

## What is an API?

API stands for **A**pplication **P**rogramming **I**nterface, which specifies how one component should interact with the other. It consists of a set of routines, protocols and tools for building the software applications.

## What is an API Testing?

The API Testing is performed for the system, which has a collection of API that ought to be tested. During Testing, a test of following things is looked at.

- Exploring boundary conditions and ensuring that the test harness varies parameters of the API calls in ways that verify functionality and expose failures.
- Generating more value added parameter combinations to verify the calls with two or more parameters.
- Verifying the behaviour of the API which is considering the external environment conditions such as files, peripheral devices, and so forth.
- Verifying the Sequence of API calls and check if the API's produce useful results from successive calls.

## Common Tests performed on API's

- Return Value based on input condition - The return value from the API's are checked based on the input condition.
- Verify if the API's does not return anything.
- Verify if the API triggers some other event or calls another API. The Events output should be tracked and verified.
- Verify if the API is updating any data structure.