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Description | 🔒 Solution | 💬 Discuss (999+) | 🕐 Submissions

ⓘ Python3 ▾ | ● Autocomplete

69. Sqrt(x)

Easy | 👍 2352 | 👎 2539 | ♡ Add to List | Share

Given a non-negative integer `x`, compute and return *the square root of* `x`.

Since the return type is an integer, the decimal digits are **truncated**, and only **the integer part** of the result is returned.

Note: You are not allowed to use any built-in exponent function or operator, such as `pow(x, 0.5)` or `x ** 0.5`.

Example 1:

```
Input: x = 4
Output: 2
```

Example 2:

```
Input: x = 8
Output: 2
Explanation: The square root of 8 is 2.82842..., and since the
decimal part is truncated, 2 is returned.
```

Constraints:

- $0 <= x <= 2^{31} - 1$

Accepted 786,820 | Submissions 2,194,901

Seen this question in a real interview before? | Yes | No

Companies 🔒   ▾

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☰ Problems | ⤬ Pick One | ‹ Prev | 69/1956 | Next ›

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

        l, r = 0, x
        while l <= r:
            mid = l + (r-l)//2
            if mid * mid <= x < (mid+1)*(mid+1):
                return mid
            elif x < mid * mid:
                r = mid - 1
            else:
                l = mid + 1
```

Your previous code was restored from your local storage. Reset to default ✕

Testcase | Run Code Result | Debugger 🔒   ⌄

Accepted   Runtime: 38 ms   ⓘ

Your input | 4

Output | 2 | Diff

Expected | 2

Console ▲   Use Example Testcases   ❓▾

▶ Run Code ▲ | Submit