

CS51 – Homework #8

1. Suppose a procedure needed to save the \$s0 and \$s1 registers on the stack before executing its code and also needed to restore those registers after executing its code. In the following table, show what the MIPS code would look like in both cases:

Before	After
<pre> addi \$sp, \$sp, -9 sw \$s1, 4(\$sp) sw \$s0, 0(\$sp) </pre>	<pre> lw \$s0, 0(\$sp) lw \$s1, 4(\$sp) addi \$sp, \$sp, 8 </pre>

2. What is the MIPS instruction that will call a procedure named **stuff**?

 j stuff

3. Suppose the following instruction has three instructions after it before the label Exit: appears:

bne \$t1, \$s4, Exit

Complete the following table based on the information given above:

op	rs	rt	const/addr
bne	\$t1	\$s4	Exit
5	9	20	3
000101	01001	10100	0000 0000 0000 0011
Hex:	1534003		