=====================================

Assignment 1 Submission

Name: Sagnik Roy

Roll number: 18CS10063

Link of the pcap file: <https://drive.google.com/file/d/1U59ZpDWE51g10iBqPp4kw1yS5uKzStbX/view?usp=sharing>

=====================================

Ans 1.

The protocols observed at the different layers of protocol stack are:

1. Application Layer: mDNS, LLMNR, DNS, TLS, HTTP, NBNS, OCSP
2. Transport Layer : TCP, UDP, ICMPv6
3. Network Layer : IPv6, IPv4, ARP

Ans 2.

1. Total data received from <http://iitkgp.ac.in>: 1829kBytes
2. Total data received from <https://www.cornell.edu>: 3445kBytes

Ans 3.

Total DNS Packets observed: 492

1. The <Domain Name, IP> table corresponding to the DNS packets received from iitkgp.ac.in and cornell.edu is:

|  |  |  |  |
| --- | --- | --- | --- |
| **Protocol** | **Domain Name** | **IPv4 Address** | **IPv6 Address** |
| DNS | [www.iitkgp.ac.in](http://www.iitkgp.ac.in) | 203.110.245.244, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.iitkgp.ac.in](http://www.iitkgp.ac.in) | 203.110.245.244, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.iitkgp.ac.in](http://www.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f4 |
| DNS | [www.rajbhasha.iitkgp.ac.in](http://www.rajbhasha.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.rajbhasha.iitkgp.ac.in](http://www.rajbhasha.iitkgp.ac.in) | 203.110.245.241,203.110.244.241,203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.sric.iitkgp.ac.in](http://www.sric.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.rajbhasha.iitkgp.ac.in](http://www.rajbhasha.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [erp.iitkgp.ac.in](http://erp.iitkgp.ac.in) | 203.110.245.59, 203.110.245.60, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [erp.iitkgp.ac.in](http://erp.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f53b, 64:ff9b::cb6e:f53c |
| DNS | [www.sric.iitkgp.ac.in](http://www.sric.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.rajbhasha.iitkgp.ac.in](http://www.rajbhasha.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [erp.iitkgp.ac.in](http://erp.iitkgp.ac.in) | 203.110.245.59, 203.110.245.60, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [erp.iitkgp.ac.in](http://erp.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f53c, 64:ff9b::cb6e:f53b |
| DNS | [www.sric.iitkgp.ac.in](http://www.sric.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.sric.iitkgp.ac.in](http://www.sric.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.rajbhasha.iitkgp.ac.in](http://www.rajbhasha.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.sric.iitkgp.ac.in](http://www.sric.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [erp.iitkgp.ac.in](http://erp.iitkgp.ac.in) | 203.110.245.60, 203.110.245.59 |  |
| DNS | [www.rajbhasha.iitkgp.ac.in](http://www.rajbhasha.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.sric.iitkgp.ac.in](http://www.sric.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [erp.iitkgp.ac.in](http://erp.iitkgp.ac.in) |  | 64:ff9b::cb6e:f53b, 64:ff9b::cb6e:f53c |
| DNS | [som.iitkgp.ac.in](http://som.iitkgp.ac.in) | 203.110.240.154, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [som.iitkgp.ac.in](http://som.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f09a |
| DNS | [som.iitkgp.ac.in](http://som.iitkgp.ac.in) | 203.110.240.154 |  |
