

Unit 04_010 — Overview

1. What is "Unit Record Equipment, and what does it have to do with pipes?"

Unit 04_020 A — Basic Redirection

2. What is `\dev\stdin` ? (Sometimes it is just called `stdin`)
3. What is `\dev\stdout` or `stdout` ?
4. What is `\dev\stdout` or `stderr` ?
5. Which of the two devices often send data to the same location?

Unit 04_020 B — Redirecting stdout

6. What symbol is used to redirect stdout to a file? ____
7. What command would output the results of the `fortune` command to a file named `quote.txt`?
8. The `cat` command is usually followed by the name of a text file. What happens if no file name is given and the output is redirected to a file?
9. If you are using the `cat` command to create a file, how do you signal the end-of-file?

Unit 04_020 C — Redirecting stderr

10. What symbol is used to redirect stderr to a file? ____
11. Where would you redirect the output of stderr if you do not want to create a file?

12. Does redirection work from right to left or left to right?
13. Write the Bash equivalent of the following command:

```
find / -name moby.txt > located.txt 2>&1
```

Unit 04_020 D — Pipes

14. What symbol is used to redirect stdout from one command as input to the following command? ____
15. Write a pipe statement that is not used in the video (make one up and try it out on woz.)

Unit 04_020 E — Appending and Input

16. What symbol is used to append output to the end of a file? ____
17. What symbol is used to redirect stdin from a file? ____
18. Comment (not a question) Input from a file is extremely useful when getting data into scripts. However, I don't find that I use < very much in situations other than using custom scripts
19. Assume there is a file called "data.txt" and an command called "tabulate.sh." Write a single Bash command that uses data.txt as input to tabulate and which sends the output to a new text file called "results.txt"
20. Now assume there is another file called "moreData.txt". Write the command that uses moreData.txt as input to tabulate.sh and **appends** it to the results.txt file from the previous question. (This was not covered in the video, but figure it out.)

Unit 04_020 F — Chaining

21. What symbol is used to allow a command to continue onto the next line? ____
22. What is the difference between a pipe and a semicolon between commands?

23. What is the difference between a ; and && when placed between commands?

24. What is the difference between putting && and || between commands?

Unit 04_023 Number Systems Interlude

Comment: If you know number systems like decimal and hexadecimal you may skip this section.

Unit 04_025

25. Would /dev/null be used more for input or output? Explain your answer.

26. Would /dev/zero be used more for input or output? Explain your answer.

27. Would /dev/random be used more for input or output? Explain your answer.

28. What s the difference between /dev/random and /dev/urandom? Suggest one use for where each of them

29. How is \$RANDOM different than /dev/random and /dev/urandom?

30. Explain what each of the following commands or files does.

- `yes`
- `history`
- `/usr/share/dict/words`

