

LPIC-2 Exam 201 v1.0 (201-450) - Full Access

Question 1 (Topic 1)



Which of the following commands erases the contents of the /dev/sdb3 partition?

- A. rm /dev/sdb3
- B. dd if=/dev/zero of=/dev/sdb3
- C. dd of=/dev/zero if=/dev/sdb3
- D. umount /dev/sdb3

Answer : B

Question 2 (Topic 1)



Which of the following files will be looked for and used by GNU make, if one of them exists, unless a different file is specified on the command line when trying to compile software from source code? (Choose two.)

- A. configure
- B. config.h.in
- C. makefile
- D. Makefile
- E. Makefile.in

Answer : CD

Question 3 (Topic 1)



FILL BLANK -

What command is used to send messages to all users currently logged in? (Specify ONLY the command without any path or parameters.)

Answer : wall

Question 4 (Topic 1)



Which of the following commands restores only those files containing lpi in their name from the archive lpifiles.tar.gz?

- A. tar xvzf lpifiles.tar.gz --wildcards "*/lpi*"
- B. tar xvzwf lpifiles.tar.gz "*/lpi*"
- C. tar -xvf lpifiles.tar.gz --deep "*/lpi*"
- D. tar -xvzf lpifiles.tar.gz --subdirs "*/lpi*"
- E. tar xvzf lpifiles.tar.gz --globbing "*/lpi*"

Answer : A

Question 5 (Topic 1)



A regular user has just run -

./configure && make && make install
to build and install a program. However, the installation fails. What could be done to install the program? (Choose two.)

- A. Install the binaries manually with suinstall
- B. Run make install with root privileges
- C. Do not run ./configure in order to maintain the default configuration for correct installation
- D. Rerun ./configure with a --prefix option where the user has permissions to write
- E. Run make install_local to install into /usr/local/

Answer : BD

Question 6 (Topic 1)



The following command has just been run successfully:

cd /opt; tar xvf /dev/nst0;

What will happen if the command sequence is run again?

- A. An error saying that there is no tape present is generated because the tape has been ejected after being used
- B. The contents of /opt will be restored again
- C. The entire contents of /opt will be replaced with the contents of the next file on the tape
- D. The contents of /opt will have additional content added from the next file on the tape

Answer : D

Question 7 (Topic 1)



FILL BLANK -

What command discards unused blocks on a mounted file system in order to support SSD devices? (Specify ONLY the command without any path or parameters.)

Answer : fstrim

Question 8 (Topic 1)



Which single command simulates a failed device within a RAID 5 array?

- A. mdadm --remove /dev/m0o /dev/sdd1
- B. mdadm --zero-superblock /dev/sdf3
- C. mdadm --force-fault /dev/m02 /dev/sde2
- D. mdadm --fail /dev/m0o /dev/sdc1
- E. mdadm /dev/m0o --offline /dev/sdc1

Answer : D

Question 9 (Topic 1)



What is the minimum number of disks required in a fully redundant RAID5 array?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

Answer : C

Question 10 (Topic 1)



A system has one hard disk and one CD writer which are both connected to SATA controllers. Which device represents the CD writer?

- A. /dev/hdb
- B. /dev/sdd
- C. /dev/sed1
- D. /dev/sro
- E. /dev/sr1

Answer : D

Question 11 (Topic 1)



What action should be performed after increasing the size of a logical volume?

- A. Run vgresize
- B. Increase the size of the filesystem used for the logical volume
- C. Run lvresize
- D. Remount the logical volume

Answer : B

Question 12 (Topic 1)



What information is found in the following excerpt from the file /proc/mstat? (Choose two.)

```

Personalities : [raid6] [raid5] [raid4]
md0 : active raid5 sdb1[3] (S) sdc1[7] sda1[4] (S) sdd1[6] sde1[5]
      1046528 blocks super 1.2 level 5, 512k chunk, algorithm 2 [3/2] [UU_]
      [=====>.....] recovery = 15.9% (83808/523264) finish=0.1min
      speed=71880K/sec

unused devices: <none>

```

- A. One of the disks in /dev/m do has failed and a spare disk is used to recreate full redundancy
B. The spare disk /dev/sda1 is used to restore full redundancy after the current recovery
C. The information [UU_] means, that the raid is missing one disk and is not fully redundant
D. The device is using version 1.2 metadata to allow LILO and GRUB Legacy to use /dev/m do as the boot partition. This would not have been necessary with GRUB2
E. The information [3/2] means that 3 RAID disks belong to the array and 2 disks are spare. Together they equal the number of available disks

Answer : AC

Question 13 (Topic 1)



FILL BLANK -
What command will remove a physical volume from a volume group? (Specify ONLY the command without any path or parameters.)

