

The purpose of **IT Instruction** is to check for specified condition after the execution of the Instruction, if the condition is satisfied, the immediate next instruction gets executed.

The variations of IT instructions are as below:

**1. IT <condition>**

**Instruction**

Here, the instruction is executed only if the condition holds true.

**2. ITE <condition>**

**Instruction 1**

**Instruction 2**

Here if the condition holds true, then instruction 1 is executed else instruction 2 is executed.

IT instruction can take upto four instruction following itself i.e., ITTTT, ITTEE etc possible combinations of T and E. Let us consider the instructions given in the two codes following ITTTE Instruction:

**1. ITTTE LT**

**MOV R3, #0x100**

**MOV R8, #0x200**

**MOV R7, #0x200**

**MOV R6, #0x200**

**2. ITTTE LT**

**ADDLT r3, r3, r8**

**MOVLT r4, #0**

**MOVLT R0, #1**

**SUBGE r3, r3, r3**

In the first code, the instructions following ITTE Instructions are not related to one another because the values are being moved into r3, r4, r7 or r6 based on the condition flags. But in the second code, there is a relation between the instructions which operate on r3 register. Hence the second code compiles correctly and not the first code.