

1 Source code is supposed to be a mono-spaced font and can go down to size 8.

2 The naming convention for source code is FirstName_LastName_sourcecode.asm

For two contributors: First name_Last name_and_First name_Last
name_Lab4_Report.pdf

3 The main difference between .equ and .def is that .equ can not be redefined.

4

- a. 00001000
- b. 00000200
- c. 00000001
- d. 00000001
- e. 01000010

5

ADIW: Adds an immediate value (0-63) to a register pair and places the result in the register pair.

BCLR: Clears a single flag in SREG

BRCC: Tests the carry flag and jumps to target location if C is cleared.

BRGE: Tests the signed flag and jumps to target if S is cleared EX cp r11 r12 brge
greateq //jumps if $r11 \geq r12$

COM: Performs one's complement

EOR: Performs a logical either or on registers and places in first register.

LSL: Performs a logical shift left. Bit 0 is cleared and bit 7 is loaded into the c flag.

LSR: Performs a logical shift right. Bit 7 is cleared and bit 0 is loaded into the c flag.

NEG: Performs two's complement on register.

OR: Performs logical OR on two registers and places result in destination.

ORI: Performs logical OR on register and a constant places result in register

ROL: Rotate left through carry. Rotates the Carry bit into the 0 bit and the 7 bit into the carry flag. All other bits shifted to the left.

ROR Rotate right through carry. Rotates the carry bit into the 7 bit and the 7 bit into the carry flag. All other bits shifted to the right.

SBC: Subtracts two registers and subtracts with the C flag and places the result in the destination register.

SBIW: Subtracts an immediate value from a register pair and places the result in the register pair. Used for pointers.

SUB: Subtracts two registers and places the result in the destination register.