**CS 9868 Internet Algorithmics  
Assignment 1: Graduate and Undergraduate Students  
Due October 5 during class**

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1. **Symbolic name:** compute.gaul.csd.uwo.ca  
   **IP address:** 129.100.22.24  
     
   Since . Then, the address belongs to the B IP address class and shares the prefix 10000001.01100100.  
     
   Furthermore, IP address class ID requires 2 bits while the Network ID and Host ID require 14 and 16 bits respectively. Therefore, since . Then, the network can have up to 65536 hosts.
2. **Estimated network size:** 6160  
     
   **L** = [129.100.93.144, 129.100.72.57, 129.100.14.115, 129.100.88.152, 129.100.56.204, 129.100.40.234, 129.100.194.252, 129.100.171.123, 129.100.48.210, 129.100.173.253, 129.100.48.62, 129.100.70.138, 129.100.154.237, 129.100.225.150, 129.100.182.13, 129.100.233.192, 129.100.186.31, 129.100.42.209, 129.100.159.13, 129.100.189.44, 129.100.101.237, 129.100.118.57, 129.100.154.37, 129.100.68.243, 129.100.30.147, 129.100.0.144, 129.100.164.45, 129.100.31.1, 129.100.121.190, 129.100.130.50, 129.100.152.252, 129.100.120.122, 129.100.76.13, 129.100.194.47, 129.100.98.206, 129.100.49.199, 129.100.110.135, 129.100.172.7, 129.100.232.187, 129.100.212.200, 129.100.118.28, 129.100.44.104, 129.100.38.225, 129.100.94.35, 129.100.35.204, 129.100.112.87, 129.100.164.217, 129.100.56.215, 129.100.222.203, 129.100.105.190, 129.100.55.79, 129.100.64.48, 129.100.40.144, 129.100.22.135, 129.100.255.107, 129.100.253.12, 129.100.186.253, 129.100.249.250, 129.100.35.224, 129.100.82.7, 129.100.118.81, 129.100.25.110, 129.100.187.70, 129.100.125.144, 129.100.15.254, 129.100.212.232, 129.100.102.172, 129.100.157.187, 129.100.198.36, 129.100.178.15, 129.100.112.194, 129.100.51.210, 129.100.45.46, 129.100.6.174, 129.100.34.90, 129.100.245.207, 129.100.236.42, 129.100.129.67, 129.100.4.251, 129.100.149.235, 129.100.102.34, 129.100.193.174, 129.100.39.0, 129.100.146.189, 129.100.181.54, 129.100.151.6, 129.100.119.11, 129.100.140.116, 129.100.226.159, 129.100.254.41, 129.100.239.17, 129.100.0.74, 129.100.43.36, 129.100.106.199, 129.100.89.23, 129.100.194.54, 129.100.111.125, 129.100.97.226, 129.100.224.29, 129.100.132.175, 129.100.230.87, 129.100.107.38, 129.100.204.12, 129.100.59.2, 129.100.78.93, 129.100.153.192, 129.100.138.162, 129.100.191.218, 129.100.237.90, 129.100.85.159, 129.100.10.20, 129.100.80.83, 129.100.66.212, 129.100.237.95, 129.100.209.23, 129.100.120.174, 129.100.46.234, 129.100.51.245, 129.100.41.186, 129.100.81.153, 129.100.85.194, 129.100.153.155, 129.100.60.122, 129.100.225.12, 129.100.46.76, 129.100.34.12, 129.100.214.214, 129.100.83.28, 129.100.125.3, 129.100.21.69, 129.100.185.34, 129.100.36.40, 129.100.194.116, 129.100.218.245, 129.100.30.4, 129.100.203.218, 129.100.110.5, 129.100.60.250, 129.100.96.68, 129.100.227.210, 129.100.21.79, 129.100.14.145, 129.100.87.60, 129.100.45.6, 129.100.172.111, 129.100.168.117, 129.100.57.235, 129.100.103.95, 129.100.141.15, 129.100.66.142, 129.100.162.114, 129.100.3.249, 129.100.174.81, 129.100.4.106, 129.100.255.164, 129.100.202.255, 129.100.81.151, 129.100.239.167, 129.100.191.73, 129.100.153.68, 129.100.148.222, 129.100.79.189, 129.100.142.77, 129.100.230.205, 129.100.217.163, 129.100.116.124, 129.100.164.92, 129.100.201.41, 129.100.79.78, 129.100.37.28, 129.100.74.33, 129.100.15.105, 129.100.4.64, 129.100.103.199, 129.100.70.238, 129.100.204.254, 129.100.221.16, 129.100.160.94, 129.100.48.252, 129.100.22.27, 129.100.12.7, 129.100.44.101, 129.100.60.170, 129.100.227.124, 129.100.88.160, 129.100.181.107, 129.100.124.242, 129.100.70.29, 129.100.155.70, 129.100.206.223, 