import ipaddress

def subnet\_details(ip\_with\_prefix):

try:

# Create an IP network object

network = ipaddress.ip\_network(ip\_with\_prefix, strict=False)

print(f"Network Address: {network.network\_address}")

print(f"Broadcast Address: {network.broadcast\_address}")

print(f"Subnet Mask: {network.netmask}")

print(f"Number of Hosts: {network.num\_addresses - 2}") # Excludes network and broadcast

print(f"First Host: {list(network.hosts())[0]}")

print(f"Last Host: {list(network.hosts())[-1]}")

except ValueError as e:

print(f"Error: {e}")

# Input: IP address with CIDR prefix (e.g., 192.168.1.0/24)

ip\_with\_prefix = input("Enter IP address with prefix (e.g., 192.168.1.0/24): ")

subnet\_details(ip\_with\_prefix)