

# Simplify Path

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Question

Solution

Total Accepted: **37783** Total Submissions: **185717** Difficulty: **Medium**

Given an absolute path for a file (Unix-style), simplify it.

For example,

**path** = `"/home/"` , => `"/home"`

**path** = `"/a/./b/../../c/"` , => `"/c"`

click to show corner cases.

## Corner Cases:

- Did you consider the case where **path** = `"/../"` ?

In this case, you should return `"/"` .

- Another corner case is the path might contain multiple slashes `'/'` together, such as

`"/home//foo/"` .

In this case, you should ignore redundant slashes and return `"/home/foo"` .

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Python ▼



```
1 class Solution(object):
2     def simplifyPath(self, path):
3         """
4         :type path: str
5         :rtype: str
6         """
7         length = len(path)
8         newpath=['' for i in range(length)]
9         top=0;i=0
10        while i<length:
11            while i<length and path[i]=='/':i+=1
12            if i==length:break
13            if path[i]=='.' and (i+1>=length or path[i+1]=='/'):i+=1
```

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```
14         elif path[i]=='.' and path[i+1]=='.' and (i+2>=length or path[i+2]!='.'):
15             i+=2
16             top=top-1 if top>0 else 0
17             while top>0 and newpath[top]!='.':top-=1
18         else:
19             newpath[top]='/'
20             top+=1
21             while i<length and path[i]!='.':
22                 newpath[top]=path[i]
23                 top+=1
24             i+=1
25         if top==0:return "/"
26     return ''.join(newpath[:top])
```

Custom Testcase ☐

Run Code

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