129.100.1.21, 129.100.149.181, 129.100.119.14, 129.100.129.183, 129.100.167.85, 129.100.174.240, 129.100.73.208, 129.100.97.253, 129.100.109.3, 129.100.213.195, 129.100.127.143, 129.100.222.223, 129.100.44.195, 129.100.180.239, 129.100.106.11, 129.100.167.176, 129.100.243.126, 129.100.233.215, 129.100.86.96, 129.100.90.238, 129.100.127.93, 129.100.36.59, 129.100.51.218, 129.100.214.192, 129.100.49.253, 129.100.53.136, 129.100.207.58, 129.100.252.62, 129.100.95.105, 129.100.29.139, 129.100.244.4, 129.100.111.98, 129.100.48.119, 129.100.241.211, 129.100.130.249, 129.100.225.145, 129.100.187.233, 129.100.47.107, 129.100.108.94, 129.100.106.74, 129.100.64.123, 129.100.45.211, 129.100.139.190, 129.100.145.241, 129.100.225.192, 129.100.211.123, 129.100.147.139, 129.100.51.110, 129.100.145.151, 129.100.123.194, 129.100.83.111, 129.100.103.141, 129.100.82.218, 129.100.47.135, 129.100.113.111, 129.100.5.6, 129.100.59.87, 129.100.224.59, 129.100.36.33, 129.100.103.127, 129.100.124.3, 129.100.115.44, 129.100.54.166, 129.100.159.208, 129.100.203.54, 129.100.130.111, 129.100.246.105, 129.100.88.240, 129.100.21.138, 129.100.42.122, 129.100.165.212, 129.100.142.107, 129.100.204.0, 129.100.161.66, 129.100.11.65, 129.100.75.92, 129.100.46.179, 129.100.47.209, 129.100.32.215, 129.100.166.166, 129.100.32.7, 129.100.171.214, 129.100.252.116, 129.100.69.79, 129.100.14.134, 129.100.39.43, 129.100.211.53, 129.100.175.89, 129.100.219.10, 129.100.244.83, 129.100.104.179, 129.100.27.27, 129.100.124.126, 129.100.187.156, 129.100.96.223, 129.100.134.102, 129.100.223.223, 129.100.89.102, 129.100.91.233, 129.100.140.66, 129.100.30.160, 129.100.245.158, 129.100.67.22, 129.100.82.185, 129.100.171.154, 129.100.143.34, 129.100.209.238, 129.100.26.215, 129.100.231.146, 129.100.139.127, 129.100.62.45, 129.100.65.144, 129.100.67.143, 129.100.79.222, 129.100.197.183, 129.100.245.137, 129.100.98.250, 129.100.149.149, 129.100.198.151, 129.100.253.86, 129.100.178.230, 129.100.86.32, 129.100.94.196, 129.100.67.201, 129.100.54.93, 129.100.3.5, 129.100.239.185, 129.100.35.226, 129.100.196.132, 129.100.49.165, 129.100.159.8, 129.100.10.75, 129.100.50.186, 129.100.30.190, 129.100.105.196, 129.100.179.53, 129.100.251.44, 129.100.166.228, 129.100.168.132, 129.100.78.161, 129.100.190.147, 129.100.252.195, 129.100.58.26, 129.100.131.36, 129.100.208.108, 129.100.110.63, 129.100.42.144, 129.100.174.95, 129.100.121.60, 129.100.143.60, 129.100.145.93, 129.100.228.64, 129.100.15.232, 129.100.129.47, 129.100.224.39, 129.100.139.11, 129.100.116.69, 129.100.14.174, 129.100.169.228, 129.100.244.184, 129.100.116.73, 129.100.64.210, 129.100.140.50, 129.100.192.156, 129.100.42.132, 129.100.233.50, 129.100.181.230, 129.100.77.250, 129.100.180.11, 129.100.10.107, 129.100.169.149, 129.100.1.167, 129.100.223.64, 129.100.219.169, 129.100.145.123, 129.100.178.218, 129.100.76.49, 129.100.245.19, 129.100.172.180, 129.100.205.63, 129.100.215.253, 129.100.215.57, 129.100.253.96, 129.100.165.67, 129.100.150.44, 129.100.95.89, 129.100.83.31, 129.100.201.138, 129.100.92.7, 129.100.0.4, 129.100.77.230, 129.100.137.120, 129.100.207.232, 129.100.185.3, 129.100.81.48, 129.100.245.152, 129.100.11.180, 129.100.45.137, 129.100.114.53, 129.100.228.157, 129.100.67.240, 129.100.254.187, 129.100.107.0, 129.100.253.50, 129.100.20.70, 129.100.24.233, 129.100.130.147, 129.100.123.212, 129.100.214.35, 129.100.250.118, 129.100.95.249, 129.100.93.11, 129.100.14.152, 129.100.136.207, 129.100.246.86, 129.100.81.80, 129.100.92.177, 129.100.233.181, 129.100.17.41, 129.100.117.254, 129.100.65.72, 129.100.229.19, 129.100.14.32, 129.100.125.222, 129.100.12.1, 129.100.94.195, 129.100.90.18, 129.100.110.134, 