Lab 3: Study Questions

- 1. What is the initial value of DDRB? 0x00
- 2. What is the initial value of PORTB? 0x00
- 3. Based on the initial values of DDRB and PORTB, what is Port B's default I/O configuration? Port B'S default configuration = Input
- 4. What 16-bit address (in hexadecimal) is the stack pointer initialized to? 0x10FF
- 5. What are the contents of register r0 after it is initialized? 0xFF
- 6. How many times did the code inside of LOOP end up running? 4
- 7. Which instruction would you modify if you wanted to change the number of times that the loop runs? LDI \$04 should be changed to LDI \$0n, n = number of times you want the loop to run.
- 8. What are the contents of register r1 after it is initialized? 0xAA
- 9. What are the contents of register r2 after it is initialized? 0x0F
- 10. What are the contents of register r3 after it is initialized? 0x0F
- 11. What is the value of the stack pointer when the program execution is inside the FUNCTION subroutine? 0x10FD
- 12. What is the final result of FUNCTION? (What are the hexadecimal contents of memory locations \$0105:\$0104)? 0xBA0E, \$0105 = 0xBA, \$0104 = 0E