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CS2210
09/08/23
Lab 00

What takes place when formatting a microSD card (or any drive)?

- When formatting a drive, all data on the drive is erased. The file system can also be changed at this point in time. Partitions can also be created. [Source](#)

What is a file system? Provide examples of two along with a comparison of them. What file system does Windows 11 use? macOS?

- A file system is the way that the files are named and how they are placed in storage. File allocation table (FAT) and Global file system (GFS) are two examples. FAT is supported by Windows, while GFS is supported by Linux (and macOS). FAT lacks performance compared to GFS. Windows 10 uses NTFS while macOS uses APFS. [Source](#)

Which file system does Raspberry Pi OS use?

- Raspberry Pi does not use a specific file system, it uses a standard created by Linux called Filesystem Hierarchy Standard (FHS). The SD card we used was formatted to FAT. [Source](#)

What is a partition? Can you have multiple partitions on the same storage device with different file systems on each partition?

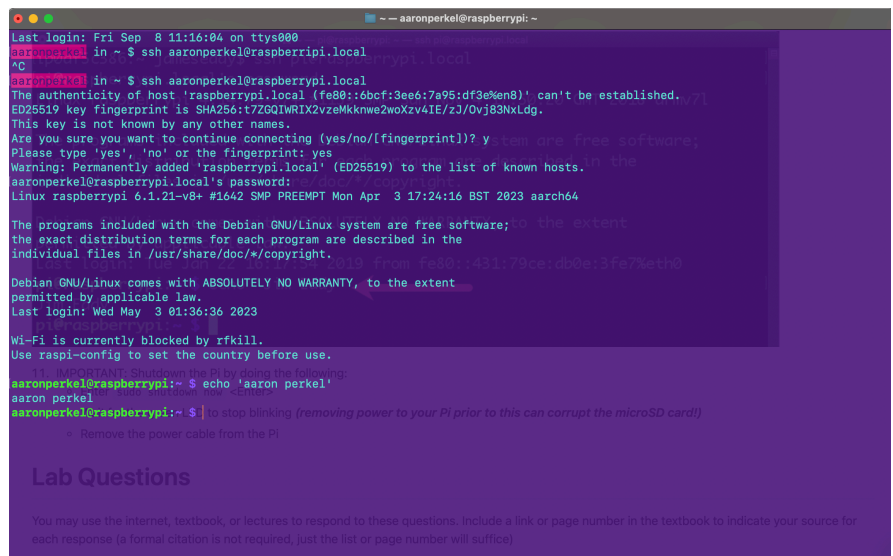
- A partition is a separate segmented part of a storage drive. Yes, you can. [Source](#)

What information needs to exist on a partition for you to be able to "boot" an operating system?

- The system files used to start the operating system need to exist on the boot partition. [Source](#)

What is SSH? Describe.

- SSH stands for Secure Shell is a network protocol that allows two computers to communicate. The "Secure" part of SSH indicates that the communication between devices is encrypted. This makes it useful over shared or otherwise insecure networks. [Source](#)



```
last login: Fri Sep 8 11:16:04 on ttys000
aaronperkel in ~ $ ssh aaronperkel@raspberrypi.local
aaronperkel in ~ $ ssh aaronperkel@raspberrypi.local
Warning: Permanently added 'raspberrypi.local' (ED25519) to the list of known hosts.
aaronperkel@raspberrypi.local's password:
Linux raspberrypi 6.1.21-v8+ #1642 SMP PREEMPT Mon Apr 3 17:24:16 BST 2023 aarch64

The programs included with the Debian GNU/Linux system are free software; to the extent
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed May 3 01:36:36 2023
aaronperkel@raspberrypi:~$ echo 'aaron perkel'
aaron perkel
aaronperkel@raspberrypi:~$
```

Lab Questions

You may use the internet, textbook, or lectures to respond to these questions. Include a link or page number in the textbook to indicate your source for each response (a formal citation is not required, just the list or page number will suffice)

Screenshot from Step 10