129.100.250.36, 129.100.209.200, 129.100.117.117, 129.100.159.195, 129.100.161.1, 129.100.183.89, 129.100.81.72, 129.100.140.173, 129.100.127.164, 129.100.224.28, 129.100.177.243, 129.100.112.10, 129.100.169.78, 129.100.252.196, 129.100.44.138, 129.100.97.99, 129.100.80.2, 129.100.149.138, 129.100.2.135, 129.100.136.177, 129.100.108.4, 129.100.98.136, 129.100.190.87, 129.100.134.39, 129.100.54.201, 129.100.209.247, 129.100.119.110, 129.100.87.200, 129.100.86.59, 129.100.6.246, 129.100.170.238, 129.100.76.95, 129.100.85.167, 129.100.34.22, 129.100.201.209, 129.100.236.156, 129.100.62.36, 129.100.86.198, 129.100.180.47, 129.100.222.78, 129.100.19.3, 129.100.222.204, 129.100.172.30, 129.100.160.63, 129.100.73.166, 129.100.66.170, 129.100.179.211, 129.100.254.119, 129.100.232.129, 129.100.154.41, 129.100.169.53, 129.100.189.92, 129.100.150.104, 129.100.110.251, 129.100.251.186, 129.100.58.132, 129.100.152.118, 129.100.19.241, 129.100.85.186, 129.100.92.204, 129.100.97.173, 129.100.216.181, 129.100.44.93, 129.100.71.23, 129.100.66.42, 129.100.232.226, 129.100.144.215, 129.100.239.199, 129.100.133.210, 129.100.64.235, 129.100.42.131, 129.100.103.223, 129.100.121.236, 129.100.106.88, 129.100.6.67, 129.100.97.93, 129.100.17.199, 129.100.77.252, 129.100.247.168, 129.100.167.155, 129.100.93.84, 129.100.210.118, 129.100.11.176, 129.100.97.229, 129.100.160.120, 129.100.159.178, 129.100.112.80, 129.100.228.106, 129.100.8.92, 129.100.175.12, 129.100.88.84, 129.100.250.82, 129.100.86.203, 129.100.214.73, 129.100.255.78, 129.100.51.192, 129.100.40.255, 129.100.255.115, 129.100.178.233, 129.100.101.46, 129.100.59.160, 129.100.160.30, 129.100.55.141, 129.100.106.173, 129.100.247.126, 129.100.90.147, 129.100.3.192, 129.100.35.60, 129.100.110.235, 129.100.58.220, 129.100.6.120, 129.100.158.175, 129.100.189.81, 129.100.229.175, 129.100.228.221, 129.100.120.165, 129.100.123.103, 129.100.170.155, 129.100.150.190, 129.100.28.237, 129.100.70.254, 129.100.140.188, 129.100.251.67, 129.100.227.83, 129.100.46.38, 129.100.95.178, 129.100.246.161, 129.100.254.109, 129.100.170.18, 129.100.4.121, 129.100.162.66, 129.100.50.161, 129.100.61.107, 129.100.4.231, 129.100.99.234, 129.100.101.204, 129.100.114.219, 129.100.178.170, 129.100.228.210, 129.100.190.223, 129.100.140.46, 129.100.21.248, 129.100.213.7, 129.100.255.245, 129.100.201.240, 129.100.237.180, 129.100.170.25, 129.100.162.194, 129.100.246.31, 129.100.234.198, 129.100.20.236, 129.100.229.40, 129.100.157.129, 129.100.202.244, 129.100.118.122, 129.100.100.95, 129.100.92.209, 129.100.49.20, 129.100.27.183, 129.100.238.40, 129.100.124.198, 129.100.33.214, 129.100.146.203, 129.100.91.99, 129.100.239.83, 129.100.31.178, 129.100.122.32, 129.100.97.5, 129.100.178.87, 129.100.32.242, 129.100.191.113, 129.100.174.82, 129.100.34.26, 129.100.240.151, 129.100.71.176, 129.100.92.140, 129.100.92.100, 129.100.150.237, 129.100.34.0, 129.100.144.126, 129.100.61.161, 129.100.164.136, 129.100.67.121, 129.100.207.174, 129.100.93.240, 129.100.107.158, 129.100.215.122, 129.100.55.168, 129.100.129.202, 129.100.89.100, 129.100.46.98, 129.100.201.180, 129.100.141.100, 129.100.208.160, 129.100.108.112, 129.100.62.106, 129.100.101.111, 129.100.170.96, 129.100.117.182, 129.100.85.166, 129.100.149.19, 129.100.168.178, 129.100.16.14, 129.100.149.187, 129.100.179.221, 129.100.151.159, 129.100.216.218, 129.100.112.61, 129.100.86.241, 129.100.252.76, 129.100.169.238, 129.100.217.119, 129.100.98.141, 129.100.168.141, 129.100.253.247, 129.100.21.108, 129.100.241.229, 129.100.163.175, 129.100.102.78, 129.100.3.227, 129.100.199.157, 129.100.90.227, 129.100.227.77, 129.100.111.36, 129.100.57.37, 129.100.147.197, 