DNS Look-up

Domain Name System also known as DNS is a phonebook of the internet,
which is related to the domain name. DNS translates the domain names to the respective IP address so that browsers can access the resources.
Python provides a DNS module which is used to handle this translation of domain names to IP addresses.

Finding Records
The **dnspython** module provides **dns.resolver()** helps to find out various records of a domain name. The function takes **two important parameters**, **the domain name, and the record type**. Some of the record types with examples are listed below :

1)A Record:
It is a fundamental type of DNS record,
Here A stands for address. It shows the IP address of the domain
Output->
A Record: `34.218.62.116 -> a demo value`

2)AAAA Record: This is an IP address record, used to find the IP of the computer connected to the domain. It is conceptually similar to A record but specifies only the IPv6 address of the server rather than IPv4.

3)PTR Record: PTR stands for pointer record, used to translate IP addresses to the domain name or hostname. It is used to reverse the DNS lookup.

4)**NS Record:** Nameserver(NS) record gives information that which server is authoritative for the given domain i.e. which server has the actual DNS records. Multiple NS records are possible for a domain including the primary and the backup name servers.
5)**MX Records:** MX stands for Mail Exchanger record, which is a resource record that specifies the mail server which is responsible for accepting emails on behalf of the domain. It has preference values according to the prioritizing mail if multiple mail servers are present for load balancing and redundancy.
6)**SOA Records:** SOA stands for Start of Authority records, which is a type of resource record that contains information regarding the administration of the zone especially related to zone transfers defined by the zone administrator.

7)**CNAME Record:** CNAME stands for Canonical Name record, which is used in mapping the domain name as an alias for the other domain. It always points to another domain and never directly points to an IP.
8)**TXT Record:** These records contain the text information of the sources which are outside of the domain. TXT records can be used for various purposes like google use them to verify the domain ownership and to ensure email security.