

COMP2155

Network Automation

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Objectives:

- Working with Telnet and text file

Instructions:

Create one python file that contains a python class. No need to instantiate or use the class, however, it is recommended to test it.

Overview:

Create a Telnet class that will facilitate connecting, authenticating and display the results of commands.

Create ONE python class. Each task represents a method of the class.

The class name is **MyTelnet**

Task 1: The Constructor

4 marks

- 1) Takes three arguments
 - a) host
 - b) username
 - c) password
- 2) Sets 3 private properties with same name as 3 arguments
- 3) Also creates a private instance variable named **session** that will save a Telnet session. The value of **session** inside the constructor is **None**.

Task 2: The Destructor

1 mark

- 1) Closes the Telnet session (**session**)

Task 3: A Method Named connect()

5 marks

- 1) This method takes no arguments.
- 2) The method initializes the Telnet **session** by connecting to host private property)
- 3) The method then passes the username and password private properties to authenticate.

Task 4: A Method Named send_command()

5 marks

- 4) This method takes two arguments.
 - a) The command to execute (required)
 - b) The time to wait (optional, with a default value greater than 1 second)
- 5) The method executes the command and returns the result in plain text (not bytes)

Submission

Upload all .py files to Blackboard as a Blackboard submission. Do not submit a zipped file, or you will be deducted 2 marks.