**Understanding Array Representation:**

* **Array Representation in Memory:**
  + Arrays are stored in contiguous memory locations.
  + When you declare an array, memory is allocated for its elements based on the specified size.
  + Each element is accessed using an index (position) within the array.
* **Advantages of Arrays:**
  + Efficient access to elements: Arrays allow direct and fast access to any element by index.
  + Better cache locality: Elements in an array are stored close together, improving performance.
  + Represent multiple data items: Arrays combine data of the same type under a single name.

**Analysis:**

* **Time Complexity:**
  + Adding an employee: O(1) (amortized, assuming array resizing is rare).
  + Searching for an employee: O(n) (linear search through the array).
  + Traversing all employees: O(n).
  + Deleting an employee: O(n) (search + deletion).
* **Limitations of Arrays:**
  + Fixed size: Arrays have a predetermined size at creation.
  + Inefficient insertion/deletion: Inserting or deleting elements requires shifting other elements.
  + Lack of flexibility: Arrays cannot dynamically grow or shrink.