


IP address

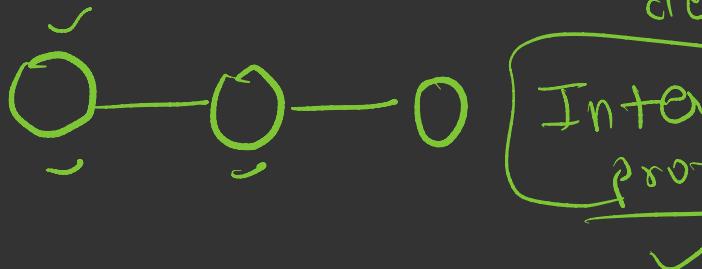
Europe



America

size ↓

D D D D D



LOGIN

1969

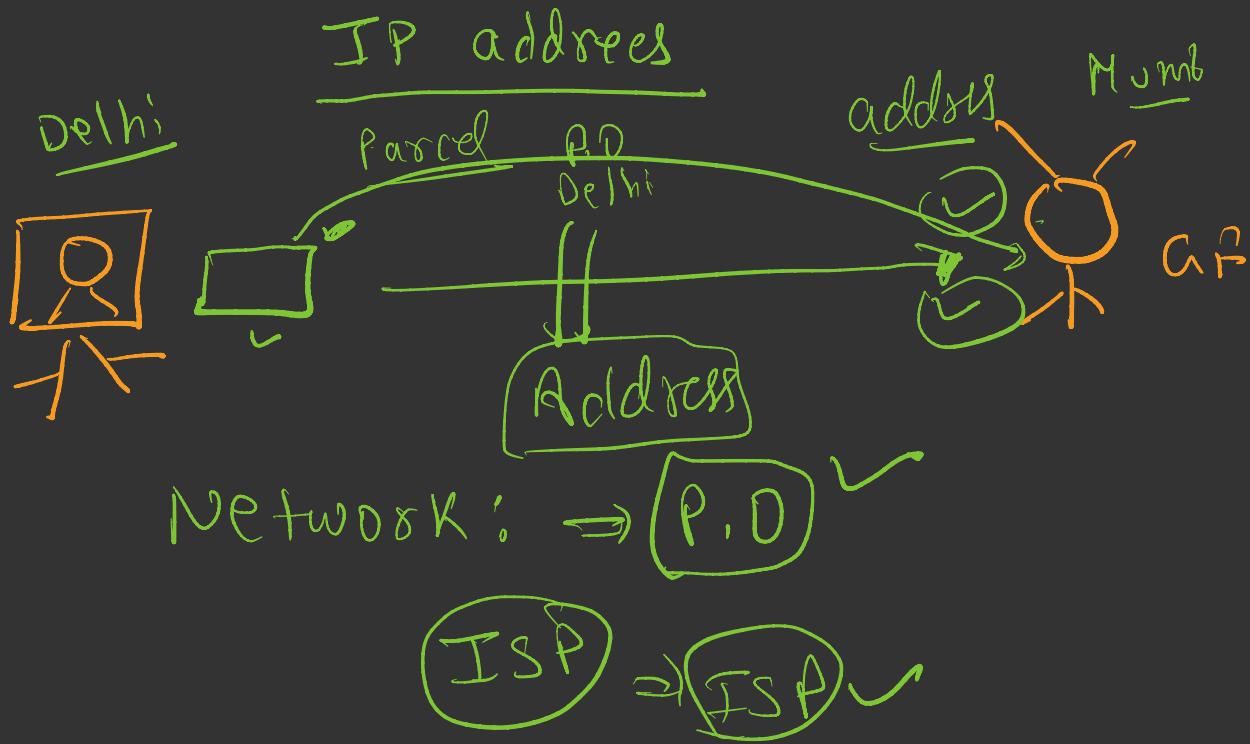