Answer : vgreduce

Question 14 (Topic 1)



Which command is used to make an exact copy, at a single point in time, of a logical volume while still allowing the original logical volume to be updated?

- A. lv clone
B. lv create
C. lvm2
D. lv snap
E. lv snapshot

Answer : B

Question 15 (Topic 1)



Which of the following commands creates a Btrfs subvolume named volume in /mnt?

- A. btrfs subvolume add ""n volume /mnt
B. btrfs create subvolume /mnt volume
C. btrfs-subvolume create /mnt/volume
D. btrfs subvolume new volume /mnt
E. btrfs subvolume create /mnt/volume

Answer : E

Question 16 (Topic 1)



FILL BLANK -
What keyword is missing in the following line from /etc/fstab in order to grant the user fred write access to the files in the vfat file system on /dev/sdb1:
/dev/sdb1 /mnt/usbflash vfat defaults, _____=fred, umask=022, o o
(Specify ONLY the option name without any path or parameters.)

Answer : uid

Question 17 (Topic 1)



Due to extreme system use, a Linux system requires some additional swap space. To initialize 5 GB of additional swap space, which combination of commands should be used?

- A. dd if=/dev/zero of=/tmp/swapfile bs=1024 count=5120000; mkswap /tmp/swapfile; mount /tmp/swapfile
B. dd if=/dev/zero of=/tmp/swapfile bs=1024 count=5120000; swapon /tmp/swapfile
C. dd if=/dev/zero of=/tmp/swapfile bs=1024 count=5120000; mkswap /tmp/swapfile; swapon /tmp/swapfile

D. touch -sG /tmp/swapfile; swapon /tmp/swapfile
E. mkswap /tmp/swapfile 512000; swapon /tmp/swapfile

Answer : C

Question 18 (Topic 1)



What is the purpose of a system mount unit?

- A. It is used by the command `systemd-mount` and allows users to mount partitions to mount points of their choice
- B. It is used only to mount network file systems to local mount points. It cannot be used for local media
- C. It is created by the command `systemd-fstab-generator` to integrate entries from `/etc/fstab` into the system boot process
- D. It is used by the command `mount` when using `systemctl mount` and `umount` file systems

Answer : A

Question 19 (Topic 1)



FILL BLANK -

What command ensures that the file systems are written to disk after a lot of write operations? (Specify ONLY the command without any path or parameters.)

Answer : sync

Question 20 (Topic 1)



What component of a system does smartd monitor?

- A. CPU
- B. RAM
- C. Hard drives
- D. Ethernet traffic

Answer : C

Question 21 (Topic 1)



How can the label root be added to the ext4 filesystem on `/dev/sda1`?

- A. relabel `/dev/sda1` root
- B. tune2fs ""L.root `/dev/sda1`
- C. echo "root" > `/proc/fs/sda1/label`
- D. labelfs --device `/dev/sda1` root

Answer : B

Question 22 (Topic 1)



Which sub command to cryptsetup shows information about an encrypted LUKS partition?

- A. luksDump
- B. luksInfo
- C. luksDebug
- D. luksLS
- E. luksShow

Answer : A

Question 23 (Topic 1)



Which of the following is a CD-ROM file system standard?

- A. OSI 9660
- B. ISO 9660
- C. SRoFS

Answer : B

Question 24 (Topic 1)



Which of the following init systems comes along with an own UEFI boot loader?

- A. systemd
- B. SysVinit
- C. Upstart
- D. OpenRC
- E. launchd

Answer : A

Question 25 (Topic 1)



What effect does the "-f" option to the update-rc.d command have on files in the /etc/rcX.d/ and /etc/init.d/ directories?

