CNS Lab
Assignment 11

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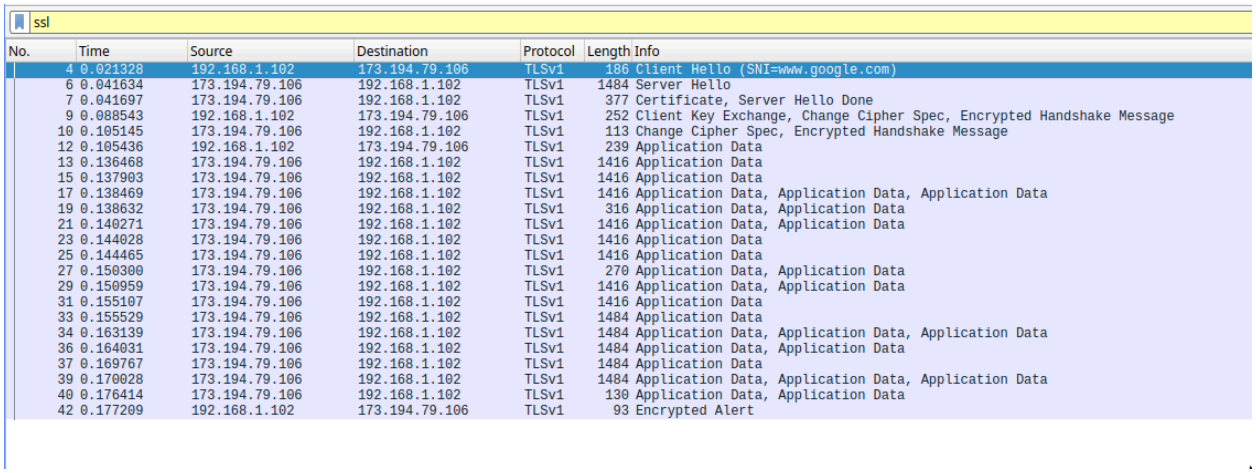
Batch : B5

