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Assignment03

1.) Explain why this is required within your submission document. Hint: it's related to the nature of a "bag" vs. a "bag with receipts" and underlying data structure you use.

A.)

- A Bag is an unordered collection where elements can be added or removed without maintaining an index-based reference.
- A Bag with receipts functions more like a collection where you get a "receipt" (an index or reference) upon insertion, allowing elements to be retrieved later based on that reference.

B.)

- `std::vector<T>` is index-based, meaning it supports retrieving elements by position efficiently. This makes it well-suited for a Bag with receipts, where each inserted element has an associated index for lookup.
- `List<T>` is optimized for insertion and removal, making it a more natural fit for a Bag, which does not rely on index-based access.