## NOTE: SCENARIO IS WHAT THE PUZZLE TAKER SEES.

### SCENARIO:

You are developing a library for filesystem operations. One of the tasks is to implement a recursive version of the clean command, which accepts a directory path and deletes its contents recursively if required. In the following implementation of such feature, the os.fwalk function generates file names in a given directory tree by walking the tree either top-down or bottom-up. The os.unlink and os.rmdir functions remove (i.e. delete) a file path and a directory path respectively. Consider the snippet of code below and answer the following questions, assuming that the code has all required permissions to execute.

```
import os

def clean(path):

for root, dirs, files, root_fd in os.fwalk(path, topdown=False):
    for name in files:
        os.unlink(name, dir_fd=root_fd)
    for name in dirs:
        os.rmdir(name, dir_fd=root_fd)
```

#### Questions:

- 1. What will the clean function do once it is executed?
- 2. What will happen if the directory passed to the function exists and contains symbolic links pointing to some files?
- a. The function deletes only path and everything inside it recursively if it is a directory, including symbolic links (but not files they are pointing to), and exits.
- b. The function throws an exception with a message because of the existence of symbolic links.
- c. The function deletes files to which the symbolic links are pointing, not the symbolic links themselves.
- d. None of the above.

[Other statistical questions will be imported here while creating survey.]

NOTE: ANSWER IS TO BE SHOWN TO THE PUZZLE TAKER AT THE END OF THE SESSION.

### ANSWER:

1. Program will take a string as a path and delete it, and its content if the path is directory.

#### 2. a

The default value for follow\_symlinks is False, which means the operation is done on symbolic link itself, not where it points.

#### TAGS:

python, flawless

### **CATEGORIES:**

Blindspot - No

Type - File

Number of distinct functions - 3

Number of total functions - 3

Blindspot function - N/A

Function call omitted - N/A

Blindspot type - N/A

Number of Parameters in the blindspot function - N/A

Cyclomatic complexity - 2

## NAME:

os.fwalk()

## **DESCRIPTION:**

The os.fwalk behaves exactly like os.walk, except that it yields a 4-tuple (dirpath, dirnames, filenames, dirfd), and it supports dir\_fd. dirpath, dirnames and filenames are identical to os.walk output, and dirfd is a file descriptor referring to the directory dirpath.

#### **BLINDSPOT:**

#N/A

## **CORRECT USE EXAMPLE:**

#N/A

# **§MORE INFORMATION:**

#N/A

## **REFERENCES:**

1. <a href="https://docs.python.org/3/library/os.html?highlight=walk#os.fwalk">https://docs.python.org/3/library/os.html?highlight=walk#os.fwalk</a>

File: PX43-os.fwalk, Status: Review, Maintainer: Rad, Updated: 04.01.2017