| DNS | [international.iitkgp.ac.in](http://international.iitkgp.ac.in) | 203.110.242.133, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [international.iitkgp.ac.in](http://international.iitkgp.ac.in) | 203.110.242.133 |  |
| DNS | [som.iitkgp.ac.in](http://som.iitkgp.ac.in) |  | 64:ff9b::cb6e:f09a |
| DNS | [kgpchronicle.iitkgp.ac.in](http://kgpchronicle.iitkgp.ac.in) | 203.110.242.132, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [kgpchronicle.iitkgp.ac.in](http://kgpchronicle.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f284 |
| DNS | [international.iitkgp.ac.in](http://international.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f285 |
| DNS | [international.iitkgp.ac.in](http://international.iitkgp.ac.in) | 203.110.242.133 |  |
| DNS | [alumni.iitkgp.ac.in](http://alumni.iitkgp.ac.in) | 203.110.242.132 |  |
| DNS | [alumni.iitkgp.ac.in](http://alumni.iitkgp.ac.in) |  | 64:ff9b::cb6e:f284 |
| DNS | [international.iitkgp.ac.in](http://international.iitkgp.ac.in) |  | 64:ff9b::cb6e:f285 |
| DNS | [kgpchronicle.iitkgp.ac.in](http://kgpchronicle.iitkgp.ac.in) | 203.110.242.132, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [kgpchronicle.iitkgp.ac.in](http://kgpchronicle.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f284 |
| DNS | [international.iitkgp.ac.in](http://international.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f285 |
| DNS | [www.gian.iitkgp.ac.in](http://www.gian.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.som.iitkgp.ac.in](http://www.som.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.som.iitkgp.ac.in](http://www.som.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.som.iitkgp.ac.in](http://www.som.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.som.iitkgp.ac.in](http://www.som.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.gian.iitkgp.ac.in](http://www.gian.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [gate.iitkgp.ac.in](http://gate.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f50b |
| DNS | [gate.iitkgp.ac.in](http://gate.iitkgp.ac.in) | 203.110.245.11, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.gian.iitkgp.ac.in](http://www.gian.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [gate.iitkgp.ac.in](http://gate.iitkgp.ac.in) | 203.110.245.11 |  |
| DNS | [gate.iitkgp.ac.in](http://gate.iitkgp.ac.in) |  | 64:ff9b::cb6e:f50b |
| DNS | [www.gian.iitkgp.ac.in](http://www.gian.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.cep.iitkgp.ac.in](http://www.cep.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.cep.iitkgp.ac.in](http://www.cep.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.cep.iitkgp.ac.in](http://www.cep.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.cep.iitkgp.ac.in](http://www.cep.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.library.iitkgp.ac.in](http://www.library.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.library.iitkgp.ac.in](http://www.library.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.library.iitkgp.ac.in](http://www.library.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.library.iitkgp.ac.in](http://www.library.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.counsellingcentre.iitkgp.ac.in](http://www.counsellingcentre.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.counsellingcentre.iitkgp.ac.in](http://www.counsellingcentre.