

# Reverse Integer

```
class Solution:
    def reverse(self, x: int) -> int:
        if x == 0:
            return 0

        x_str = str(x)

        if x_str[0] == '-':
            x_str = '-' + x_str[:0:-1] #Work done at O(n)
        else:
            x_str = x_str[::-1] #O(n) work
        x_str = x_str.lstrip('0') #Work done is O(1)

        x_str = int(x_str)

        if x_str < -2**31 or x_str > 2**31 - 1: #This comparison
            return 0

        return x_str
```

I've had to google for overflow cases, and splicing methods

otherwise this whole program is done at  $O(n)$ , I'm interest in seeing if there's a way to do it without converting string and integer