

1166. Design File System

Medium748Add to ListShare

You are asked to design a file system which provides two functions:

- createPath(path, value):** Creates a new path and associates a value to it if possible and returns `True`. Returns `False` if the path already exists or its parent path doesn't exist.
- get(path):** Returns the value associated with a path or returns `-1` if the path doesn't exist.

The format of a path is one or more concatenated strings of the form `/` followed by one or more lowercase English letters. For example, `/leetcode` and `/leetcode/problems` are valid an empty string and `/` are not.

Implement the two functions.

Please refer to the examples for clarifications.

Example 1:

```
Input:
["FileSystem","createPath","get"]
[[],["/a",1],["/a"]]
Output:
[null,true,1]
Explanation:
FileSystem fileSystem = new FileSystem();

fileSystem.createPath("/a", 1); // return true
fileSystem.get("/a"); // return 1
```

Example 2:

```
Input:
["FileSystem","createPath","createPath","get","createPath","get"]
[[],["/leet",1],["/leet/code",2],["/leet/code"],["/c/d",1],["/c"]]
Output:
[null,true,true,2,false,-1]
Explanation:
FileSystem fileSystem = new FileSystem();

fileSystem.createPath("/leet", 1); // return true
fileSystem.createPath("/leet/code", 2); // return true
fileSystem.get("/leet/code"); // return 2
fileSystem.createPath("/c/d", 1); // return false because the parent path "/c" doesn't exist.
fileSystem.get("/c"); // return -1 because this path doesn't exist.
```

Constraints:

- The number of calls to the two functions is less than or equal to 10^4 in total.
- $2 \leq \text{path.length} \leq 100$
- $1 \leq \text{value} \leq 10^9$

NOTE: create method has been changed on August 29, 2019 to createPath. Please reset to default code definition to get new method signature.

Accepted5,956Submissions10,512

Seen this question in a real interview before?

YesNo

Contributor

Companies🏢

Related Topics

Show Hint 1

Show Hint 2

Show Hint 3