CSULB CECS225 MIPS 1

Type your answers

Convert the following MIPS assembly code into machine language. Show details, show binary and hexadecimal values

MIPS Assembly	Binary	Hex
add \$t0, \$s0, \$s1		
lw \$t0, 0x20(\$t7)		
addi \$s0, \$0, −10		
addi \$s0, \$0, 73		
sw \$t1, -7(\$t2)		
sub \$t1, \$s7, \$s2		

Convert the following program from machine language into MIPS assembly language.

The numbers on the left are the instruction addresses in memory, and the numbers on the right give the instruction at that address. Then reverse engineer a high-level program that would compile into this assembly language routine and write it. Explain in words what the program does. \$a0 is the input, and it initially contains a positive number, n. \$v0 is the output.

Address	Instruction	MIPS
0x00400000	0x20080000	
0x00400004	0x20090001	
0x00400008	0x0089502A	
0x0040000C	0x15400003	
0x00400010	0x01094020	
0x00400014	0x21290002	
0x00400018	0x08100002	
0x0040001C	0x01001020	
0x00400020	0x03E00008	

Start from Beachboard-> Dropbox download. Then from MARS open 225_MIPS_ASM1_starter.txt file

Read the example and follow the instructions in that file.

Paste your conversion in a word document, with the MIPS code from 225_MIPS_ASM1_starter.txt file. Include a screenshot of the output and upload as a pdf. (upload one file only)