

List FTP Directory with MLSD ftplib

Problem Description

You are tasked with implementing a Python function that connects to an FTP server, logs in with provided credentials, lists the contents of a specified directory using MLSD command, and outputs the details of each file.

Function Requirements

- Connect to an FTP server using the provided host.
- Log in with the provided username and password.
- Use the `mlsd` command to get a detailed list of files in the specified directory.
- Print the welcome message from the server.
- Print the login message.
- For each file in the directory, print the filename and its details (e.g., size, modification date).
- Print the quit message after closing the connection.

Sample Output (without unit test, files and directories may be different on your laptop)

```
220-FileZilla Server 1.7.0
220 Please visit https://filezilla-project.org/
230 Login successful.
Contents of directory .:
autopsy:
  type: dir
  modify: 20240130231230.947
  perms: cplem
test.txt:
  type: file
  size: 32
  modify: 20240512232549.554
  perms: awr
uploaded_example.zip:
  type: file
  size: 174
  modify: 20240513000408.961
  perms: awr
221 Goodbye.
```

Output (with unit test)

```
login called with call('user', '123')
mlsd called with call('/')
test attribute passed: 220-FileZilla Server 1.7.0 is equal to
220-FileZilla Server 1.7.0
test attribute passed: 220 Please visit https://filezilla-
project.org/ is equal to 220 Please visit https://filezilla-
```

project.org/
test attribute passed: 230 Login successful. is equal to 230
Login successful.
test attribute passed: Contents of directory /: is equal to
Contents of directory /:
test attribute passed: file1.txt: is equal to file1.txt:
test attribute passed: type: file is equal to type: file
test attribute passed: size: 32 is equal to size: 32
test attribute passed: modify: 20210515094500 is equal to
modify: 20210515094500
test attribute passed: perms: awr is equal to perms: awr
test attribute passed: file2.txt: is equal to file2.txt:
test attribute passed: type: file is equal to type: file