69. Sqrt(x)

Easy

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Implement int sqrt(int x).

Compute and return the square root of *x*, where *x* is guaranteed to be a non-negative integer.

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

Example 1:

Input: 4  
Output: 2

Example 2:

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

class Solution {

public:

int mySqrt(int x) {

if(x==0||x==1) return x;

int ans,left=1,right=x/2,mid;

while(left<=right){

//mid=right-(right-left)/2;

mid=(left+right)/2;

if(mid<=x/mid){

left=mid+1;

ans=mid;

}else right=mid-1;

}

return ans;

}

};

Success

[Details](https://leetcode.com/submissions/detail/206712797/)

Runtime: 16 ms, faster than 100.00% of C++ online submissions for Sqrt(x).

Memory Usage: 11.2 MB, less than 0.23% of C++ online submissions forSqrt(x).