Approach #1: Direct [Accepted]

Intuition and Algorithm

We will reverse each block of 2k characters directly.

Each block starts at a multiple of 2k: for example, 0, 2k, 4k, 6k, One thing to be careful about is we may not reverse each block if there aren't enough characters.

To reverse a block of characters from i to j, we can swap characters in positions i++ and j--.

```
Java Python

1    class Solution(object):
    def reverseStr(self, s, k):
        a = list(s)
        for i in xrange(0, len(a), 2*k):
        a[i:i+k] = reversed(a[i:i+k])
        return "".join(a)
```

Complexity Analysis

- Time Complexity: O(N), where N is the size of ${\color{red} {\sf s}}$. We build a helper array, plus reverse about half the characters in ${\color{red} {\sf s}}$.
- ullet Space Complexity: O(N), the size of ${f a}$.

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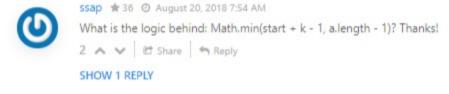
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              goyalshub ★ 217 ② September 22, 2018 8:46 AM
              This is more complicated than an "Easy" level problem. Isn't it?
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              tobe2019 *80 @ June 12, 2019 10:32 AM
              The problem statement could be much, much clearer. The problem itself is quite easy, but it's so hard to
              understand what exactly the programmer is supposed to do. :(
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              hamhus # 4 @ May 11, 2020 7:03 AM
              Gosh, I worked on this problem for more than 90 mins and I couldn't solve it, finally had to look at the
              solution. This wasn't an easy problem for me. To make matters worse, the description is really confusing
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              kengni 🛊 75 🗿 May 29, 2019 5:03 PM
              Instead of using the reversed() function. It is better to reverse using slicing, i.e.
              a[i:i+k] = a[i:i+k][::-1] instead of a[i:i+k] = reversed(a[i:i+k].
              Slicing is much faster(32ms) than the built in function reversed(52ms- i guess because the built in
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              Woors # 42 @ October 5, 2019 1:07 PM
              your ans is wrong for "abcdefg" k=8
              My ans can't pass for this case
              char * reverseStr(char * s, int k){
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              bobmeade44 ★ 16 ② December 27, 2019 12:06 AM
              I think this is a great problem because it challenges the ability to understand a problem that is clearly
              not a fun programming problem, and that is the way the real work is sometimes. It is an easy first
              reaction to just skip this problem because it is wordy. These are some of the biggest challenges for me
              to be patient and work through the description of the problem. My goal here was just to have a
              working solution and not judge myself on time or space in this case since it is such a contrived (but not
```

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niphadkarneha ★ 2 ② October 14, 2019 9:32 PM
Instead of xrange it should be range. Python 3 does not have xrange.

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g5li ★4 ② March 29, 2019 4:10 PM

Here is slow but interesting solution by Java StringBuilder.

Code First:

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