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Additional Bonus (5 pts)

Question:

Why MemFree is not equal to MemAvailable? What is different between these two values?

Answer:

$\text{MemAvailable} \approx \text{MemFree} + \text{Buffers} + \text{Cached}$

- **MemFree (System):**
The amount of physical RAM, in kilobytes, left unused by the system.
- **MemAvailable (Application):**
An estimate of how much memory is available for starting new applications, without swapping. Calculated from MemFree, SReclaimable, the size of the file LRU lists, and the low watermarks in each zone. The estimate takes into account that the system needs some page cache to function well, and that not all reclaimable slab will be reclaimable, due to items being in use. The impact of those factors will vary from system to system.