129.100.188.74, 129.100.115.120, 129.100.210.192, 129.100.22.41, 129.100.163.36, 129.100.235.1, 129.100.153.248, 129.100.208.166, 129.100.22.140, 129.100.0.190, 129.100.215.87, 129.100.102.56, 129.100.42.190, 129.100.56.76, 129.100.155.198, 129.100.75.9, 129.100.40.96, 129.100.106.63, 129.100.181.22, 129.100.59.63, 129.100.79.86, 129.100.111.112, 129.100.14.146, 129.100.146.147, 129.100.25.43, 129.100.83.21, 129.100.85.184, 129.100.155.140, 129.100.124.13, 129.100.191.145, 129.100.115.191, 129.100.66.70, 129.100.252.25, 129.100.115.239, 129.100.12.77, 129.100.1.158, 129.100.99.147, 129.100.244.191, 129.100.183.26, 129.100.78.150, 129.100.26.219, 129.100.41.134, 129.100.183.246, 129.100.180.107, 129.100.108.234, 129.100.150.129, 129.100.49.110, 129.100.201.210, 129.100.86.196, 129.100.94.95, 129.100.228.102, 129.100.173.119, 129.100.61.29, 129.100.64.108, 129.100.70.5, 129.100.131.109, 129.100.230.129, 129.100.122.217, 129.100.224.80, 129.100.176.202, 129.100.204.253, 129.100.19.70, 129.100.253.98, 129.100.197.65, 129.100.243.110, 129.100.105.58, 129.100.221.217, 129.100.181.57, 129.100.223.188, 129.100.52.3, 129.100.14.14, 129.100.26.130, 129.100.247.234, 129.100.31.29, 129.100.102.135, 129.100.20.188, 129.100.222.114, 129.100.65.164, 129.100.107.124, 129.100.192.51, 129.100.117.119, 129.100.113.144, 129.100.174.92, 129.100.197.8, 129.100.57.153, 129.100.173.192, 129.100.246.219, 129.100.23.206, 129.100.77.122, 129.100.133.194, 129.100.99.23, 129.100.155.93, 129.100.223.93, 129.100.27.252, 129.100.76.192, 129.100.198.209, 129.100.132.60, 129.100.164.142, 129.100.243.41, 129.100.209.25, 129.100.143.20, 129.100.128.206, 129.100.30.172, 129.100.160.166, 129.100.80.148, 129.100.148.40, 129.100.13.189, 129.100.137.81, 129.100.249.220, 129.100.54.199, 129.100.117.62, 129.100.104.241, 129.100.167.164, 129.100.17.89, 129.100.45.119, 129.100.146.2, 129.100.36.47, 129.100.246.97, 129.100.164.66, 129.100.38.177, 129.100.178.55, 129.100.42.49, 129.100.41.137, 129.100.37.54, 129.100.51.183, 129.100.187.3, 129.100.42.119, 129.100.44.24, 129.100.168.208, 129.100.127.132, 129.100.165.65, 129.100.12.161, 129.100.97.183, 129.100.179.218, 129.100.81.19, 129.100.223.171, 129.100.30.97, 129.100.236.15, 129.100.92.163, 129.100.200.22, 129.100.252.254, 129.100.150.217, 129.100.93.109, 129.100.56.205, 129.100.57.21, 129.100.255.111, 129.100.179.149, 129.100.141.195, 129.100.244.29, 129.100.10.201, 129.100.185.87, 129.100.180.81, 129.100.60.98, 129.100.207.14, 129.100.132.96, 129.100.119.119, 129.100.208.60, 129.100.192.207, 129.100.97.189, 129.100.218.153, 129.100.153.107, 129.100.229.41, 129.100.21.191, 129.100.209.208, 129.100.71.207, 129.100.88.38, 129.100.155.56, 129.100.104.47, 129.100.243.186, 129.100.133.53, 129.100.36.38, 129.100.103.217, 129.100.174.20, 129.100.206.33, 129.100.77.170, 129.100.89.238, 129.100.236.174, 129.100.109.21, 129.100.228.201, 129.100.121.128, 129.100.165.184, 129.100.218.195, 129.100.192.113, 129.100.124.19, 129.100.238.46, 129.100.13.97, 129.100.202.8, 129.100.97.169, 129.100.218.109, 129.100.7.221, 129.100.218.78, 129.100.204.145, 129.100.187.5, 129.100.247.106, 129.100.35.53, 129.100.172.94, 129.100.108.119, 129.100.186.160, 129.100.10.122, 129.100.243.219, 129.100.215.140, 129.100.105.65, 129.100.180.197, 129.100.195.206, 129.100.112.132, 129.100.98.226, 129.100.250.111, 129.100.208.212, 129.100.59.107, 129.100.114.82, 129.100.58.93, 129.100.53.247, 129.100.86.138, 129.100.27.15, 129.100.227.112, 129.100.114.226, 129.100.232.58, 129.100.126.6, 129.100.246.113, 129.100.140.226, 129.100.133.11, 129.100.17.117, 129.100.237.21, 129.100.109.28, 129.100.165.30, 129.100.195.233, 