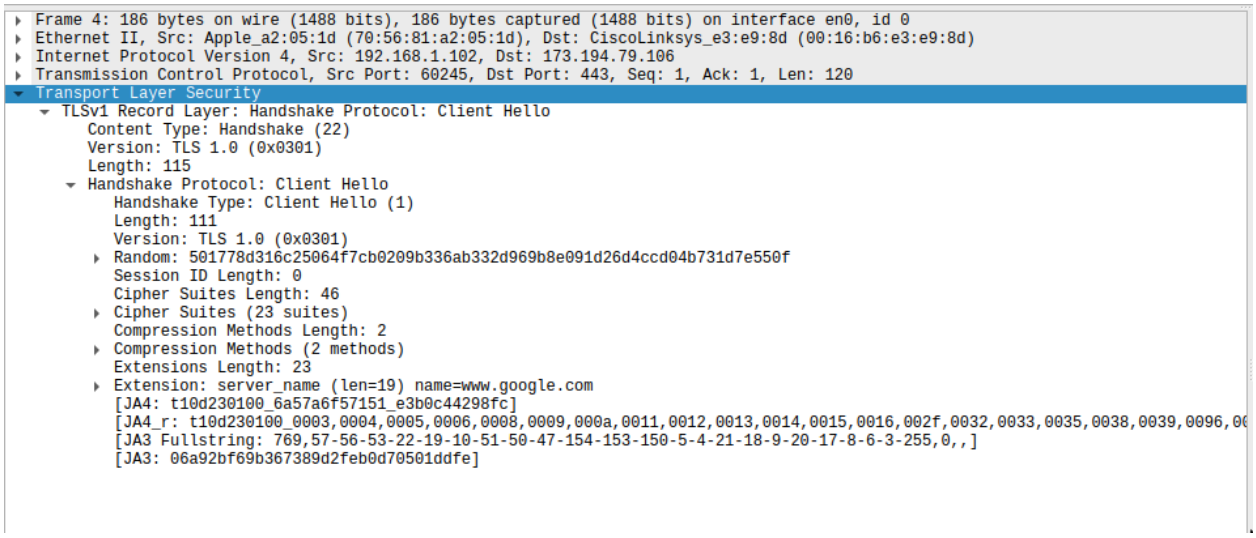
1. Filrer trace using ssl



ssl

No.	Time	Source	Destination	Protocol	Length	Info
4	0.021328	192.168.1.102	173.194.79.106	TLSv1	186	Client Hello (SNI=www.google.com)
6	0.041634	173.194.79.106	192.168.1.102	TLSv1	1484	Server Hello
7	0.041697	173.194.79.106	192.168.1.102	TLSv1	377	Certificate, Server Hello Done
9	0.088543	192.168.1.102	173.194.79.106	TLSv1	252	Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
10	0.105145	173.194.79.106	192.168.1.102	TLSv1	113	Change Cipher Spec, Encrypted Handshake Message
12	0.105436	192.168.1.102	173.194.79.106	TLSv1	239	Application Data
13	0.136468	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data
15	0.137903	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data
17	0.138469	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data, Application Data, Application Data
19	0.138632	173.194.79.106	192.168.1.102	TLSv1	316	Application Data, Application Data
21	0.140271	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data, Application Data
23	0.144028	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data
25	0.144465	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data
27	0.150300	173.194.79.106	192.168.1.102	TLSv1	270	Application Data, Application Data
29	0.150959	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data, Application Data
31	0.155107	173.194.79.106	192.168.1.102	TLSv1	1416	Application Data
33	0.155529	173.194.79.106	192.168.1.102	TLSv1	1484	Application Data
34	0.163139	173.194.79.106	192.168.1.102	TLSv1	1484	Application Data, Application Data, Application Data
36	0.164031	173.194.79.106	192.168.1.102	TLSv1	1484	Application Data, Application Data
37	0.169767	173.194.79.106	192.168.1.102	TLSv1	1484	Application Data
39	0.170028	173.194.79.106	192.168.1.102	TLSv1	1484	Application Data, Application Data, Application Data
40	0.176414	173.194.79.106	192.168.1.102	TLSv1	130	Application Data, Application Data
42	0.177209	192.168.1.102	173.194.79.106	TLSv1	93	Encrypted Alert

2. Client-side hello



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▸ Frame 4: 186 bytes on wire (1488 bits), 186 bytes captured (1488 bits) on interface en0, id 0
▸ Ethernet II, Src: Apple_a2:05:1d (70:56:81:a2:05:1d), Dst: CiscoLinksys_e3:e9:8d (00:16:b6:e3:e9:8d)
▸ Internet Protocol Version 4, Src: 192.168.1.102, Dst: 173.194.79.106
▸ Transmission Control Protocol, Src Port: 60245, Dst Port: 443, Seq: 1, Ack: 1, Len: 120
▾ Transport Layer Security
  ▾ TLSv1 Record Layer: Handshake Protocol: Client Hello
      Content Type: Handshake (22)
      Version: TLS 1.0 (0x0301)
      Length: 115
    ▾ Handshake Protocol: Client Hello
        Handshake Type: Client Hello (1)
        Length: 111
        Version: TLS 1.0 (0x0301)
      ▸ Random: 501778d316c25064f7cb0209b336ab332d969b8e091d26d4ccd04b731d7e550f
        Session ID Length: 0
        Cipher Suites Length: 46
      ▸ Cipher Suites (23 suites)
        Compression Methods Length: 2
      ▸ Compression Methods (2 methods)
        Extensions Length: 23
      ▸ Extension: server_name (len=19) name=www.google.com
        [JA4: t10d230100_6a57a6f57151_e3b0c44298fc]
        [JA4_r: t10d230100_0003,0004,0005,0006,0008,0009,000a,0011,0012,0013,0014,0015,0016,002f,0032,0033,0035,0038,0039,0096,00
        [JA3 Fullstring: 769,57-56-53-22-19-10-51-50-47-154-153-150-5-4-21-18-9-20-17-8-6-3-255,0,,]
        [JA3: 06a92bf69b367389d2feb0d70501ddfe]
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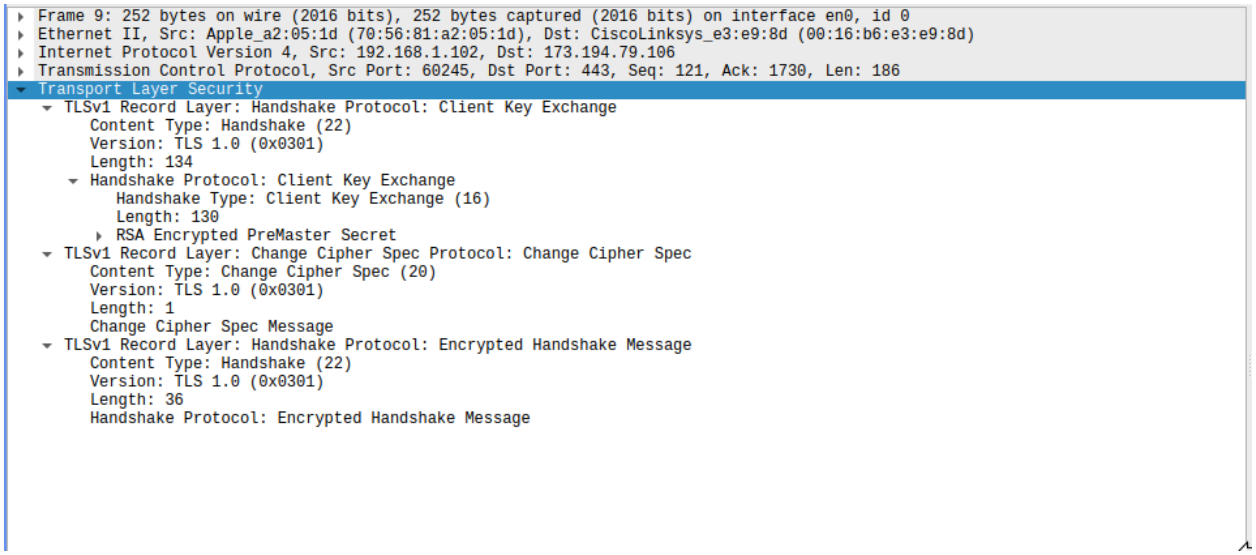
3. Server-side hello

4. Client key exchange



5. Encrypted data :