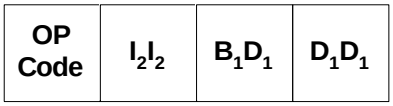
NI D1(B1),I2

And Immediate

SI



The And Immediate instruction performs a logical bit by bit “and” between a byte in memory and an immediate constant. Operand 1, the target, is a byte in memory and Operand 2, the source, specifies the immediate constant. The byte in memory is “and-ed” internally with the immediate constant and contains the final result. The immediate constant is not changed. The table below shows the results of “anding” two bits together.

Bit 1	Bit 2	Bit 1 and Bit 2
0	0	0
0	1	0
1	0	0
1	1	1

This instruction sets the condition code as follows:

0 if all target bits are set to 0. Test this condition with **BZ** or **BNZ**.
1 if any target bit is set to 1. Test this condition with **BM** or **BNM**.

Examples

Some Unrelated And Immediates

```
BYTE1  DC   X'00'
BYTE2  DC   X'FF'
BYTE3  DC   X'C3'

NI    BYTE1,X'12'          BYTE1 = X'00'    Condition Code = 0
NI    BYTE1,X'FF'          BYTE1 = X'00'    Condition Code = 0
NI    BYTE1,C'A'           BYTE1 = X'00'    Condition Code = 0
NI    BYTE1,B'11110000'    BYTE1 = X'00'    Condition Code = 0
NI    BYTE2,X'12'          BYTE2 = X'12'    Condition Code = 1
NI    BYTE2,X'FF'          BYTE2 = X'FF'    Condition Code = 1
NI    BYTE2,C'A'           BYTE2 = X'C1'    Condition Code = 1
NI    BYTE2,B'11110000'    BYTE2 = X'F0'    Condition Code = 1
NI    BYTE3,X'12'          BYTE3 = X'02'    Condition Code = 1
NI    BYTE3,X'FF'          BYTE3 = X'C3'    Condition Code = 1
NI    BYTE3,C'A'           BYTE3 = X'C1'    Condition Code = 1
NI    BYTE3,B'11110000'    BYTE3 = X'C0'    Condition Code = 1
```