



The Or instruction performs a logical bit by bit “or” between a register and a fullword in memory. Operand 1, the target, is a register and Operand 2, the source, specifies a fullword in memory. The fullword in memory is or-ed internally with the fullword in the register and the result is placed in the register. The fullword in memory is not changed. The table below shows the results of “or-ing” two bits together.

Bit 1	Bit 2	Result
0	0	0
0	1	1
1	0	1
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 Ors**

```
R4 = X'FFFFFFFF'    ALL 1'S
R5 = X'00000000'    ALL 0'S
R6 = X'0000148C'    000000000000000000001010010001100
```

```
FIELD1 DC X'0000148C'
FIELD2 DC X'00000000'
FIELD3 DC X'FFFFFFFF'
FIELD4 DC X'12345678'
```

```
O R4, FIELD1    R4 = X'FFFFFFFF' Condition Code = 1
O R4, FIELD2    R4 = X'FFFFFFFF' Condition Code = 1
O R4, FIELD3    R4 = X'FFFFFFFF' Condition Code = 1
O R4, FIELD4    R4 = X'FFFFFFFF' Condition Code = 1
O R5, FIELD1    R5 = X'0000148C' Condition Code = 1
O R5, FIELD2    R5 = X'00000000' Condition Code = 0
O R5, FIELD3    R5 = X'FFFFFFFF' Condition Code = 1
O R5, FIELD4    R5 = X'12345678' Condition Code = 1
O R6, FIELD1    R6 = X'0000148C' Condition Code = 1
O R6, FIELD2    R6 = X'0000148C' Condition Code = 1
```

```
O   R6, FIELD3   R6 = X'FFFFFFFF' Condition Code = 1
O   R6, FIELD4   R6 = X'123456FC' Condition Code = 1
```