Reverse Integer

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class Solution:
    def reverse(self, x: int) → int:

        MIN = -2147483648
        MAX = 2147483647

        res = 0
        while x:
            digit = int(math.fmod(x, 10)) #takes last digit
            x = int(x / 10) #removes last digit

            if (res > MAX // 10 or (res == MAX// 10 and digit >= MAX % 10)): #chec
ks for overflow
                return 0
            if (res < MIN // 10 or (res == MIN // 10 and digit <= MIN % 10)):
                return 0
            res = (res * 10) + digit #builds reverse digit
        return res
```

If we take a value, mod by 10, to get the last digits, we can then add onto res (make sure we multiply by 10 each time, to shift digits left by multiplying 10)

divide x by 10 to remove the last digit so that the process can be repeated again (getting the last digits)

iteratively keeps checking if the rounded down value of MAX or MIN is bigger or smaller than res (checks largest safe values) and in the case where its an exact match, it will check the last digits in the end