- A. It will force the removal of the symlinks in /etc/rcX.d/ even when the links are read only
- B. It will remove both the symlinks in /etc/rcX.d/ and the init script in /etc/init.d/
- C. It will remove the init script in /etc/init.d/ and the symlinks in /etc/rcX.d/ and update the package information of installed files
- D. It will force the removal of symlinks in /etc/rcX.d/ even if the corresponding init script still exists in /etc/init.d/

Answer : D

Question 26 (Topic 1)



Which command is used to install a GRUB boot loader into the master boot record?

- A. grub-install
- B. grub-mkconfig
- C. grub-install-mbr
- D. grub-glue-mbr
- E. grub-mbr-setup

Answer : A

Question 27 (Topic 1)



If the file containing the Linux kernel is deleted, what happens when the system boots?

- A. The system starts normally since the bootloader copies the kernel to the master boot record of the hard disk
- B. Instead of the kernel, the initramfs is loaded and instructed to mount the root filesystem and reinstall the kernel from the original package or from source
- C. The bootloader mounts the root filesystem read-only and launches /bin/sh directly in order to allow the administrator to reinstall the kernel
- D. Without a kernel system cannot boot and, depending on the bootloader, an error is displayed

Answer : D

Question 28 (Topic 1)



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Which directory contains system-specific system unit files? (Specify the full path to the directory.)

Answer : /lib/systemd/system

Question 29 (Topic 1)



A Linux server running systemd booted to rescue.target for maintenance. Which commands are used to restore the server to its usual target? (Choose two.)

- A. telinit 0
- B. systemctl default

- C. sync
- D. systemctl emergency
- E. systemctl reboot

Answer : AB

Question 30 (Topic 1)



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Which is the main configuration file for the System V init process? (Specify the full name of the file, including path.)

Answer : /etc/inittab

Question 31 (Topic 1)



What is the purpose of an initramfs during the Linux system start?

- A. It loads required modules and starts subsystems like LVM to make the root file system accessible to the kernel
- B. It moves the kernel from normal system memory to initram memory to speed up kernel access
- C. It copies the root file system's content to RAM to speed up the system and reduce writes to disk
- D. It creates a ram disk to store volatile data for directories like /tmp to reduce writes to disk

Answer : A

Question 32 (Topic 1)



Which of the following is a userspace application used to modify EFI entries on a Linux system?

- A. efieditor
- B. configefi
- C. efimanager
- D. efibootmgr
- E. efibootedit

Answer : D

Question 33 (Topic 1)



In which directory tree are files modified when changing kernel parameters using the command sysctl?

- A. /sys/kernel/
- B. /proc/kernel/
- C. /proc/sys/
- D. /lib/sys/
- E. /sys/proc/

Answer : C

Question 34 (Topic 1)



What is the purpose of the command udevadm monitor?

- A. It listens to kernel events produced by a udev rule and prints information to the console
- B. It monitors the /dev/ directory for new devices
- C. It monitors the udev process and prints performance statistics to the console
- D. It communicates with D-Bus to setup new devices

Answer : A

Question 35 (Topic 1)



How is the source code for the main Linux kernel modules distributed?

- A. It is included with the Linux kernel source code
- B. The kernel modules are downloaded on demand as they are used during compilation

- C. The kernel modules have their own release cycle and can be maintained separately from the Linux kernel source
D. It is provided as a separate download alongside the Linux kernel source code for the same version

Answer : A

Question 36 (Topic 1)



After the downloading patch-4.6.4.xz from <http://kernel.org>, what are the next steps to prepare the build of a version 4.6.4 Linux kernel? (Choose two.)

- A. Uncompress the file and move the resulting directory to /usr/src/linux
- B. Apply the patch file to the kernel source directory containing kernel version 4.6.0
- C. Apply the patch file to the kernel source directory containing kernel version 4.6.3
- D. Uncompress the file using xz to get the uncompressed patch file
- E. Use patch to apply the uncompressed patch file to the source directory of any previous kernel version

Answer : DE

Question 37 (Topic 1)



After manually compiling and installing a new kernel, what has to be done regarding the initramfs?

