Curtin College | in association with Curtin University

CS2000 – Laboratory 06 (Part2)

Bash

#/bin/bash

Task 1- Use “sed” command to answer the following questions

1. Create a file with the following text
   Linux is a free operation system
   Linus Torvalds start the project to create linux as a free OS kernel in 1991
   Linus was originally from Finland and University of Helsinki
   You can download linux for free. Services like ftp can be installed on linux
   Unix and linux are different
   Some of the versions of Linux are Fedora, Redhat , Ubuntu, …

2. Search the file and print:
   a. only lines containing “linux”
   b. only lines that do not contain “linux”
   c. Lines 3 to end
   d. All lines excluding line 3 to 5
3. Search the file and replace all “linux” with “Linux”
4. Write the output from question 3 in a file

Task 2- Use “awk” command to answer the following questions

1. Using information below create awkexample.csv file. Read the file and print name and email address field only.

Name	Surname	Email address	ID
John	Smith	j.smith@cs.com.au	1234
Garon	May	g.may@cs.com.au	5678
Kaven	Hill	k.Hill@cs.com.au	9012
Alisa	Hoy	A.hoy@cs.co.au	4567

2. Using awk command print the first field of file “/etc/passwd”

3. Print each system user home path using “function” and “awk” command

References:
https://likegeeks.com/awk-command/
Book: Bash Guide for Beginners

Task 1

Question 1

Create the file called linuxfile.txt from the provided text.

Question 2

a) sed -n '/linux/p' linuxfile.txt
b) sed -n '/linux/!p' linuxfile.txt
c) sed -n '3,$'p linuxfile.txt
d) sed '3d;5d' linuxfile.txt

Question 3

sed 's/linux/Linux/g' linuxfile.txt

Question 4

sed 's/linux/Linux/g' linuxfile.txt > newlinuxfile.txt

Task 2

Question 1

awk -F “,” ‘{ print $1 $3}’ awkexample.csv

Question 2

awk 'NR==1{ print $1 }' /etc/passwd

Question 3

awk -F":" '$7 == "/bin/false" {print $0}' /etc/passwd

Task 1

Question 1

Create the file called linuxfile.txt from the provided text.

Question 2

a) sed -n '/linux/p' linuxfile.txt
b) sed -n '/linux/!p' linuxfile.txt
c) sed -n '3,$'p linuxfile.txt
d) sed '3d;5d' linuxfile.txt

Question 3

```
sed 's/linux/Linux/g' linuxfile.txt
```

Question 4

```
sed 's/linux/Linux/g' linuxfile.txt > newlinuxfile.txt
```

Task 2

Question 1

```
awk -F "," '{ print $1 $3}' awkexample.csv
```

Question 2

```
awk 'NR==1{ print $1 }' /etc/passwd
```

Question 3

```
awk -F":" '$7 == "/bin/false" {print $0}' /etc/passwd
```