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

bittoggle

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

Bit masks are an important part of coding bitwise operations. Often you might need to set or clear a particular bit in a mask, and the following functions accomplish that:

```
int bitset(int num, int pos)
{
    return num | (1 << pos);
}

int bitclear(int num, int pos)
{
    return num & (~(1 << pos));
}
```

Write a function named **bittoggle** that accepts two `int` arguments `num` and `pos`, and toggles the bit at the pos'th position of `num`, returning the result. For example, the call of `bittoggle(22, 5)` should return 54.

.
.
.

```
1 // bittoggle by Brandon Kmiec. Submitted for CSC 152 September 15, 2024
2 // function to toggle a specific bit
3
4 int bittoggle(int num, int pos) {
5     return num ^ (1 << pos);
```

```
6 } // end bittoggle
```

Function: Write a C function as described, not a complete program.

Submit

You passed 13 of 13 tests.

bittoggle(22, 5)	→	54
bittoggle(54, 5)	→	22
bittoggle(22, 1)	→	20
bittoggle(42, 0)	→	43
bittoggle(42, 1)	→	40
bittoggle(15, 31)	→	-2147483633
bittoggle(12, 0)	→	13
bittoggle(12, 2)	→	8
bittoggle(-12, 31)	→	2147483636
bittoggle(1023, 6)	→	959
bittoggle(0, 0)	→	1
bittoggle(1, 0)	→	0
bittoggle(0, 31)	→	-2147483648

Testing began at 2024/09/14 19:15 (PDT) and ran for 413 ms.

Need help?

Stuck on an exercise? Contact your TA or instructor.

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