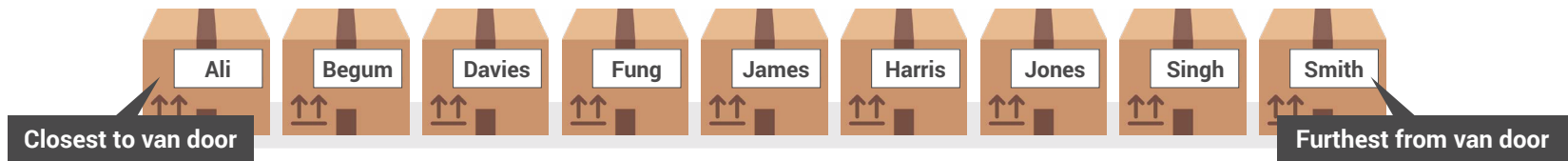


How to find the correct parcel to deliver



Background

- Luca is a delivery driver who has decided to position the parcels he has to deliver in alphabetical order inside his van.
- He thinks this will be a good idea as the people with a surname starting with A will be near the opening doors.
- When he arrives at a recipients' address, he uses a linear search to find the correct parcel to deliver.



Your task

Answer these questions

- Explain how the linear search works for Luca's first delivery.
- How many comparisons would Luca have to make to find the parcel for Singh?
- How many comparisons would Luca have to make to find the parcel for James?
- What would be the best-case scenario?
- What would be the worst-case scenario?
- What are the advantages and disadvantages of this parcel system in Luca's van?
- If the parcels were not in alphabetical order how would this affect Luca's linear search?
- How could a binary search improve searching for a parcel?