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.counsellingcentre.iitkgp.ac.in](http://www.counsellingcentre.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.counsellingcentre.iitkgp.ac.in](http://www.counsellingcentre.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.counsellingcentre.iitkgp.ac.in](http://www.counsellingcentre.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.counsellingcentre.iitkgp.ac.in](http://www.counsellingcentre.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.library.iitkgp.ac.in](http://www.library.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.dak.iitkgp.ernet.in](http://www.dak.iitkgp.ernet.in) | 203.110.246.11, 203.110.242.61, 203.110.243.4, 203.110.246.4, 144.16.192.65, 203.110.246.3, 144.16.192.1, 203.110.243.3 |  |
| DNS | [www.library.iitkgp.ac.in](http://www.library.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.tgh.iitkgp.ac.in](http://www.tgh.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.dak.iitkgp.ernet.in](http://www.dak.iitkgp.ernet.in) | 203.110.242.61, 144.16.192.65, 203.110.243.4, 203.110.246.4, 203.110.243.3, 203.110.246.3, 144.16.192.1 | 64:ff9b::cb6e:f60b |
| DNS | [www.dak.iitkgp.ernet.in](http://www.dak.iitkgp.ernet.in) | 203.110.246.11 |  |
| DNS | [www.dak.iitkgp.ernet.in](http://www.dak.iitkgp.ernet.in) |  | 64:ff9b::cb6e:f60b |
| DNS | [www.tgh.iitkgp.ac.in](http://www.tgh.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.tgh.iitkgp.ac.in](http://www.tgh.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.tgh.iitkgp.ac.in](http://www.tgh.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www.dak.iitkgp.ernet.in](http://www.dak.iitkgp.ernet.in) | 203.110.242.61, 203.110.246.4, 144.16.192.65, 203.110.243.4, 144.16.192.1, 203.110.243.3, 203.110.246.3 | 64:ff9b::cb6e:f60b |
| DNS | [www.international.iitkgp.ac.in](http://www.international.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.international.iitkgp.ac.in](http://www.international.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www.international.iitkgp.ac.in](http://www.international.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www.international.iitkgp.ac.in](http://www.international.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [www1.iitkgp.ac.in](http://www1.iitkgp.ac.in) | 203.110.245.243, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [www.tgh.iitkgp.ac.in](http://www.tgh.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www1.iitkgp.ac.in](http://www1.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5f3 |
| DNS | [www1.iitkgp.ac.in](http://www1.iitkgp.ac.in) | 203.110.245.243 |  |
| DNS | [www1.iitkgp.ac.in](http://www1.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5f3 |
| DNS | [iitkgpmail.iitkgp.ac.in](http://iitkgpmail.iitkgp.ac.in) | 203.110.245.235, 203.110.245.241, 203.110.244.241, 203.110.242.36 |  |
| DNS | [iitkgpmail.iitkgp.ac.in](http://iitkgpmail.iitkgp.ac.in) | 203.110.245.241, 203.110.244.241, 203.110.242.36 | 64:ff9b::cb6e:f5eb |
| DNS | [iitkgpmail.iitkgp.ac.in](http://iitkgpmail.iitkgp.ac.in) | 203.110.245.235 |  |
| DNS | [iitkgpmail.iitkgp.ac.in](http://iitkgpmail.iitkgp.ac.in) |  | 64:ff9b::cb6e:f5eb |
| DNS | [ucomm-gw1.cornell.media3.us](http://ucomm-gw1.cornell.media3.us) | 20.42.25.107 |  |
| DNS | [ucomm-gw1.cornell.media3.us](http://ucomm-gw1.cornell.media3.us) |  | 64:ff9b::142a:196b |