129.100.148.228, 129.100.169.43, 129.100.53.40, 129.100.195.94, 129.100.183.2, 129.100.156.96, 129.100.48.215, 129.100.144.44, 129.100.79.68, 129.100.78.163, 129.100.216.192, 129.100.214.142, 129.100.165.90, 129.100.235.121, 129.100.188.130, 129.100.238.72, 129.100.22.171, 129.100.80.101, 129.100.193.75, 129.100.25.153, 129.100.31.198, 129.100.94.174, 129.100.193.19, 129.100.70.230, 129.100.250.220, 129.100.221.144, 129.100.49.238, 129.100.88.15, 129.100.180.140, 129.100.92.239, 129.100.232.65, 129.100.4.246, 129.100.221.91, 129.100.69.206, 129.100.254.161, 129.100.193.110, 129.100.174.207, 129.100.148.1, 129.100.61.171, 129.100.79.229, 129.100.137.232, 129.100.67.113, 129.100.242.242, 129.100.2.16, 129.100.202.25, 129.100.92.29, 129.100.254.34, 129.100.75.229, 129.100.8.146, 129.100.7.109, 129.100.222.215, 129.100.208.105, 129.100.89.67, 129.100.232.16, 129.100.82.18, 129.100.238.81, 129.100.60.6, 129.100.167.19, 129.100.104.126, 129.100.132.128, 129.100.186.37, 129.100.49.176, 129.100.197.90, 129.100.178.187, 129.100.29.255, 129.100.85.104, 129.100.117.146, 129.100.28.52, 129.100.231.12, 129.100.36.243, 129.100.114.10, 129.100.96.49, 129.100.194.208, 129.100.99.176, 129.100.112.85, 129.100.214.159, 129.100.141.86, 129.100.83.1, 129.100.186.30, 129.100.214.224, 129.100.145.243, 129.100.47.121, 129.100.95.31, 129.100.14.23, 129.100.236.157, 129.100.140.18, 129.100.176.228, 129.100.138.201, 129.100.2.180, 129.100.38.78, 129.100.97.178, 129.100.147.103, 129.100.33.210, 129.100.75.63, 129.100.212.10, 129.100.251.209, 129.100.97.152, 129.100.212.100, 129.100.247.5, 129.100.11.214, 129.100.210.148, 129.100.190.118, 129.100.234.88, 129.100.196.242, 129.100.84.42, 129.100.34.245, 129.100.109.48, 129.100.166.234, 129.100.13.202, 129.100.216.129, 129.100.207.133, 129.100.184.245, 129.100.63.53, 129.100.72.141, 129.100.220.15, 129.100.235.245, 129.100.228.200, 129.100.33.132, 129.100.249.144, 129.100.255.10, 129.100.172.72, 129.100.172.16, 129.100.127.30, 129.100.54.207, 129.100.82.10, 129.100.116.253, 129.100.254.139, 129.100.147.240, 129.100.1.171, 129.100.75.202]  
   **A** = [129.100.48.210, 129.100.48.62, 129.100.182.13, 129.100.233.192, 129.100.49.199, 129.100.35.204, 129.100.0.74, 129.100.237.90, 129.100.57.235, 129.100.103.199, 129.100.48.119, 129.100.106.74, 129.100.139.190, 129.100.145.241, 129.100.211.123, 129.100.147.139, 129.100.51.110, 129.100.103.141, 129.100.246.105, 129.100.245.137, 129.100.178.230, 129.100.86.32, 129.100.179.53, 129.100.131.36, 129.100.42.144, 129.100.42.132, 129.100.233.50, 129.100.178.218, 129.100.207.232, 129.100.20.70, 129.100.246.86, 129.100.229.19, 129.100.110.134, 129.100.117.117, 129.100.224.28, 129.100.177.243, 129.100.112.10, 129.100.6.246, 129.100.236.156, 129.100.160.63, 129.100.179.211, 129.100.42.131, 129.100.160.120, 129.100.86.203, 129.100.178.233, 129.100.35.60, 129.100.58.220, 129.100.229.175, 129.100.170.155, 129.100.227.83, 129.100.246.161, 129.100.170.18, 129.100.246.31, 129.100.229.40, 129.100.86.241, 129.100.241.229, 129.100.102.78, 129.100.227.77, 129.100.22.41, 129.100.163.36, 129.100.235.1, 129.100.42.190, 129.100.106.63, 129.100.41.134, 129.100.150.129, 129.100.224.80, 129.100.57.153, 129.100.246.219, 129.100.36.47, 129.100.246.97, 129.100.178.55, 129.100.42.49, 129.100.41.137, 129.100.60.98, 129.100.229.41, 129.100.36.38, 129.100.236.174, 129.100.109.21, 129.100.35.53, 129.100.105.65, 129.100.86.138, 129.100.227.112, 129.100.246.113, 129.100.133.11, 129.100.109.28, 129.100.48.215, 129.100.235.121, 129.100.180.140, 129.100.148.1, 129.100.82.18, 129.100.83.1, 129.100.145.243, 129.100.176.228, 129.100.184.245]
3. CIDR IP address: 172.31.100.10/23  
     