TCP IP

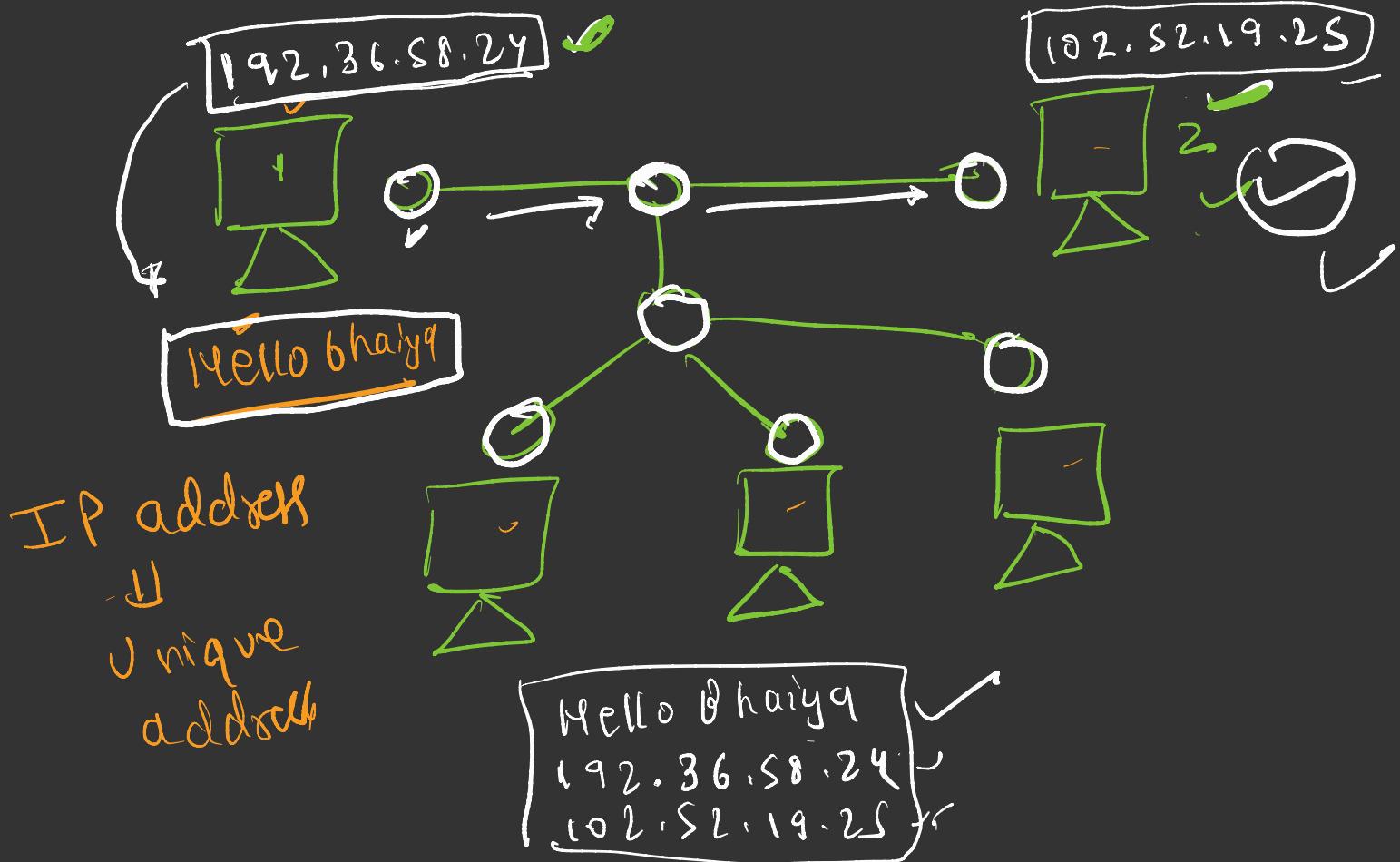


1974

ARPANET

source
destination





IP Address: 32 bit 4 Bytes =

IPv4:

