What is REST API ?

REST (Representational State Transfer) API is an architectural style that defines a set of constraints to be used for creating networked applications. It relies on HTTP protocol and provides methods for HTTP verbs, such as GET, POST, PUT, DELETE, etc.

The REST API relies on the concept of "resources", which are identified by URIs (Uniform Resource Identifiers) and can be accessed using standard HTTP methods.
REST API's have several advantages, including:

Statelessness: Each request from a client to a server must contain all the information needed to understand and process the request. The server cannot store any information about the client's state between requests.

Client-Server: The client-server model separates the user interface concerns from the data storage concerns, resulting in systems that are more scalable and maintainable. Cacheable: The REST API can use the HTTP cache to cache server responses. This can improve the performance of the system by reducing the number of requests to the server.

Layered System: The architecture of a REST API allows it to be composed of multiple layers, each of which is independent of the others. This enables greater flexibility in the system design and allows for the implementation of additional features, such as load balancing and security.

RESTful (representational state transfer) API (application programming interface) DLs (description languages) are formal languages designed to provide a structured description of a RESTful web API that is useful both to a human and for automated machine processing.

API description languages are sometimes called interface description languages (IDLs). The structured description might be used to generate documentation for human programmers; such documentation may be easier to read than free-form documentation, since all documentation generated by the same tool follows the same formatting conventions.