

**Section 7 Lab**  
**LPIC-1, Exam 2 (102-500)**

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**Recommended Linux Distributions for this exercise:**

- CentOS version 7
- Ubuntu Desktop 18.04LTS

**Note:** For a successful lab session, it is assumed you are using the recommended Linux distribution(s) and the recommended version. Recall that these Linux distribution(s) are recommended, because they most closely match what is covered on the certification exam. It is also assumed your Linux systems are booted. In addition, it is assumed that you can log into the system as a standard user as well as either the root account or a user with super user privileges.

Follow these actions to explore concepts and commands covered in this section (but please feel free to explore as much as you want.):

1. Log into either your Ubuntu or CentOS distro tty3 terminal, using the username and password you created when you installed the system.
2. Use the ICMP protocol to ping another system, by typing **ping -c 5 www.google.com** and pressing Enter. (If you get 100% packet loss, try a different system/site. The site may be blocked in your area of the world. You may also not have a functioning network connection to the Internet.)
3. View the addresses assigned to the network interface(s) on your system, by typing **ip addr show** and pressing Enter. Use this information to answer the questions in the following steps.
4. Does your system use any IPv4 addresses? If yes, then record the addresses. If no, then skip to step 9.
5. From the previous addresses you recorded, what is the loopback address? Record your answer and the address.
6. From the addresses recorded in step #4, are any of the addresses in the APIPA range of addresses? Record your answer and the address.
7. From the addresses recorded in step #4, are any of the addresses in a private range of IPv4 addresses? Record your answer and the address.
8. From the addresses recorded in step #4, what are the CIDR notations used on the IPv4 addresses? Record your answer and the address.
9. From the information displayed in step #3, does your system use any IPv6 addresses? If yes, then record the addresses. If no, then skip to step #12.
10. From the previous addresses you recorded, what is the loopback address? Record your answer and the address.
11. From the addresses recorded in step #4, what are the CIDR notations used on the IPv4 addresses? Record your answer and the address.

12. Look at the well-known ports document on your system, by typing **less /etc/services** and pressing Enter. Look through the various well-known ports file (it includes other port listings too). When you are done, press the **q** key to quit viewing the file.