32 bit

When =
 $2^8 = 256$

192.36.15.8

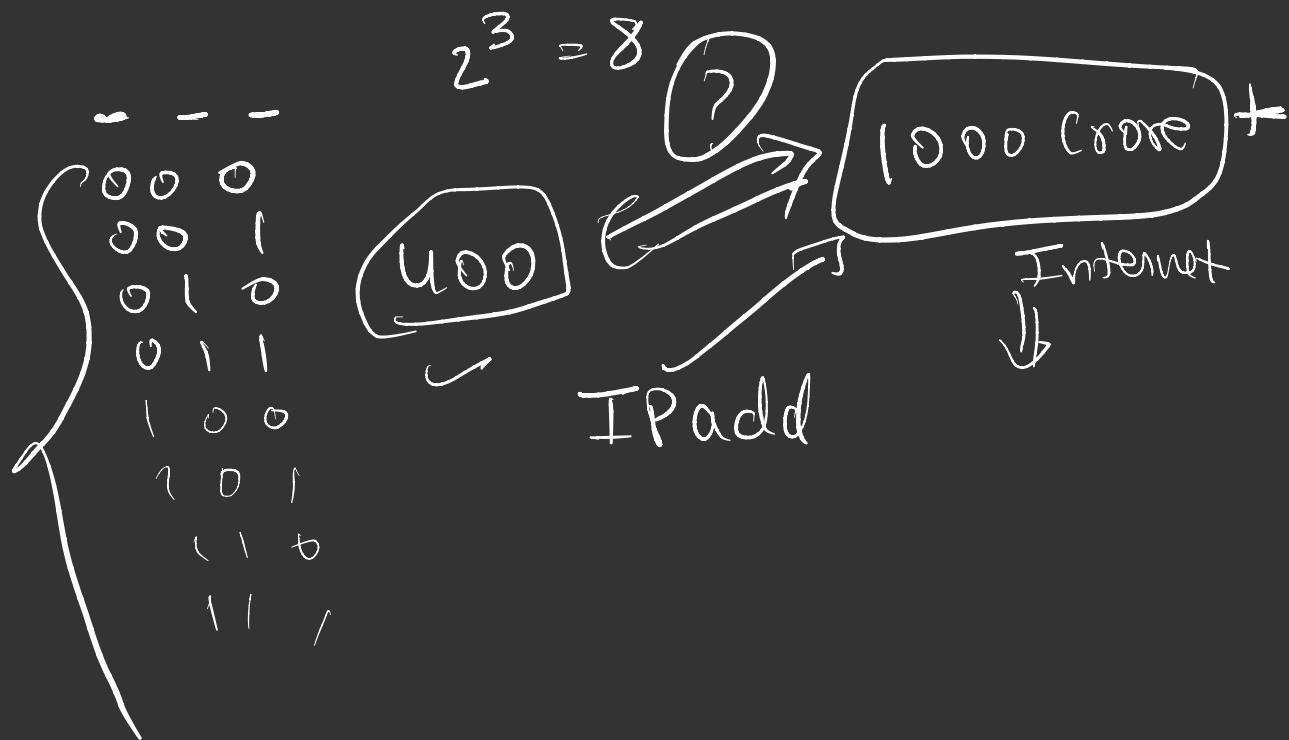
0 0 0 0 0 0 0 0
1 1 1 1 1 1 1 1

0-255 0-255 0-255 0-255
256

1.1.1.1.1.1.1.1
400 C00F

Devices IP add

2^{32}



20101010111010

2

[4800 address]

→

(1000)

33

- IPv4 \Rightarrow 32 bits \downarrow 4 Bytes ✓ $2^5 \Rightarrow 32$

9

IPV6

128 bits

?