   Since . Then, the network ID is 10101100.00011111.0110010 and the host ID is 0.00001010.  
     
   Furthermore, the subnetwork can have up to 512 hosts since .
4. Maximum number of hops: 16 hops

|  |  |  |
| --- | --- | --- |
| Website | Hops | Geolocation |
| facebook.com | 172.30.104.2 | London, ON, CA |
| 129.100.253.65 | London, ON, CA |
| 199.71.2.113 | London, ON, CA |
| 66.97.23.73 | Kitchener, ON, CA |
| 66.97.16.17 | Bowmanville, ON, CA |
| 66.97.16.22 | Bowmanville, ON, CA |
| 206.108.35.2 | Toronto, ON, CA |
| 204.15.23.245 | Palo Alto, CA, USA |
| 173.252.67.119 | Menlo Park, CA, USA |
| 31.13.80.36 | Ireland |
| apple.ca | 172.30.104.2 | London, ON, CA |
| 129.100.253.65 | London, ON, CA |
| 199.71.2.185 | London, ON, CA |
| 172.16.2.101 | - |
| 172.16.2.2 | - |
| 162.212.232.141 | Bradford, ON, CA |
| 209.148.231.217 | Canada |
| 209.148.230.165 | Canada |
| 209.148.233.90 | Canada |
| 209.148.230.134 | Canada |
| 17.1.148.62 | Cupertino, CA, USA |
| 17.1.0.106 | Cupertino, CA, USA |
| 17.1.0.18 | Cupertino, CA, USA |
| 17.1.0.251 | Cupertino, CA, USA |
| 17.0.80.81 | Cupertino, CA, USA |
| 17.168.2.171 | Cupertino, CA, USA |
| youtube.ca | 172.30.104.2 | London, ON, CA |
| 129.100.253.65 | London, ON, CA |
| 199.71.2.185 | London, ON, CA |
| 172.16.2.101 | - |
| 172.16.2.2 | - |
| 38.104.251.1 | Toronto, ON, CA |
| 154.54.31.225 | United States |
| 154.54.6.221 | United States |
| 154.54.42.165 | United States |
| 154.54.5.89 | United States |
| 154.54.41.145 | United States |
| 154.54.44.141 | United States |
|  | 154.54.43.14 | United States |

