# AACS2284 OPERATING SYSTEMS (PRACTICAL)

## **Practical 1: Performing Basic Linux Tasks**

- 1. Which of these statements about open sources software are true? (Select all that apply.)
  - a) Its source code is accessibility by all
  - b) Users have the right to modify and redistribute it
  - c) It available at zero price (some are not free)
  - d) It cannot be updated
- 2. What are the advantages of Linux? (Select all that apply.)
  - a) Enables software to be customized
  - b) Comes with strong single-vendor support
  - c) Increases the likelihood of bugs being detected because of increased numbers of programmers who can view the code.
  - d) Fosters a community among users and a sense of shared responsibility for the software
- 3. Write the output for date command using each of the following format:
  - a. \$date "+This is the date"

This is the date

b. \$date "+This is the date: %B" This is the date: January

- 4. Write a command to show the date using each of the following format:
  - a. Date: 30 October 2019 \$date "+Date: %d %B %Y"
  - b. Today is Friday (30/10/2019) \$date "+Today is % A(%d/% m/% Y)"
  - c. Date Today: 30-10-2019 & Time Now: 12:30 PM \$date "+Date Today: %d-%m-%%Y & Time Now: %l:%M %p"
- 5. Determine and explain the result of the following commands:

a. wall
b. echo
c. uname
d. Print system information

d. last -- Show a listing of last logged in user

- 6. Write command(s) based on the following scenario:
  - a. To display the manual for the **sed** command -- man sed

b. To check the name of the Linux system
c. To clear terminal screen and exit the terminal
-- hostname
-- clear; exit

d. To view for the current month calendar -- cal

e. To show the summary of **gzip** command -- whatis gzip

### 7. Fill in the following UNIX commands:

Command	Function	Note
date	To list the date and time of the server.	
date -s "datestr"	To set time and date to the value specified. Eg. "11/20/2019 12:48:00"	
cal month year	To show calendar of the specified month and year.	
man	To provide in depth information about the requested command.	
man -k keyword	To search for commands related to a particular keyword.	
commandhelp	To display a short help file.	
clear	To clear the screen.	
pwd	To displays the name of the current working directory.	
su su <i>username</i>	To become super user or another user.	
sudo <i>command</i>	To allow a user to execute a command as the superuser.	
exit	To leave the current shell session.	

## Notes: Common formatting characters for the date command:

- ♣ %D Display date as mm/dd/yy
- **%Y** Year (e.g., 2020)
- **4** %m Month (01-12)
- **♣ %B** Long month name (e.g., November)
- **♣** %b Short month name (e.g., Nov)
- **♣** %d Day of month (e.g., 01)
- ♣ %j Day of year (001-366)
- <sup>★</sup> %u Day of week (1-7)
- **%A** Full weekday name (e.g., Friday)
- ♣ %a Short weekday name (e.g., Fri)
- **%H** Hour (00-23)
- **%** Hour (01-12)
- **M** Minute (00-59)
- %S Second (00-60)

#### Sample Answer:

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- What are the advantages of Linux? (Select all that apply.)
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  - c) Increases the likelihood of bugs being detected because of increased numbers of programmers who can view the code.
  - d) Fosters a community among users and a sense of shared responsibility for the software
- 3. Write the output for date command using each of the following format:
  - a. \$date "+This is the date"

This is the date

b. \$date "+This is the date: %B"

This is the date: June

- 4. Write a command to show the date using each of the following format:
  - a. Date: 30 October 2019

date "+Date: %d %B %Y"

Today is Friday (30/10/2019)

date "+Today is %A (%d/%m/%Y)"

c. Date Today: 30-10-2019 & Time Now: 12:30 PM date "+Date Today: %d-%m-%Y & Time Now: %l:%M %p"

- 5. Determine and explain the result of the following commands:
  - a. wall write a message to users.
  - b. echo display a line of text.
  - c. uname print system information.
  - d. last show listing of last logged in users
- Write command(s) based on the following scenario:
  - a. To display the manual for the sed command man sed
  - b. To check the name of the Linux system hostname
  - c. To clear terminal screen and exit the terminal clear; exit
  - a. To view for the current month calendar cal
  - b. To show the summary of gzip command

whatis gzip

Command	Function	Note
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<u>su</u> username		
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