2^{128}

$2^6 = 64$
 $2^1 = 128$ bits

Hex decimal formal ✓

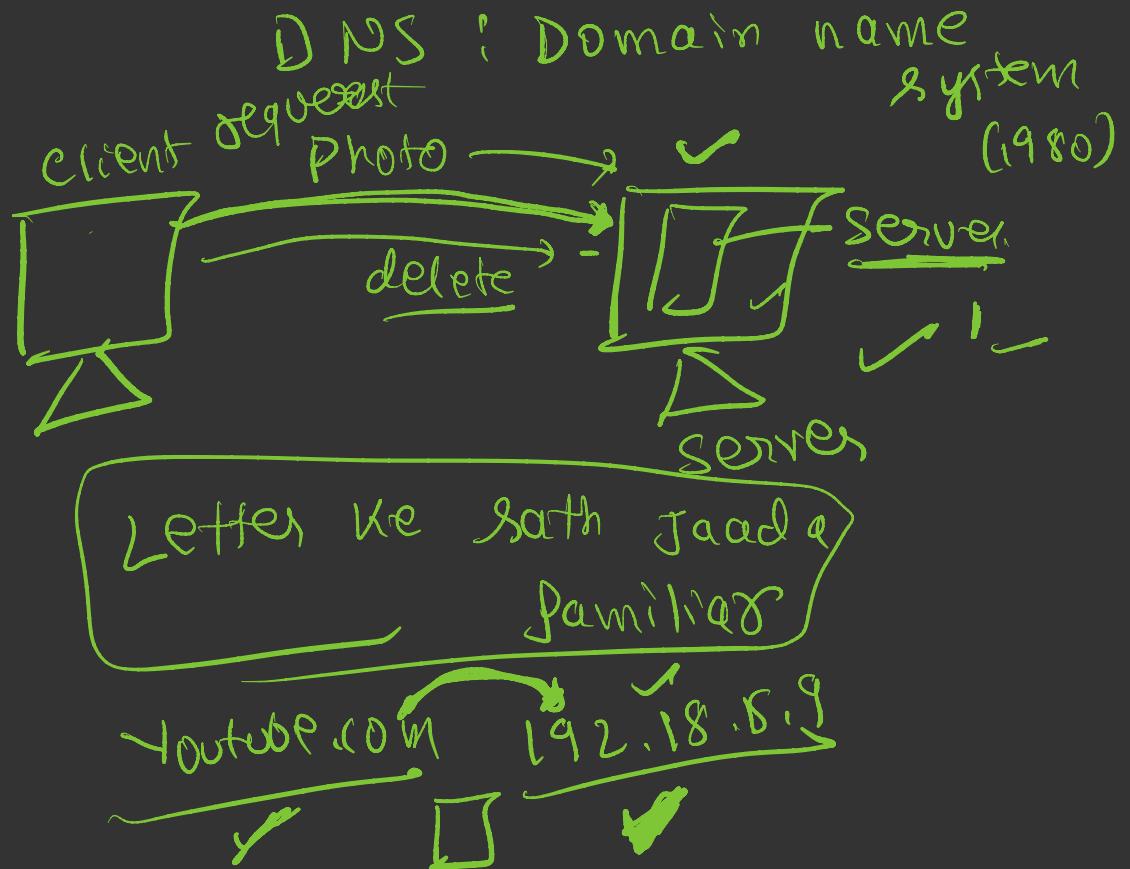
1594 - IP ✓