| DNS | [ucomm-gw1.cornell.media3.us](http://ucomm-gw1.cornell.media3.us) |  | 64:ff9b::142a:196b |
| DNS | [ocsp.usertrust.com](http://ocsp.usertrust.com) | 151.139.128.14 |  |
| DNS | [ocsp.usertrust.com](http://ocsp.usertrust.com) |  | 2001:4de0:ac19::1:b:1b,2001:4de0:ac19::1:b:2a,2001:4de0:ac19::1:b:3b,2001:4de0:ac19::1:b:3a,2001:4de0:ac19::1:b:2b,2001:4de0:ac19::1:b:1a |
| DNS | [ocsp.usertrust.com](http://ocsp.usertrust.com) |  | 2001:4de0:ac19::1:b:1a,2001:4de0:ac19::1:b:2b,2001:4de0:ac19::1:b:3a,2001:4de0:ac19::1:b:3b,2001:4de0:ac19::1:b:2a,2001:4de0:ac19::1:b:1b |
| DNS | [ocsp.usertrust.com](http://ocsp.usertrust.com) | 151.139.128.14 |  |
| DNS | [ocsp.usertrust.com](http://ocsp.usertrust.com) |  | 2001:4de0:ac19::1:b:1b, 2001:4de0:ac19::1:b:1a, 2001:4de0:ac19::1:b:2b, 2001:4de0:ac19::1:b:3a, 2001:4de0:ac19::1:b:3b, 2001:4de0:ac19::1:b:2a |
| DNS | [use.typekit.net](http://use.typekit.net) | 104.94.18.177, 104.94.18.176 |  |
| DNS | [use.typekit.net](http://use.typekit.net) |  | 2402:3a80:c000:25::2a6a:a237, 2402:3a80:c000:25::2a6a:a230 |
| DNS | [a1988.dscg1.akamai.net](http://a1988.dscg1.akamai.net) | 104.94.18.176, 104.94.18.177 |  |
| DNS | [a1988.dscg1.akamai.net](http://a1988.dscg1.akamai.net) |  | 2402:3a80:c000:25::2a6a:a230,2402:3a80:c000:25::2a6a:a237 |
| DNS | [cdnjs.cloudflare.com](http://cdnjs.cloudflare.com) | 104.16.19.94, 104.16.18.94 |  |
| DNS | [cdnjs.cloudflare.com](http://cdnjs.cloudflare.com) |  | 2606:4700::6810:135e, 2606:4700::6810:125e |
| DNS | [cdnjs.cloudflare.com](http://cdnjs.cloudflare.com) |  | 2606:4700::6810:125e, 2606:4700::6810:135e |
| DNS | [cdnjs.cloudflare.com](http://cdnjs.cloudflare.com) | 104.16.18.94, 104.16.19.94 |  |
| DNS | [cdnjs.cloudflare.com](http://cdnjs.cloudflare.com) |  | 2606:4700::6810:135e,2606:4700::6810:125e |
| DNS | [ajax.googleapis.com](http://ajax.googleapis.com) |  | 2404:6800:4009:80f::200a |
| DNS | [ajax.googleapis.com](http://ajax.googleapis.com) | 172.217.27.202 |  |
| DNS | [ajax.googleapis.com](http://ajax.googleapis.com) | 172.217.27.202 |  |
| DNS | [ajax.googleapis.com](http://ajax.googleapis.com) |  | 2404:6800:4009:80f::200a |
| DNS | [embanner.univcomm.cornell.edu](http://embanner.univcomm.cornell.edu) | 20.42.25.107 |  |
| DNS | [embanner.univcomm.cornell.edu](http://embanner.univcomm.cornell.edu) | 20.42.25.107 |  |
| DNS | [embanner.univcomm.cornell.edu](http://embanner.univcomm.cornell.edu) |  | 64:ff9b::142a:196b |
| DNS | [embanner.univcomm.cornell.edu](http://embanner.univcomm.cornell.edu) |  | 64:ff9b::142a:196b |
| DNS | ocsp.pki.goog | 142.250.67.163 |  |
| DNS | ocsp.pki.goog |  | 2404:6800:4009:812::2003 |
| DNS | ocsp.pki.goog |  | 2404:6800:4009:812::2003 |
| DNS | ocsp.pki.goog | 142.250.67.163 |  |
| DNS | [pki-goog.l.google.com](http://pki-goog.l.google.com) | 142.250.67.163 |  |
| DNS | [media.univcomm.cornell.edu](http://media.univcomm.cornell.edu) |  | 64:ff9b::142a:196b |
| DNS | [media.univcomm.cornell.edu](http://media.univcomm.cornell.edu) |  | 64:ff9b::142a:196b |
| DNS | [pki-goog.l.google.com](http://pki-goog.l.google.com) |  | 2404:6800:4009:812::2003 |
| DNS | [media.univcomm.cornell.edu](http://media.univcomm.cornell.edu) | 20.42.25.107 |  |
| DNS | [media.univcomm.cornell.edu](http://media.univcomm.cornell.edu) | 20.42.25.107 |  |
