Работа с nslookup.

1) Просмотреть A-записи для доменов mail.ru, geekbrains.ru, vk.com. Сколько IP адресов серверов у этих ресурсов? Какой из них отвечает при выполнении команды ping на mail.ru, geekbrains.ru, vk.com соответственно?

```
C:\Users\Aggy>nslookup mail.ru
Server:  UnKnown
Address:  192.168.1.254

Non-authoritative answer:
Name:    mail.ru
Addresses:  2a00:1148:db00:0:b0b0::1
            94.100.180.200
            94.100.180.201
            217.69.139.200
            217.69.139.202
```

mail.ru - 4 IP адреса и один ipv6 адрес

```
C:\Users\Aggy>ping mail.ru

Pinging mail.ru [217.69.139.202] with 32 bytes of data:
Reply from 217.69.139.202: bytes=32 time=125ms TTL=51
Reply from 217.69.139.202: bytes=32 time=125ms TTL=51
Reply from 217.69.139.202: bytes=32 time=125ms TTL=51
Reply from 217.69.139.202: bytes=32 time=124ms TTL=51

Ping statistics for 217.69.139.202:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 124ms, Maximum = 125ms, Average = 124ms
```

На ping отвечает адрес 217.69.139.202

```
C:\Users\Aggy>nslookup vk.com
Server:  UnKnown
Address:  192.168.1.254

Non-authoritative answer:
Name:    vk.com
Addresses:  87.240.190.67
            87.240.137.158
            87.240.139.194
            93.186.225.208
            87.240.190.78
            87.240.190.72
```

Vk.com - 6 ip адресов

```
C:\Users\Aggy>ping vk.com

Pinging vk.com [87.240.190.72] with 32 bytes of data:
Reply from 87.240.190.72: bytes=32 time=83ms TTL=55
Reply from 87.240.190.72: bytes=32 time=84ms TTL=55
Reply from 87.240.190.72: bytes=32 time=85ms TTL=55
Reply from 87.240.190.72: bytes=32 time=83ms TTL=55

Ping statistics for 87.240.190.72:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 83ms, Maximum = 85ms, Average = 83ms
```

На ping отвечает адрес 87.240.190.72

```
C:\Users\Aggy>nslookup geekbrains.ru
Server:    UnKnown
Address:   192.168.1.254

Non-authoritative answer:
Name:      geekbrains.ru
Addresses:  5.61.239.21
            5.61.239.22
```

Geekbrains.ru - 2 ip адреса

```
C:\Users\Aggy>ping geekbrains.ru

Pinging geekbrains.ru [5.61.239.22] with 32 bytes of data:
Reply from 5.61.239.22: bytes=32 time=81ms TTL=53
Reply from 5.61.239.22: bytes=32 time=81ms TTL=53
Reply from 5.61.239.22: bytes=32 time=81ms TTL=53
Reply from 5.61.239.22: bytes=32 time=82ms TTL=53

Ping statistics for 5.61.239.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 81ms, Maximum = 82ms, Average = 81ms
```

На ping отвечает адрес 5.61.239.22
Вывод: все указанные сайты имеют по несколько ip адресов и отвечают на ping в зависимости от загрузки и , вероятно, географического положения пингующего.

2) Просмотреть NS-записи для доменов google.com и youtube.com. Какой можно сделать вывод по результатам вывода этих двух команд?

```
aggy@AlgayaDell:~$ dig any google.com

; <<>> DiG 9.11.3-1ubuntu1.11-Ubuntu <<>> any google.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 9223
;; flags: qr rd ra; QUERY: 1, ANSWER: 12, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
;google.com.                    IN      ANY

;; ANSWER SECTION:
google.com.            119     IN      A       172.217.22.142
google.com.            1304    IN      AAAA    2a00:1450:4007:80f::200e
google.com.            1713    IN      MX      50 alt4.aspmx.l.google.com.
google.com.            1713    IN      MX      30 alt2.aspmx.l.google.com.
google.com.            1713    IN      MX      20 alt1.aspmx.l.google.com.
google.com.            1713    IN      MX      10 aspmx.l.google.com.
google.com.            1713    IN      MX      40 alt3.aspmx.l.google.com.
google.com.            131     IN      SOA     ns1.google.com. dns-admin.google.com. 301336768 900 900 1800 60
google.com.            329511  IN      NS      ns4.google.com.
google.com.            329511  IN      NS      ns1.google.com.
google.com.            329511  IN      NS      ns2.google.com.
google.com.            329511  IN      NS      ns3.google.com.

;; Query time: 47 msec
;; SERVER: 192.168.1.254#53(192.168.1.254)
;; WHEN: Wed Mar 18 17:33:54 STD 2020
;; MSG SIZE  rcvd: 309
```

```
aggy@AlgayaDell:~$ dig any youtube.com

; <<>> DiG 9.11.3-1ubuntu1.11-Ubuntu <<>> any youtube.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 38723
;; flags: qr rd ra; QUERY: 1, ANSWER: 7, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
;youtube.com.                   IN      ANY

;; ANSWER SECTION:
youtube.com.           1721    IN      A       216.58.209.238
youtube.com.           187     IN      AAAA    2a00:1450:4007:812::200e
youtube.com.           1242    IN      SOA     ns1.google.com. dns-admin.google.com. 301336768 900 900 1800 60
youtube.com.           333362  IN      NS      ns1.google.com.
youtube.com.           333362  IN      NS      ns4.google.com.
youtube.com.           333362  IN      NS      ns2.google.com.
youtube.com.           333362  IN      NS      ns3.google.com.

;; Query time: 49 msec
;; SERVER: 192.168.1.254#53(192.168.1.254)
;; WHEN: Wed Mar 18 17:37:14 STD 2020
;; MSG SIZE  rcvd: 209
```

Google.com и youtube.com используют одни и те же ns сервера

P.s. : не поняла почему dig (см выше) и nslookup (см ниже) отдают разные а записи для google.com

```
C:\Users\Aggy>nslookup google.com
Server:   UnKnown
Address:  192.168.1.254

Non-authoritative answer:
Name:      google.com
Addresses:  2a00:1450:4007:80f::200e
           216.58.204.110
```