

Assignment 1: Answer the following questions in MS-Word file, take a screenshot of each question/output, and add the related commands/scripts for each question.

Question 1) Develop a script (name it as Q1-yourname.sh) which accept an input parameter/argument as *line_number* and display that line of the **data.txt** file.

i.e: Q1-yourname.sh 12 → display line 12 of the data.txt file

Question 2) Write a script to accept two arguments (filename) (like ./myscript filename1 filename2)

The script performs the following:

- 1) Check whether user provide the correct number of arguments. Display proper error message if requires.
- 2) Check whether both filenames are exists. Display proper error message if requires.
- 3) Calculate the number of bytes/characters in each file and if the number of characters in both files are the same, the script displays “Files are similar”, otherwise it displays “Files are different”

Question 3) Using the filters (SED/GREP/AWK) develop a shell script which displays only the IPv4 address of the current computer.

Hint: Use IPCONFIG to display IP setting, and use filters in order to display only IPv4.

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$ ipconfig

Windows IP Configuration

Ethernet adapter Ethernet 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : ASTUDENT.LOCAL

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::a99f:282a:51f3:f27%24
    IPv4 Address. . . . . : 192.168.56.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :
```

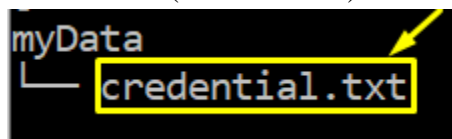
Question 4) Upload the **BookStore.txt** file into your Matrix account. This file contains book information in five columns including, BookID, Book Title, Year, Publisher Name and Price. Develop shell scripts (for each step, develop a script) which perform:

- A. Print the first five book records in the file
- B. Print all the book records which aren't published by "Cengage Learning"
- C. Print all the book names (in uppercase) which are published by "Prentice Hall".
- D. Print all the book IDs which are published after 2010.
- E. Print all the book records which their BookID has pattern like "R-367-U" (Start with an alphabet follow by hyphen, three digits , hyphen and an alphabet)
- F. Print all the book records like a report as follow:

BookID	Book Title	Year	Publisher	Price
PA-123	Unix Shell Programming	2001	Prentice Hall	\$145
F-123P	C# Programming	2010	Cengage Learning	\$170
MN-345	CCNA Study Guide	2005	Cisco Press	\$132
Z-567-X	Routing TCP/IP	2007	Cisco Press	\$120
R-367-U	Linux Kernel Dev.	2005	Prentice Hall	\$180
12-MXZ	Learning OSx	2007	Sybex	\$99
S-123-P	Bash Pocket Ref.	2010	Cengage Learning	\$55
E-P234	Python Pocket Ref.	2012	Cengage Learning	\$45
55-MNP	Unix System Programming	2001	Sybex	\$230
W-M900	Windows PowerShell	2012	Prentice Hall	\$190
P-890-A	Mastering Windows 2012	2015	Microsoft Press	\$145

Question 6) Complete the following steps:

- You are asked to open a data-file from my machine and display the file content. How do you do this? Here are the data-file info:
 - My username: shahdad.shariatmadar
 - The datafile (credential.txt) is located in Quiz1-Data in my machine as follow:



- How do you display the permission setting of credential.txt?