

## Linux II Midterm 1 16W

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- 1 What command can you use to list what units must be started before the GUI can be started?
  - a. `systemctl list-dependencies basic.target`
  - b. `systemctl list-dependencies graphical.target`
  - c. `systemctl list-dependencies multi-user.target`
  - d. `systemctl list-dependencies sysinit.target`
  - e. `systemctl isolate multi-user.target`
- 2 Where is the primary configuration file for systemd located?
  - a. `~/.system.conf`
  - b. `/usr/lib/systemd/system.conf`
  - c. `/etc/systemd.conf`
  - d. `/usr/lib/systemd.conf`
  - e. `/etc/systemd/system.conf`
- 3 What is the absolute path of the configuration file for GRUB2 ?
  - a. `/etc/mtab`
  - b. `/etc/default/grub`
  - c. `/etc/grub2.cfg`
  - d. `/etc/fstab`
  - e. `/etc/os-release`
- 4 Which of the following RAID schemes can tolerate one drive failure, but no more?
  - a. Four drives in a RAID 5 array.
  - b. Four drives in a RAID 1 array.
  - c. Three drives in a RAID 0 array.
  - d. Four drives in a RAID 0 array.
  - e. Three drives in a RAID 1 array.
- 5 If we wanted to start a service called ``bluetooth-spamd`` after the "bluetooth" target is applied, we could place a link to the service in which directory?
  - a. `/etc/systemd/bluetooth.target.wants/`
  - b. `/etc/systemd/system/bluetooth.wants/`
  - c. `/etc/systemd/system/bluetooth.target.wants/`
  - d. `/etc/systemd/bluetooth.wants/`
  - e. `/etc/systemd/bluetooth-spamd.wants/`

- 6 Which command is used to move to the system state defined by ``graphical.target``?
- `systemctl enable graphical.target`
  - `systemctl unmask graphical.target`
  - `systemctl isolate graphical.target`
  - `systemctl boot graphical.target`
  - `systemctl start graphical.target`
- 7 Which of the following utilities can be used to archive files?
- `tar`
  - `lvcreate`
  - `mount`
  - `dumpe2fs`
  - `arc`
- 8 If you want to be able to easily resize the block devices that your filesystems reside on, what storage management scheme could you use?
- LVM
  - Shadow Copy
  - Copy-on-write
  - RAID
  - Standard partitions
- 9 The ``Compact Disk File System`` is also referred to as:
- HFS
  - ISO9660
  - Rock Ridge
  - UDF
  - Joliet
- 10 What is the universal Linux mascot?
- Penguin
  - Daemon (with pitchfork)
  - Sabre-tooth tiger
  - Wombat
  - Frog
- 11 What switch can you use with ``systemctl`` to determine what features are supported by the edition of ``systemd`` you are running?
- `--version`
  - `--edition`
  - `--features`
  - `-r`
  - `--feature-list`

- 12 What is the first software that runs when a computer is powered on?
- BTRFS
  - BIOS
  - GRUB2
  - MBR
  - UDF
- 13 What utility can be used to determine how long `systemd` takes to reach the final system state?
- systemctl analyze final
  - systemd-analyze
  - systemd-analyze final
  - systemctl-analyze
  - systemd-analyze --final
- 14 Which command lists only active service units?
- systemctl service
  - systemctl list-unit-files service
  - systemctl list-units --type service
  - systemctl list-unit-files --type service
  - systemctl list-units service
- 15 Which command is used to format a partition for use as virtual memory?
- mkfs
  - pvcreate
  - mkswap
  - virbr0
  - swapon
- 16 Which command can be used to remove a physical volume from an LVM storage pool?
- vgreduce
  - lvreduce
  - vgs
  - vgscan
  - pvremove
- 17 Which utility can be used to administer RAID arrays?
- fdisk
  - smartctl
  - mdadm
  - systemctl
  - hdparm

