB, what is Port B's default I/O configuration?
   Will be configured as an input and or a tristate buffer

4. What 16-bit address (in hexadecimal) is the stack pointer initialized to?
   The value that the stack pointer is initialized to will be 0x10FF

5. What are the contents of register r0 after it is initialized?
   The current contents of register 0 is going to be 0xFF

6. How many times did the code inside of LOOP end up running?
   The code inside of our loop ended up going through 5 times

7. Which instruction would you modify if you wanted to change the number of times that the loop runs?
   The instruction you would want to modify would be using the command ldi and for example would write ldi i, $04 changing our loop to a value of 4.

8. What are the contents of register r1 after it is initialized?
   The current contents of register 1 is 0xAA

9. What are the contents of register r2 after it is initialized?
   The current contents of register 2 is 0x0F

10. What are the contents of register r3 after it is initialized?
    The current contents of register 3 is 0x0F

11. What is the value of the stack pointer when the program execution is inside the FUNCTION subroutine?
    The new value of our stack pointer is going to be 0x10FD

12. What is the final result of FUNCTION? (What are the hexadecimal contents of memory locations $0105:$0104)?
    The final result of our FUNCTION is going to be at location $0105 is 0x0E and at $0104 is going to be 0xBA