You are working on problem set:
Homework 2 (Pause)

bitmask1

Language/Type: C C bitwise operators bit manipulation
Author: Julie Zelenski (on 2018/02/03)

Assume `mine` is an `unsigned int` being used as bit vector. For each listed task, show how to express it in C.

.
.
.

test if mine has either of two lowest bits on

a. ○ `(mine & 0x3) == 0x3`
b. ○ `mine |= 0xff`
c. ○ `mine &= 0x55555555`
d. ◉ `(mine & 0x3) != 0`

(order shuffled)

test if mine has both of two lowest bits on

a. ◉ `(mine & 0x3) == 0x3`
b. ○ `(mine & 0x3) != 0`
c. ○ `mine &= 0x55555555`
d. ○ `mine |= 0xff`

(order shuffled)

set lowest 8 bits of mine

a. ○ `(mine & 0x3) != 0`
b. ○ `(mine & 0x3) == 0x3`
c. ◉ `mine |= 0xff`
d. ○ `mine &= 0x55555555`

(order shuffled)

clear every other bit in mine

a. ◉ `mine &= 0x55555555`

b. ○ `(mine & Øx3) != Ø`
c. ○ `(mine & Øx3) == Øx3`
d. ○ `mine |= Øxff`
(order shuffled)

Submit

You passed 4 of 4 tests.

question #1:	test if mine has either of two lowest bits on
your answer:	`(mine & Øx3) != Ø`
result:	pass
question #2:	test if mine has both of two lowest bits on
your answer:	`(mine & Øx3) == Øx3`
result:	pass
question #3:	set lowest 8 bits of mine
your answer:	`mine |= Øxff`
result:	pass
question #4:	clear every other bit in mine
your answer:	`mine &= Øx55555555`
result:	pass

Need help?

Stuck on an exercise? Contact your TA or instructor.

If something seems wrong with our site, please contact us.