- 18] What command would list any installed video cards?
- lspci
  - xprobe
  - lsvid
  - lsmod
  - modprobe
- 19] In both the `/etc/systemd` and `/lib/systemd` directories, there is a subdirectory which contains unit files. What is the name of this directory?
- unit-files
  - system-files
  - units
  - systemd
  - system
- 20] Where would you find files such as `sdb2` or `sde4`?
- /run
  - /var
  - /sys
  - /proc
  - /dev
- 21] Which command will tell you what version of `systemd` you have?
- `systemd --version`
  - `systemctl version`
  - `uname -r`
  - `systemd version`
  - `systemctl --version`
- 22] What command can you use to become the root user?
- `machinectl enable`
  - `chown root`
  - `elevate`
  - `su`
  - `enable`
- 23] Which command displays journal entries from the `NetworkManager` unit only?
- `journalctl -k NetworkManager`
  - `journalctl -t NetworkManager`
  - `journalctl -u NetworkManager`
  - `journalctl NetworkManager`
  - `journalctl | grep NetworkManager`

- 24 Which directory contains files which represent hardware devices?
- /var
  - /dev
  - /etc
  - /run
  - /boot
- 25 What utility is used to create an `ext2` filesystem?
- mkext2
  - pvcreate
  - e2fsck
  - mke2fs
  - mkswap
- 26 What utility is used to create an `xfs` filesystem?
- mkfs
  - xmkfs
  - xfsdump
  - xfs\_create
  - mkxfs
- 27 Which command can you use to list all units and their state?
- systemctl list-units --type all
  - systemctl
  - systemctl list-units
  - systemctl list-unit-files
  - systemctl list-dependencies
- 28 What command could you use to make a logical volume smaller?
- lvscan
  - vgremove
  - vgreduce
  - lvs
  - lvreduce
- 29 What link should you change if you want to change the final system state reached when the operating system boots?
- multi-user.target
  - default.target
  - graphical.target
  - sysinit.target
  - basic.target

- 30 Which command will display all active service units?
- `systemctl -t service`
  - `systemctl list-units`
  - `systemctl list-unit-files`
  - `systemctl -t enabled`
  - `systemctl -t active`
- 31 Which command is used to add a physical volume to an LVM storage pool?
- `vgextend`
  - `lvextend`
  - `vgscan`
  - `vgs`
  - `pvcreate`
- 32 What command can you use to list what units must be started before the `bluetooth.service` can be started?
- `systemctl show-dependencies bluetooth.service`
  - `systemctl isolate bluetooth.service`
  - `systemctl list-units --type bluetooth.service`
  - `systemctl list-unit-files bluetooth.service`
  - `systemctl list-dependencies bluetooth.service`
- 33 Which file should you edit to change the timeout in the GRUB2 menu?
- `grub2-mkconfig`
  - `fstab`
  - `grub`
  - `boot`
  - `grub2.cfg`
- 34 What command can you run to determine what units must be started before `multi-user.target` can start?
- `systemctl list-dependencies multi-user.target`
  - `systemctl list-unit-files multi-user.target --reverse`
  - `systemctl list-dependencies multi-user.target --reverse`
  - `systemctl list-units multi-user.target`
  - `systemctl list-unit-files multi-user.target`
- 35 Which device file represents the second partition on the third SCSI drive?
- `dm-3`
  - `sdc2`
  - `tty42`
  - `hdc2`
  - `md127`

- 36 Which of the following optical disk standards allows long filenames?
- ISO9660
  - Joliet
  - El Torito
  - Rock Ridge
  - FAT32
- 37 Which utility can you use to convert an `ext3` filesystem to an `ext2` filesystem?
- tune2fs
  - fsck
  - mke2fs
  - mkfs
  - dumpe2fs
- 38 Which service is responsible for assigning persistent device names?
- systemd-generators
  - user-generators
  - systemd-udev
  - rhel-loadmodules
  - ntp-units
- 39 Which command is used to view `systemd` logs?
- logctl
  - dmesg
  - cat /var/log/messages
  - journalctl
  - systemctl show-log
- 40 Which of the following commands will tell you how long a Linux system took to boot?
- systemctl
  - systemd-analyze
  - systemd-cgtop
  - journalctl
  - systemd-cgls
- 41 What Linux utility is used to check a filesystem for errors?
- sync
  - fdisk
  - fsck
  - chkdsk
  - dumpe2fs