| DNS | [siteimproveanalytics.com](http://siteimproveanalytics.com) | 172.64.197.24, 172.64.196.24 |  |
| DNS | [siteimproveanalytics.com](http://siteimproveanalytics.com) |  | 2606:4700:e6::ac40:c518, 2606:4700:e6::ac40:c418 |
| DNS | [siteimproveanalytics.com](http://siteimproveanalytics.com) | 172.64.196.24, 172.64.197.24 |  |
| DNS | [siteimproveanalytics.com](http://siteimproveanalytics.com) |  | 2606:4700:e6::ac40:c418, 2606:4700:e6::ac40:c518 |
| DNS | [siteimproveanalytics.com](http://siteimproveanalytics.com) | 172.64.196.24, 172.64.197.24 |  |
| DNS | [siteimproveanalytics.com](http://siteimproveanalytics.com) |  | 2606:4700:e6::ac40:c418, 2606:4700:e6::ac40:c518 |
| DNS | [p.typekit.net](http://p.typekit.net) | 104.120.64.164 |  |
| DNS | [p.typekit.net](http://p.typekit.net) |  | 2600:140f:d400:19a::19fd, 2600:140f:d400:189::19fd |
| DNS | [e6653.dscf.akamaiedge.net](http://e6653.dscf.akamaiedge.net) | 104.120.64.164 |  |
| DNS | [e6653.dscf.akamaiedge.net](http://e6653.dscf.akamaiedge.net) |  | 2600:140f:d400:189::19fd, 2600:140f:d400:19a::19fd |
| DNS | [cdnsecakmi.kaltura.com](http://cdnsecakmi.kaltura.com) | 23.209.112.140 |  |
| DNS | [cdnsecakmi.kaltura.com](http://cdnsecakmi.kaltura.com) |  | 64:ff9b::17d1:708c |
| DNS | [e4669.g.akamaiedge.net](http://e4669.g.akamaiedge.net) | 23.209.112.140 |  |
| DNS | [e4669.g.akamaiedge.net](http://e4669.g.akamaiedge.net) |  | 64:ff9b::17d1:708c |
| DNS | [cdnsecakmi.kaltura.com](http://cdnsecakmi.kaltura.com) |  | 64:ff9b::17d1:708c |
| DNS | [cdnsecakmi.kaltura.com](http://cdnsecakmi.kaltura.com) | 23.209.112.140 |  |
| DNS | [6120104.global.siteimproveanalytics.io](http://6120104.global.siteimproveanalytics.io) | 18.159.119.149, 18.158.85.68 |  |
| DNS | [ana-cf-col-elb-78-567119012.eu-central-1.elb.amazonaws.com](http://ana-cf-col-elb-78-567119012.eu-central-1.elb.amazonaws.com) | 18.158.85.68, 18.159.119.149 |  |
| DNS | [6120104.global.siteimproveanalytics.io](http://6120104.global.siteimproveanalytics.io) | 18.159.119.149, 18.158.85.68 |  |
| DNS | [6120104.global.siteimproveanalytics.io](http://6120104.global.siteimproveanalytics.io) |  | 64:ff9b::129e:5544, 64:ff9b::129f:7795 |
| DNS | [presence.teams.microsoft.com](http://presence.teams.microsoft.com) | 52.114.32.109 |  |
| DNS | [presence.teams.microsoft.com](http://presence.teams.microsoft.com) |  | 64:ff9b::3472:206d |
| DNS | [presence.teams.microsoft.com](http://presence.teams.microsoft.com) |  | 64:ff9b::3472:206d |
| DNS | [incoming.telemetry.mozilla.org](http://incoming.telemetry.mozilla.org) | 34.211.246.164, 52.32.14.183, 52.10.174.113, 34.223.172.12, 52.34.254.140, 52.33.45.66, 52.89.213.25, 52.39.2.52 |  |
| DNS | [incoming.telemetry.mozilla.org](http://incoming.telemetry.mozilla.org) |  | 64:ff9b::3459:d519, 64:ff9b::3427:234, 64:ff9b::22d3:f6a4, 64:ff9b::3420:eb7, 64:ff9b::340a:ae71, 64:ff9b::22df:ac0c, 64:ff9b::3422:fe8c, 64:ff9b::3421:2d42 |
| DNS | [incoming.telemetry.mozilla.org](http://incoming.telemetry.mozilla.org) |  | 64:ff9b::3420:eb7, 64:ff9b::340a:ae71, 64:ff9b::22df:ac0c, 64:ff9b::3422:fe8c, 64:ff9b::3421:2d42, 64:ff9b::3459:d519, 64:ff9b::3427:234, 64:ff9b::22d3:f6a4 |
| DNS | [incoming.telemetry.mozilla.org](http://incoming.telemetry.mozilla.org) | 34.223.172.12, 52.34.254.140, 52.33.45.66, 52.89.213.25, 52.39.2.52, 34.211.246.164, 52.32.14.183, 52.10.174.113 |  |

