README

DNS Resolver

<u>Language used</u>: Python3
<u>External Libraries used</u>: dnspython

<u>Instructions on how to run the program</u>:
Using the command prompt, the program resolves the domain name specified as a command line argument.
In the program's directory, type: mydig.py, followed by a space and the domain name you want to resolve.
Example with the domain name, "www.cnn.com"
`>> mydig.py` www.cnn.com

Expected output:
```
QUESTION SECTION:
www.cnn.com. IN A

ANSWER SECTION:
turner-tls.map.fastly.net. 30 IN A 199.232.37.67

QUERY TIME: 332.081 msec
WHEN: 2020-02-24 00:35:53.869027
```

Implemented a DNS resolver, "dig" -like tool.
The "resolver resolves this query by first contacting the root server, the top-level domain, all the way until the authoritative name server."
Uses the dnspython library to resolve a single iterative DNS query.
Uses root server, "a.root-servers.net" 198.41.0.4 (https://www.iana.org/domains/root/servers).
Resolves the "A" record for the query.
Program also resolves CNAME with an additional resolution.
Program assumes valid domain names.
2 seconds to wait before the query times out (dns.query.udp).
Prints output.