

Practices-----

- Find the MAC address from following Link-local address--

Rules-

- i) Drop first 4 Hextets [which is FE80::]
- ii) Flip the 7th bit of 5th Hextet
- iii) Drop the 2nd Octet of 6th Hextet
- iv) Drop the 1st Octet of 7th Hextet

1. **FE80 :: 7B95 : 62FF : FE7F : 0051**

⇒ 7 B = 0111 1011 ⇒ 0111 1001 ⇒ 79

MAC Address:- 7995:627F:0051

- Find Link-local address from the following MAC Address—

2. **0004.9A7E.6903**

Rules-

- i) Add FFFE After First 24 Bits->
0004.9AFF.FE7E.6903
- ii) Flip the 7th Bit of the first hextet
-> 00 = 0000 0000 = 0000 0010 = 02
0204.9AFF.FE7E.6903
- iii) Add FE80:: in the beginning->
FE80::0204:9AFF:FE7E:6903

Link-Local Address: FE80::0204:9AFF:FE7E:6903

- Convert IPv4 to IPv6 Address--

8 Bit	88 Bit	32-Bit
0	::	Converted IPv4

3. **106.27.58.9**

106= 01101010

27= 00011011

58= 00111010

9 = 00001001

0110 1010 0001 1011 0011 1010 0000 1001

6 A 1 B 3 A 0 9

IPv6 Address: - 0::6A1B:3A09

- Write Full Form of IPv6 Address--

4. **2001::411:0:0**

Full Form: -

2001:0000:0000:0000:0411:0000:0000