

# NAND and RSHIFT Example

Since bit 8 is used as a gateway, the 10 bit op-code will provide us with 4 new combinations, but we'll only use 3 of the 4 as follows:

1111111 1 00 xxxxxxx for NAND (no operand)

1111111 1 01 xxssss for RSHIFT (4 bit shift field ssss as operand)

1111111 1 10 xxxxxxx for HALT (no operand)

1111111 1 11 xxxxxxx for HALT (no operand)

## MULT, RSHIFT and DIV Assignment 4

- Since bit 8 is used as a gateway, the 10 bit op-code will provide us with 4 new combinations, and we'll use them as follows:

- `1111111 1 00 mmmmmm` for MULT (6 bit multiplier field mmmmmm as operand)

- `1111111 1 01 xxssss` for RSHIFT (4 bit shift field ssss as operand)

- `1111111 1 10 xxxxxx` for DIV (no operand)

- `1111111 1 11 xxxxxx` for HALT (no operand)