- 42 Which of the following is an optical disk standard?
- a. NTFS
  - b. EXT226.
  - c. UDF
  - d. XFS
  - e. SYSFS
- 43 How can you add a PV to a VG?
- a. pvextend
  - b. pvcreate
  - c. vgextend
  - d. pvadd
  - e. vgadd
- 44 Which file contains detailed information on the installed Linux distribution?
- a. /proc/os-release
  - b. /etc/mdstat
  - c. /etc/default/grub
  - d. /etc/os-release
  - e. /proc/mdstat
- 45 Which filesystem has a maximum size of one exbibyte?
- a. xfs
  - b. ext4
  - c. ext2
  - d. ext3
  - e. FAT32
- 46 Which of the following is a native OS X filesystem?
- a. HFS
  - b. NTFS
  - c. ExFAT
  - d. LVM
  - e. XFS
- 47 Which command is used to take an LVM snapshot?
- a. pvs
  - b. vgs
  - c. lvs
  - d. lvcreate
  - e. lvextend

- 48 Which of the following files contains information about filesystems?
- a. /proc/mdstat
  - b. /etc/default/grub
  - c. /etc/mdadm.conf
  - d. /etc/grub2.cfg
  - e. /proc/mounts
- 49 Which of the following contains information about RAID arrays?
- a. /proc/mdstat
  - b. /etc/mdtab
  - c. /dev/mapper
  - d. /etc/mtab
  - e. /dev/pts
- 50 When Linux starts running out of RAM, it resorts to using \_\_\_\_ .
- a. resource handles
  - b. extra memory
  - c. device files
  - d. filesystem mounts
  - e. swap areas

**Linux II Midterm 1 16W**  
**Answer Section****MULTIPLE CHOICE**

1	ANS: B	PTS: 1
2	ANS: E	PTS: 1
3	ANS: C	PTS: 1
4	ANS: A	PTS: 1
5	ANS: C	PTS: 1
6	ANS: C	PTS: 1
7	ANS: A	PTS: 1
8	ANS: A	PTS: 1
9	ANS: B	PTS: 1
10	ANS: A	PTS: 1
11	ANS: A	PTS: 1
12	ANS: B	PTS: 1
13	ANS: B	PTS: 1
14	ANS: C	PTS: 1
15	ANS: C	PTS: 1
16	ANS: A	PTS: 1
17	ANS: C	PTS: 1
18	ANS: A	PTS: 1
19	ANS: E	PTS: 1
20	ANS: E	PTS: 1
21	ANS: E	PTS: 1
22	ANS: D	PTS: 1
23	ANS: C	PTS: 1
24	ANS: B	PTS: 1
25	ANS: D	PTS: 1
26	ANS: A	PTS: 1
27	ANS: D	PTS: 1
28	ANS: E	PTS: 1
29	ANS: B	PTS: 1
30	ANS: A	PTS: 1
31	ANS: A	PTS: 1
32	ANS: E	PTS: 1
33	ANS: C	PTS: 1

34	ANS: A	PTS: 1
35	ANS: B	PTS: 1
36	ANS: B	PTS: 1
37	ANS: A	PTS: 1
38	ANS: C	PTS: 1
39	ANS: D	PTS: 1
40	ANS: B	PTS: 1
41	ANS: C	PTS: 1
42	ANS: C	PTS: 1
43	ANS: C	PTS: 1
44	ANS: D	PTS: 1
45	ANS: B	PTS: 1
46	ANS: A	PTS: 1
47	ANS: D	PTS: 1
48	ANS: E	PTS: 1
49	ANS: A	PTS: 1
50	ANS: E	PTS: 1