1. The   
     
   Since, , thenFurthermore, , then

1. **Packet first 34 bytes:** 00 0a f7 0f 9a 2c 8c 85 90 2d c8 35 08 00 45 00   
   **Source MAC address:** 00 0a f7 0f   
   **Destination MAC address:** 9a 2c 8c 85  
     
   **Protocol version number**: 4  
   **Header length:** 5  
   **Total length of datagram:** 495  
   **Time to live:** 64  
   **Source IP address:** 172.30.105.200  
   **Destination IP address:** 129.100.16.66
2. routing table:

|  |  |
| --- | --- |
| Destination | Next hop |
| 132.32.16.10 | deliver direct |
| 164.80.22.31 | deliver direct |
| 192.10.4.2 | 192.10.4.16 |
| 129.1.44.12 | 129.1.7.12 |
| 194.8.11.55 | deliver direct |
| 196.3.7.4 | 196.3.7.18 |

1. Network 1:  
     
   [ MAC address of **A**, MAC address of **R1**, **1**; { IP address of **A**, IP address of **B**, rest of header; **500** } ]   
     
   Network 2:   
     
   [ MAC address of **R1**, MAC address of **R2**, **2**; { IP address of **A**, IP address of **B**, rest of header; **350** } ]   
   [ MAC address of **R1**, MAC address of **R2**, **2**; { IP address of **A**, IP address of **B**, rest of header; **150** } ]  
     
   Network 3:   
     
   [ MAC address of **R2**, MAC address of **B**, **3**; { IP address of **A**, IP address of **B**, rest of header; **350** } ]   
   [ MAC address of **R2**, MAC address of **B**, **3**; { IP address of **A**, IP address of **B**, rest of header; **150** } ]