

# Problem 7: Reverse Integer

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 31.07%

**Paid Only:** No

**Tags:** Math

## Problem Description

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 `[-231, 231 - 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`

**\*\*Constraints:\*\***

`-231 <= x <= 231 - 1`

## Code Snippets

**C++:**

```
class Solution {  
public:  
    int reverse(int x) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public int reverse(int x) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def reverse(self, x: int) -> int:
```