

5/8/24

## Exercise 2

### STUDY OF NETWORK COMPONENTS

AIM:-

Study of different types of Network cables

a) different types of network cables:

1. Unshielded Twisted Pair (UTP) cable

Advantage:

cheaper in cost

Disadvantage:

More prone to EMI

Application:

Fast Ethernet

2. Shielded Twisted Pair (STP) cable:-

Advantage: Faster than UTP

Disadvantage: Expensive

Application: Gigabit Ethernet.

3. Coaxial cable:

Advantage: High bandwidth

Disadvantage: Limited distance

Application: High speed Internet connection

4. Fibre Optic cable:

Advantages: High speed

Disadvantages: Expensive

Application: Maximum distance of fibre.

b) Make your own Ethernet Crossover cable:

Step 1: Start construction of device, begin by treading shields

Step 2: Strip 1.5 cm of cable shielding from both ends.

Step 3: Untangle the wires, should be twisted pairs.



Step 4: Once order is correct, bunch them up a line and if there are any sticks.

Step 5: Next push the cable right in. The end of the plug needs to be just over the cable sheathing.

Step 6: After the wires are securely sitting inside plug, insert it into the crimping tool and push down.

Step 7: Lastly, repeat for other end using diagram B using diagram A.

#### RESULT:

To test it, plug it in and attempt to connect two devices directly.

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