Lesson 12 FAQs

Q: Is there any way to gain the efficiency of the HashMap and still produce sequenced results?

A: There actually is a way to do both, but it makes getting the output in sequence less efficient. If you expect an application to have a vast majority of its accesses be by key, with only a few sorted requests, you could use a HashMap to store the data and provide efficient retrieval.

Getting the output in sequence would require dumping the entire collection into a list that could be sorted, then sorting to get the data in sequence. While that may sound like a lot of work, that's exactly what one company I worked with did with one of its most used sets of data involving several million records. It was stored in the equivalent of a large HashMap on disks and accessed tens of thousands of times every day in the company's online systems. Then, every night, the entire collection got dumped to a magnetic tape and sorted so that reports could be prepared with the data in sequence. So even though it might not be the most efficient way to get sorted data, other requirements like online system performance may dictate the most efficient storage possible for access by key.