Assignment 2. MT2017510

The IT Instruction can be used to build an IF-THEN-ELSE block. This instruction can take up forms like ITTEE, ITTTE, ITEEE etc.

Note: The number of Ts & Es should be equal to number of consequential instructions to be executed

IT condition

Opcode1 // If the condition is true ,then Opcode1 is executed.

ITE condition

Opcode1

Opcode2 // If the condition is true ,then Opcode 1 is executed, else Opcode 2 executed.

The ELSE condition is always the inverse of THEN condition.

Note: The Opcodes that are related to the THEN should be consistent to "condition".

That are made consistent by keeping condition at the end of opcode and inverse condition at the end of ELSE related instructions' opcode.

The code is corrected simply by appending conditions to the opcode.

```
AREA        Largest, CODE, READONLY
            export __main
            ENTRY
__main    function
                        MOV R3, #0x100
                        MOV R8, #0x200
                        CMP R8, R3 ; do R8 - R3 & updated N & V flags
                        ITTTE LT ; or N != V
                        MOVLT R3, #0x100
                        MOVLT R8, #0x200
                        MOVLT R7, #0x200
                        MOVGE R6, #0x200
stop                    B stop ; stop program
```

```
endfunc
end
```

Here LT and GE are inverse to each other.