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

The errors that arises while implementing the algorithm are:

**Run Time Error**

It is a kind of error that occurs during the execution of the program.

**For example:**

A program trying to divide any number by zero will produce a run time error.

**Syntax error**

An error that occurs in the compiler while writing a program if the program is not written according to the rule of programming language.

**For example:**

In python programming language,

Correct syntax: print ("Hello FA")

Incorrect syntax: display ("hello FA']

Incorrect syntax will produce a syntax error.

**Logical error**

This kinds of error occurs because of the bad thinking and reasoning while converting algorithm into program. This types of error are not detected by the compiler and will yield false outcome.

**For instance:**

Creating an algorithm of adding salary and writing a program of subtracting salary.

Which produces logical error.

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

API stands for **Application Programming Interface**. It is a toolset that programmers can use to help them create software. An API specifies how software components should interact.

It is important in effective programming because when we are creating an application from scratch we don't have to do everything instead we can contract out certain responsibilities by using already created pieces that do the job better.

**The implementation procedure of API in programming.**

* Get the API key which is unique string of letters and numbers to use when accessing the API.
* Second easiest way of using API is by finding an HTTP client online like REST-Client, Postman, or Paw and get API key to access existing APIs.
* The next best way of using API is by building a URL from existing API documentation.