**What are the errors that arises while implementing the algorithm?**

The errors that arises while implementing algorithms are

Completeness:An algorithm is said to be complete if it definitely finds solution to the problem, if exist.

Time Complexity:How long (worst or average case) does it take to find a solution? Usually measured in terms of thenumber of nodes expanded

Space Complexity:How much space is used by the algorithm? Usually measured in terms of the maximum number of nodes in memory at a time

Optimality/Admissibility:If a solution is found, is it guaranteed to be an optimal one? For example, is it the one with minimum cost?

**What is API? Why it is important in effective programming? Explain the implementation procedure of API in programming.**

The computing interface which defines interactions between multiple software intermediaries is known as API also known as Application Programming interface.

API is important in order to write effective program because

Computers can manage the work rather than people while using API

API can access app components which makes the delivery of services and information more flexible

With an API an application layer can be created which can be used to distribute information and services to new audiences which can be personalized to create custom user experiences.

When access is provided to an API the content generated can be published automatically and is available for every channel, it allows it to be shared and distributes more easily