M3: Create A Low-Level Program Which Includes Decision Making And Branching.

1. Explain what is Instruction and Instruction Set
2. MIPS R2000

* Arithmetic Instruction (Explain with Example)
* Data Transfer Instruction (Explain with Example)
* Decision Making (Explain with Example)

1. Let A be an array of 100 integers. The base address of A, 0x00000000 is stored in $1. The values of $4 and $2 are 400 and 65536, respectively. The C language code is

for ( i=0; i<100; i++)

A[i] = 65536 + A[i];

Please create the program in MIPS R2000.

OR

Write a program with the following instruction.

**bne $register1,$register2, Label If $regisiter1 is not equal to $regisiter2 then goto Label otherwise execute the next instruction which is subtract $register2, $register5 and store in $register3. Under label you have to use add immediate instruction, to add $register 2 and constant 4 into $register1.**