- A. To initramfs is independent of the kernel and should not be modified unless the hardware configuration of the machine has changed
- B. Since the initramfs contains kernel modules, a new initramfs must be built for the new kernel
- C. During the compilation of the Linux kernel, a new initramfs is built automatically. The new initramfs only needs to be installed
- D. The system should be restarted since the initramfs reconfigures itself for the new kernel during the startup of the system

Answer : C

Question 38 (Topic 1)



Which of the following commands displays the physical path of the kernel module named dummy?

- A. modprobe "i dummy
- B. modinfo "n dummy
- C. modpath "v dummy
- D. depmod "n dummy
- E. modshow "p dummy

Answer : A

Question 39 (Topic 1)



Which of the following parameters instructs the kernel at boot time to use only one of the available processors?

- A. maxcpus=1
- B. usecpus=1
- C. smcpus=1
- D. vcpumx=1
- E. vmxcpus=1

Answer : A

Question 40 (Topic 1)



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After installation of a self-compiled kernel, modules that need to be loaded cannot be found. What make target was likely missed while installing the kernel? (Specify ONLY the make target without any command or parameters.)

Answer : modules_install

Question 41 (Topic 1)



On a server running the 3.4.50-11 Linux kernel, which file in the /boot directory contains the kernel configuration parameters?

- A. config-linux-3.4.50-11
- B. config-3.4.50-11
- C. system-3.4.50-11
- D. vmlinuz-3.4.50-11
- E. rc.config-3.4.50-11

Answer : B

Question 42 (Topic 1)



Which of the following commands by default provides the PIDs of the processes sorted by which are using the most CPU cycles on the Linux system?

- A. top
- B. uptime
- C. ps aux
- D. vmstat
- E. free -m

Answer : A

Question 43 (Topic 1)



In the output of sar ""b, what does tps stand for?

- A. Terrabyte per second
- B. Traffic per second
- C. Transfers per second
- D. Total data per second
- E. Terrabit per second

Answer : C

Question 44 (Topic 1)



In the following output of the command uptime, the load averages represent the system load averages for what time frames?
12:10:05 up 18 days, 19:00, 2 users, load average: 0.47, 24.71, 35.31

- A. 1, 5 and 15 minutes
- B. 1, 15 and 30 minutes
- C. 5, 20 and 25 seconds
- D. 15, 30 and 60 minutes
- E. 15, 45 and 90 seconds

Answer : A

Question 45 (Topic 1)



Which of the following properties should be recorded in order to monitor the quality of a network link? (Choose two.)

- A. Bandwidth in both directions
- B. Number of nodes using the link
- C. Effective Latency
- D. Number of IPv4 and IPv6 packets
- E. Number of used TCP ports

Answer : AC

Question 46 (Topic 1)



Which command reports information on memory usage, paging and block input/output?

- A. free
- B. memshow
- C. lsof
- D. pidof
- E. vmstat

Answer : E

Question 47 (Topic 1)



In order to gather performance data with sar over a longer period of time, which command should be run periodically from cron?

- A. sa1
- B. sarmon
- C. sarec
- D. sadf
- E. sarcron

Answer : A

Question 48 (Topic 1)



Which commands below are useful to collect data about remote filesystem connections? (Choose two.)

- A. pidstat
- B. nfsiostat
- C. sadf
- D. cfsiostat
- E. fsiostat

Answer : BD

Question 49 (Topic 1)



A web application server contains 64 GB of RAM and two swap partitions on normal hard disk drives, each with a size of 64 GB. Within the last month, the average number of user sessions on this server has grown by 20 percent. At the same time, the average usage of RAM increased from 65 to 75 percent, while the swap space is almost not used at all. It is expected that the number of user sessions will continue to increase by about 15 to 20 percent each month. Which of the following reactions would be appropriate in response to these observations? (Choose two.)

- A. Delay any hardware upgrade until there is a significant consumption of swap space to ensure an efficient usage of the available hardware
- B. Create a RAID 1 device on the two swap partitions to avoid data loss in case swap space has to be used in the future
- C. Consider the installation of an additional application server to distribute the load if the expected growth continues over several months
- D. Move the web application's scripts and content to a ram disk in order to ensure fast access and to avoid the need for swap space
- E. Update the hardware to increase the amount of available RAM to avoid using swap space

Answer : CE

Question 50 (Topic 1)



Which of the following configuration files are used by tcpwrapper?