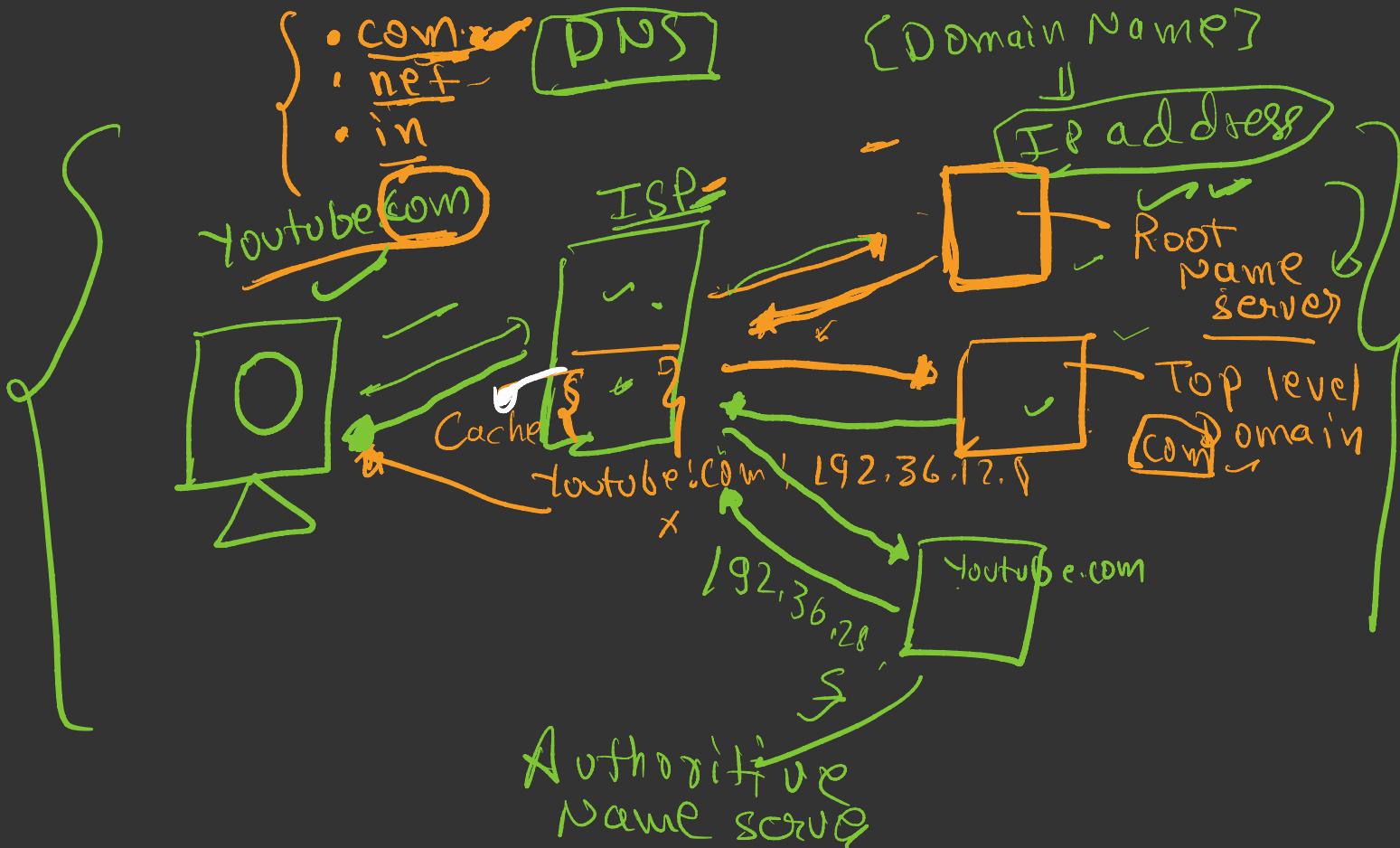
192.36.84.18 ✓

✓ google.com = IP address

✓ CoderArmy.in ✓

IP address





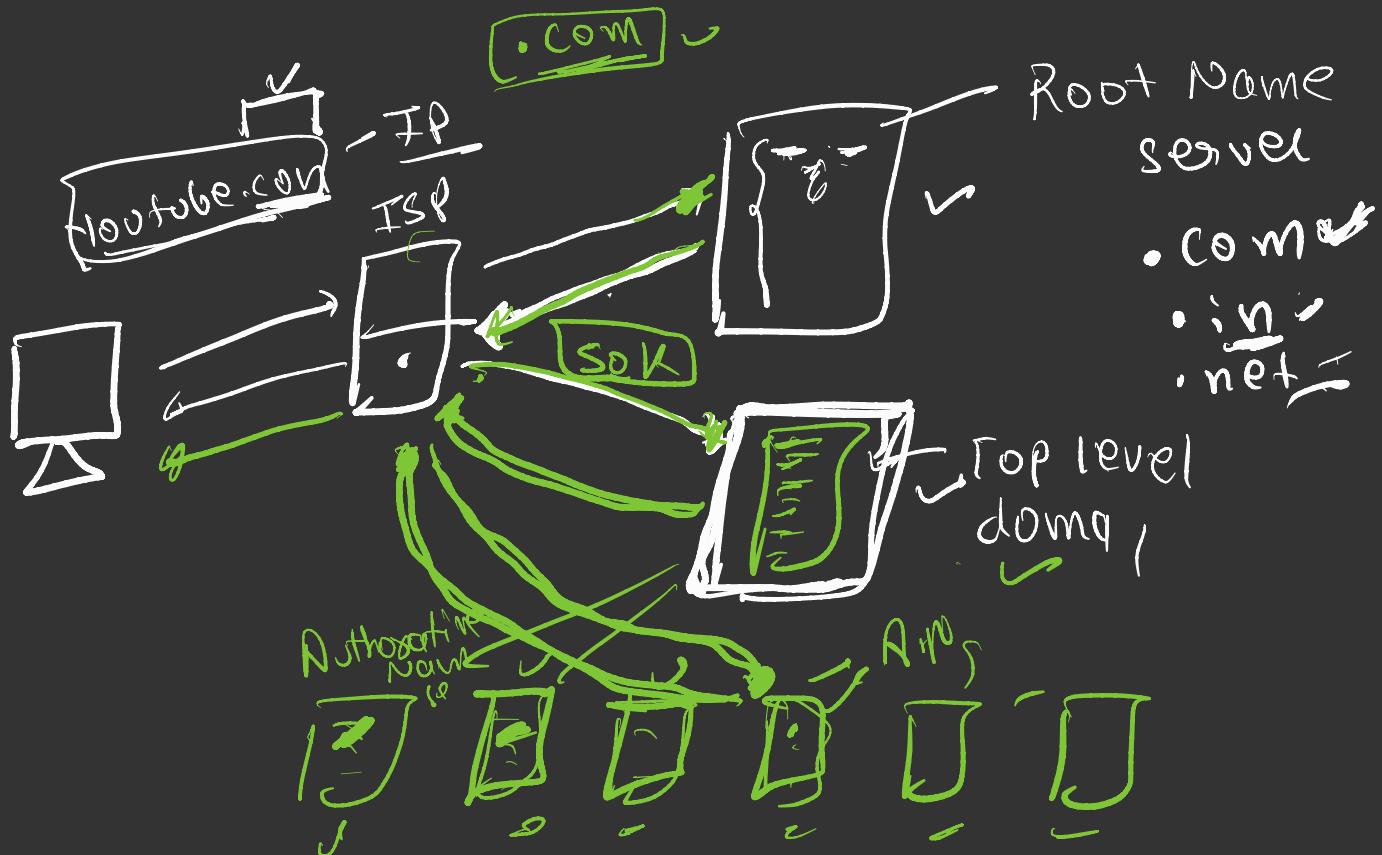
