

1 Radix Sort

- (a) I don't think there's anything else that will find much benefit in using radix sort because there aren't a lot of concepts that have a hierarchical bucket form that can be organised. And like I said on the exam, even with objects with an implied hierarchy say like playing cards, I think the usage of radix sort unnecessary. For one, we already have an idea of the range of numbers that might exist in that data set. If we're using buckets, I can understand maybe wanting to organise into said buckets, for example, group all balls by colour, but again we're not sorting; just containerising.
- (b) I guess MSD would be more useful comparatively for the odd digit length compared to the even lengths that are shorter by one, (for example, 7 more efficient than 6 but a negligible difference with 8. This is because while we might be able to start with a more "meaningful" digit, we are stilling having to preform with LSD anyways, and I guess we might preserve a single loop.

2 Implementing Delete-Min

In Submitted File

3 Checkout Simulator

In Submitted File