

CENG 421 IP RESEARCH

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39. The address of İzmir Institute of Technology is 10.8.32.1. Due to being close to the school, I went there and connected to Wifi and looked up the address from Command Prompt app. [1] Since it belongs to C Class, the addresses granted to the router are between 10.8.32.0 and 10.8.32.255.

40. Name of my Internet Service Provider (ISP) that I use at home is Turkcell Superonline and the address is 192.168.1.1. Also, its mask is 255.255.255.0 which means it belongs to C class and its CIDR is 24. Internet Service Provider can be granted in blocks which have addresses between 255.255.255.0 and 255.255.255.255 according to its customers.

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Connection-specific DNS Suffix . :  
Link-local IPv6 Address . . . . . : fe80::900d:48ca:e4a1:756c%17  
IPv4 Address. . . . . : 192.168.1.196  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . . . : 192.168.1.1
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41. Subnetting is a method which provides maximum amount of networks available and it decreases the number of hosts that can be on each network. [2] In classfull addressing, the number of devices connected to the Internet are much less than the capacity of the network. This causes empty spaces which is waste of space and host. Solution for this problem is classless addressing which has blocks instead of classes. Number of blocks depend on the customer needs which is more efficient and useful. [3]

42. İzmir Institute of Technology has classfull address. There are 4 of C classes which are;

- 193.140.248.0
- 193.140.249.0
- 193.140.250.0
- 193.140.251.0

References

- [1] «HelloTechHow,» 29 January 2020. [Çevrimiçi]. Available:
<https://www.hellotech.com/guide/for/how-do-i-find-my-router-ip-address>.
- [2] [Online]. Available: <https://www.seslisozluk.net/subnetting-nedir-ne-demek>.
- [3] «Network Layer: Logical Addressing,» %1 içinde *Data Communications and Networking*, 2000.