Static IP =

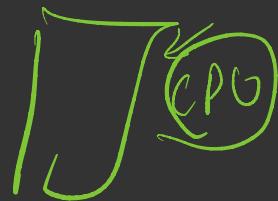
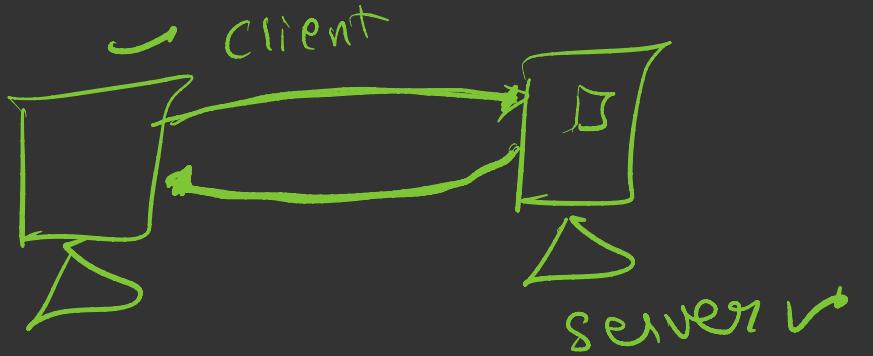
Deve : IP address
✓
✓

