1. To determine the performance of an algorithm we check
2. Time complexity
3. Space Complexity
4. What is Time Complexity?

* The amount of time taken by an algorithm to run
* The inputs processed by an algorithm helps in determining the time complexity

1. What is Space Complexity?

* The amount of memory or space taken by algorithms to run.
* The memory required to process the input by an algorithm helps in determining the space complexity.

1. What is Asymptotic Analysis?

* Asymptotic analysis helps in evaluating performance of an algorithm in terms of input size and its increase.
* Using asymptotic analysis, we don’t measure actual running time of algorithms
* It helps in determining how time and space taken by an algorithm increases with input size.

1. What are Asymptotic Notations?

* Asymptotic Notations are the mathematical tools used to describe the running time of an algorithm in terms of input size.
* Asymptotic Notations help us in determining
  + Best Case
  + Average Case
  + Worst Case

1. Types of Asymptotic Notations
2. Omega (Ω) Notation
3. Big O (O) Notation
4. Theta (Θ) Notation