

Skills: Problem Solving (Basic) ①

Coding



Bit Manipulation

Algorithms

**Problem Solving** 

A binary number is a combination of 1s and 0s. Its  $n^{th}$  least significant digit is the the  $n^{th}$  digit starting from the right starting with 1. Given a decimal number, convert it to binary and determine the value of the the  $4^{th}$  least significant digit.

## **Example**

number = 23

- Convert the decimal number 23 to binary number:  $23_{10} = 2^{4+} 2^{2+} 2^{1+} 2^{0} = (10111)_2$ .
- The value of the  $4^{th}$  index from the right in the binary representation is 0.

## **Function Description**

Complete the function *fourthBit* in the editor below.

fourthBit has the following parameter(s):

int number: a decimal integer

Returns:

*int:* an integer 0 or 1 matching the 4<sup>th</sup> least significant digit in the binary representation of *number*.

## **Constraints**

• 0 ≤ number < 2<sup>31</sup>