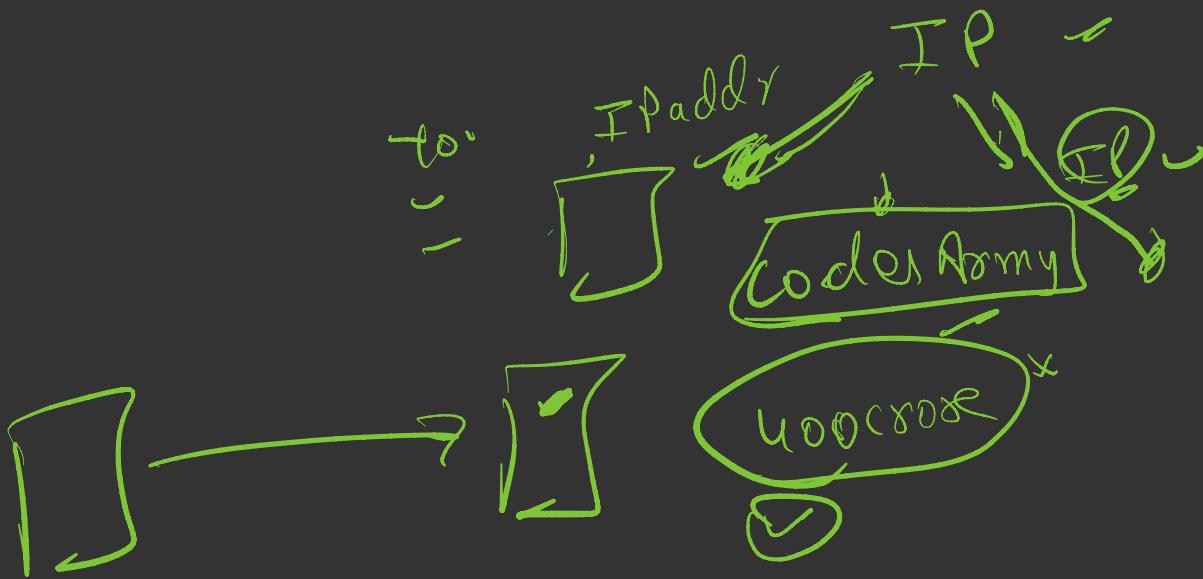
Dynamic IP address

400 cross Add socks change



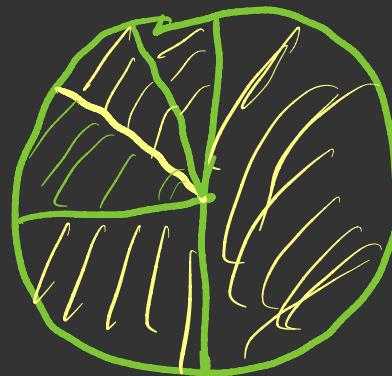






IP \Rightarrow address \rightarrow 232

- Class A : 50%
- Class B : 25%
- Class C : 12.5%
- Class D : 6.25%
- Class E : 6.25%



$$25\% \quad 128/2 = 64$$

$$\frac{128}{64} \quad 32$$



{ 192-223. —·—·—

{ 0-255
—·—·—·—
0-255
0-255
0-255 } ✓

A ✓ 0-127
—·—·—·—

B ✓ 128-191
—·—·—·—

C' 192-223
—·—·—

D' 224-239
—·—·—

E' 240-255
—·—·—

$$\begin{array}{r} 256 \\ 128 \\ \hline 128 \\ \hline 2 \\ \hline 64 \\ \hline 2 \end{array}$$

16 16
16 16

$$= \frac{32}{2}$$

Class C 192.168.0.1 IP address