1. Yes, we can find the IP of the DNS servers corresponding to the DNS packets from the Destination column after applying the DNS filter.

It is: 192.168.42.165 and 2402:3a80:a90:19f5:59c0:3d51:3b:dd79

Ans 4.

1. Total number HTTP Get requests observed on accessing <http://iitkgp.ac.in> are 222.
2. These HTTP Get Requests along with total number of TCP segments received and total amount of data being received in the corresponding HTTP Response Response message are listed down as:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **No.** | **Protocol** | **Response in frame** | **Info** | **TCP Segments recieved** | **Total Data received (bytes)** |
| 1 | 204 | HTTP | 1012 | GET / HTTP/1.1 | 680 | 934075 |
| 2 | 874 | HTTP | 1578 | GET /resources/css/bootstrap.min.css;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 115 | 141167 |
| 3 | 1016 | HTTP | 1037 | GET /resources/css/home\_style.css;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 8 | 8718 |
| 4 | 1023 | HTTP | 1111 | GET /resources/css/font-awesome.css;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 27 | 35495 |
| 5 | 1024 | HTTP | 1107 | GET /resources/common\_css/common\_stylesheet.css;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 16 | 19706 |
| 6 | 1148 | HTTP | 1324 | GET /resources/js/jquery.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 71 | 95981 |
| 7 | 1149 | HTTP | 1272 | GET /resources/js/bootstrap.min.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 28 | 37058 |
| 8 | 1150 | HTTP | 1195 | GET /resources/js/override.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 7 | 8012 |
| 9 | 1151 | HTTP | 1207 | GET /resources/js/navigation.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 3 | 2176 |
| 10 | 1152 | HTTP | 1196 | GET /resources/page\_js/jquery.tickerNews.min.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 4 | 4183 |
| 11 | 1202 | HTTP | 1291 | GET /resources/js/jquery.bootstrap.newsbox.min.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 5 | 5456 |
| 12 | 1203 | HTTP | 1294 | GET /resources/page\_js/home\_page.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 5 | 4821 |
| 13 | 1209 | HTTP | 1299 | GET /resources/common\_js/common\_js.js;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 4 | 3024 |
| 14 | 1593 | HTTP | 1691 | GET /resources/images/logo.png;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 14 | 17250 |
| 15 | 1594 | HTTP | 1981 | GET /resources/banners/adm\_vgsom.jpg;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 175 | 239321 |
| 16 | 1595 | HTTP | 1639 | GET /resources/images/index.png;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 6 | 5750 |
| 17 | 1598 | HTTP | 1654 | GET /resources/images/nvsp3.png;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 8 | 9123 |
| 18 | 1601 | HTTP | 1683 | GET /resources/images/hindi.png;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 3 | 2196 |
| 19 | 1608 | HTTP | 1769 | GET /resources/fonts/glyphicons-halflings-regular.woff2 HTTP/1.1 | 15 | 18180 |
| 20 | 1641 | HTTP | 1915 | GET /resources/fonts/fontawesome-webfont.woff2?v=4.5.0 HTTP/1.1 | 50 | 66776 |
| 21 | 1657 | HTTP | 1821 | GET /resources/css/override.css;jsessionid=88B0365B367849D698659413F1268AB9 HTTP/1.1 | 6 | 6815 |
| 22 | 1686 | HTTP | 2001 | GET /resources/images/footer\_bg.jpg HTTP/1.1 | 42 | 56150 |

For these HTTP Get requests:

Source are: 192.168.42.165 and 2402:3a80:a90:19f5:59c0:3d51:3b:dd79

Destination are: 203.110.245.244 and 64:ff9b::cb6e:f5f4