1. **Explain the concept of recursion and how it can simplify certain problems.**

* Recursion is a programming technique where a function calls itself to solve smaller instances of a problem. It is useful when the problem has a repeating substructure (e.g., Fibonacci sequence, factorial).

1. **Discuss the time complexity of your recursive algorithm.**

* The time complexity is O(n).

1. **Explain how to optimize the recursive solution to avoid excessive computation.**

* For larger n, recursion can lead to stack overflow. We can use iteration to avoid it.