- A. /etc/tcpd.allow and /etc/tcpd.deny
- B. /etc/tcpwrapper.allow and /etc/tcpwrapper.deny
- C. /etc/hosts.allow and /etc/hosts.deny
- D. /etc/access.allow and /etc/access.deny
- E. /etc/service.allow and /etc/service.deny

Answer : C

Question 51 (Topic 1)



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Which program lists information about files and network connections opened by processes? (Specify ONLY the command without any path or parameters.)

Answer : lsof

Question 52 (Topic 1)



A network client has an Ethernet interface (eth0) configured with an IP address in the subnet 192.168.0.0/24. This subnet has a router, with the IP address 192.168.0.1, that connects this subnet to the Internet. Which of the following commands can be used on the client to enable it to use the router as its default gateway? (Choose two.)

- A. route add default gw 192.168.0.1 eth0
- B. ifconfig eth0 defaultroute 192.168.0.1

- C. ip route add default via 192.168.0.1
D. echo defaultroute 192.168.0.1 >/etc/resolv.conf
E. route add defaultgw=192.168.0.1 if=eth0

Answer : AC

Question 53 (Topic 1)



FILL BLANK -
The users of the local network complain that name resolution is not fast enough. Which command shows the time taken to resolve a DNS query? (Specify the command without path.)

Answer : dig

Question 54 (Topic 1)



Which of the filter keywords below could be used in the following command: tcpdump "i eth0 _____ 203.0.113.8
(Choose three.)

- A. host
- B. ip
- C. src
- D. dst
- E. ipv6

Answer : ACD

Question 55 (Topic 1)



Which of the following commands adds a static IPv6 address to the network interface eth0?

- A. ip add addr 2001:db8::1337/64 dev eth0
- B. ip -6 add addr 2001:db8::1337/64 dev eth0
- C. ip addr add 2001:db8::1337/64 dev eth0
- D. ip -6 addr add new 2001:db8::1337/64 dev eth0
- E. ip addr add -6 2001:db8::1337/64 dev eth0

Answer : D

Question 56 (Topic 1)



On a Linux node with multiple active network interfaces, each having a default route to the Internet, which default route is preferred?

- A. The default route with the highest metric value
- B. The default route with the highest MTU value
- C. The default route with the lowest TTL value
- D. The default route with the highest TTL value
- E. The default route with the lowest metric value

Answer : E

Question 57 (Topic 1)



The following is an excerpt from the output of tcpdump "n!l eth1:

13:03:17.277327 IP 192.168.123.5.1065 > 192.168.5.112.21: Flags [.], ack 1 (truncated)
13:03:17.598624 IP 192.168.5.112.21 > 192.168.123.5.1065: Flags [P.], seq (truncated)

Which network service or protocol was used?

- A. FTP
- B. HTTP
- C. SSH
- D. DNS
- E. DHCP

Answer : A

Question 58 (Topic 1) 

What should be done to ensure a client machine uses the recursive nameserver running on the IP address 192.168.0.1? (Choose two.)

- A. Add nameserver 192.168.0.1 to /etc/resolv.conf
- B. Run route add nameserver 192.168.0.1
- C. Run ifconfig eth0 nameserver 192.168.0.1
- D. Ensure that the dns service is listed in the hosts entry in the /etc/nsswitch.conf file
- E. Run bind add nameserver 192.168.0.1

Answer : AD

Question 59 (Topic 1) 

Which of the following commands shows capabilities and usable frequencies for the wireless interface wlano?

- A. iw phy phy0 info
- B. iw dev wlano info
- C. iw dev wlano show
- D. iw phy wlano show
- E. iw phy0 show

Answer : A

Question 60 (Topic 1) 

Which of the following commands lists IPv4 addresses and MAC addresses of network nodes that the local system has seen on its directly connected IP networks?

- A. arp
- B. ifconfig
- C. ipadm
- D. iwlist

Answer : A