

Reverse Integer

Given a signed 32-bit integer x , return x *with its digits reversed*. If reversing x causes the value to go outside the signed 32-bit integer range $[-2^{31}, 2^{31} - 1]$, then return 0.

Assume the environment does not allow you to store 64-bit integers (signed or unsigned).

Example 1:

Input: $x = 123$
Output: 321

Example 2:

Input: $x = -123$
Output: -321

Example 3:

Input: $x = 120$
Output: 21

Example 4:

Input: $x = 0$
Output: 0

Constraints:

- $-2^{31} \leq x \leq 2^{31} - 1$