

Assignment 3

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1. One way is to use the CSMA/CD protocol. This protocol dictates that each message be broadcast to all the machines on the bus. To transmit a message, a machine waits until the bus is silent, and at this time it begins transmitting while continuing to monitor the bus. If another machine also begins transmitting, both machines detect the clash and pause for a brief, independently random period of time before trying to transmit again.

2. The transport layer chops large messages into small packets because a single long message, which forces others to wait while it passes, can obstruct the flow of other messages at the Internet routers where numerous messages cross paths. However, small segments of messages can interweave at these points.

3.

```
def FactorsPrint(N):  
    X = 1  
    while (X < N):  
        if (N % X == 0):  
            print(X)  
        X = X + 1
```

4.

```
def Euclidean(a, b):  
    if (b == 0):  
        print(a)  
    else:  
        Euclidean(b, a % b)
```

5. The values that are printed are : 2, 0, 1, -1.