

LAB 2

MIPS Instruction

OBJECTIVE: To get acquainted with basic MIPS instructions.

Convert these MIPS instructions or pseudo-instructions to MIPS MARS hexadecimal machine code. Answers expressed in binary or decimal or octal will be wrong. Watch out for psuedo-code which may use more than one MIPS instruction to implement.

ADDRESS	Instruction	Hexadecimal Machine Code
0x0040 0100	sub \$t0, \$s3, \$a0	0x02644022
AGAIN: 0x00400104	addi \$s2, \$s1, -5	0x22320005
0x0040 0108	beq \$t5, \$s0, 0xF842	0x11B0F842
0x0040 010c	jal 0x1041001c	0x0C41001C
0x0040 0110	xor \$t2, \$s5, \$zero	0x02A05026
0x0040 0114	lw \$t0, 4(\$t1)	0x8D280004
0x0040 0118	sub \$t3, \$t5, \$a0	0x01A45822
NEXT: 0x0040 011c	LW, \$t5, 0x0000, \$t4	0x8D8D0000
0x0040 0120	sltu \$a2,\$s1,\$s0	0x0230302B
END: 0x0040 0124	BEQ, \$t8, \$zero,0xFFFF8	0x1300FFF8

DELIVERABLES:

Submit your Lab2 Assignment to Beacboard by due date. Note that the filename should be in this format Lab2_<student_id>_<lastname>

Notes:

- This is an NOT a group assignment
- Keep these lab files as they will be needed for future labs!

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