

Untitled-1

```
/*
 * conditional - same as x ? y : z
 *   Example: conditional(2,4,5) = 4
 *   Legal ops: ! ~ & ^ | + << >>
 *   Max ops: 16
 *   Rating: 3
 */
int conditional(int x, int y, int z) {
    // create a mask that depends on the value of x
    // if x is not 0, create a all 1 mask
    // else if x is 0, create a all 0 mask

    // !x => 1 if x = 0
    // if x = 0, !x - 1 = 0
    // if x != 0, !x - 1 = -1 (all 1 binary)
    // ~0x00 produces an all 1 binary array (aka -1 in base10)
    int mask = ((!x) + ~0x00);

    return ((mask) & y) | ((~mask) & z);
}
```