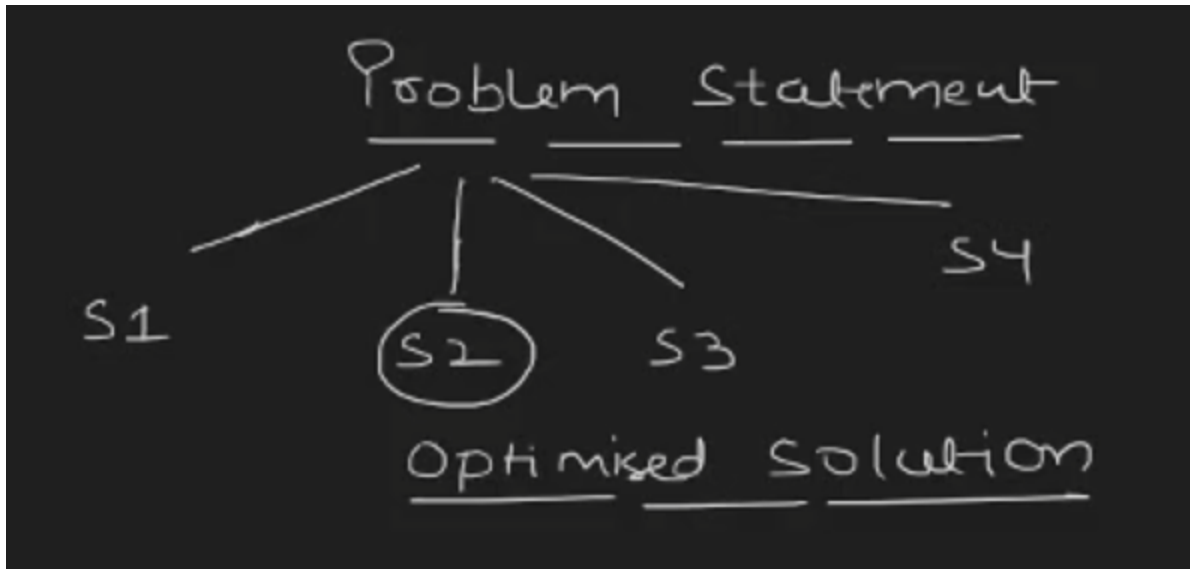# Analysis in Algorithms

We need optimised solutions for a given problem statement.

Two main Factors:

1) Time Complexity

2) Space Complexity

Two factors :-

1) Time complexity
   (Minimum)

2) Space complexity
   (Minimum)

Asymptotic
Notation

Which is more Important?

Tradeoff b/w time & space
Time complexity is more
Powerful than space complexity.

TIME COMPLEXITY

Types of Analysis

1. Apostiary Analysis
2. Apriori Analysis

Apostiary Analysis : Relative Analysis

- Dependent on the language of compiler and type of hardware.

- Exact Answers

- Different answers

- Program running fast because of the type of hardware.

Apriori Analysis : Absolute Analysis(Important)

- Independent of the language of compiler and the type of heardware

- Approximate answers

- Same answers

- Program running fast because of some good logic.