



Bangladesh University of Business and Technology

LAB Report

Topic name: Configure Network Cable and RJ45 Connector

Lab Report : 02

Course Title : Computer Network Lab

Course Code: CSE-320

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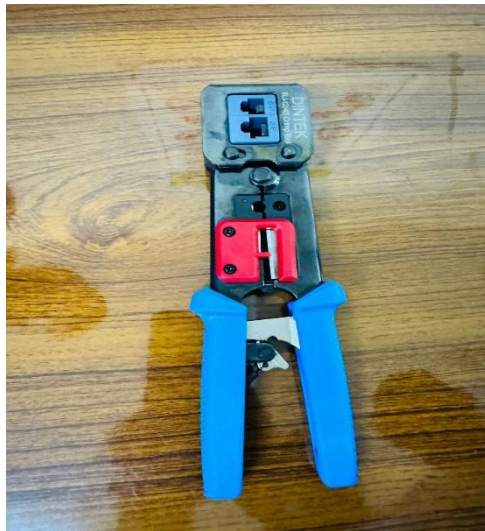
Signature Of Teacher:

Experiment Name: Configure Network Cable and RJ45 Connector

Required Elements :

- CAT 6 Cable
- RJ45 Connector
- Crimper for RJ45
- Cable Tester

Step 1: Outer Sheath Stripping



Step-1: Removing the outer covering of the cable First, I cut the cable to the length I needed. Then, using a stripper on a crimping tool, remove about 1 inch of the outer covering. Insert the cable into the tool and squeeze it tightly. Rotate the tool around the cable (a full circle), then pull the outer cover off. We should be careful not to cut the small twisted wires inside, damaging them can cause the cable to stop working properly.

Step-2: Straightening Wires and Arranging T568A Format

After stripping the outer jacket of the cable, the next step is to strip the inner wires and align them according to the T568A standard for RJ45 connectors.

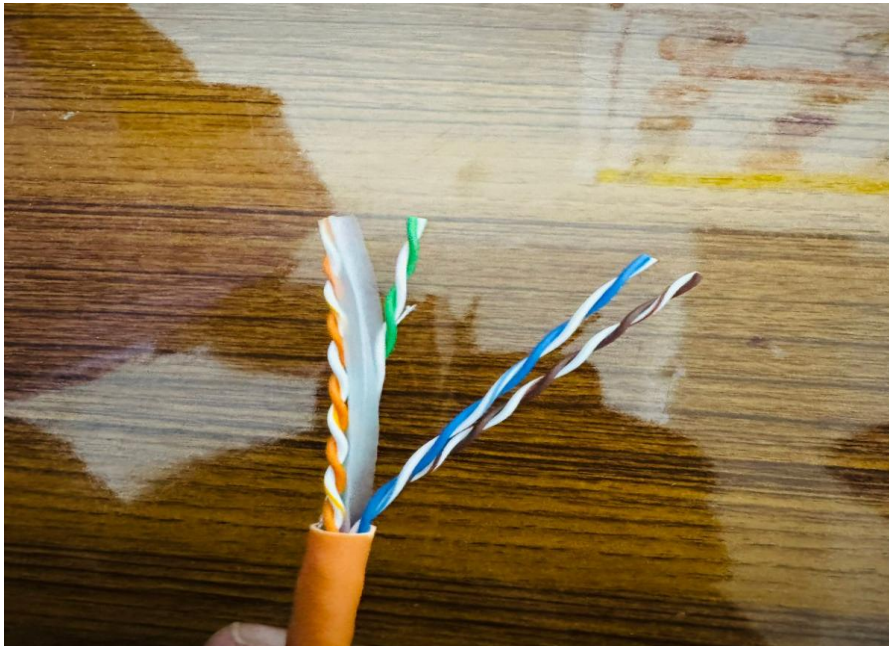
The recommended color sequence is:

Side: 1

1. White/Orange
2. Orange
3. White/Green
4. Blue
5. White/Blue
6. Green
7. White/Brown
8. Brown

Side:2

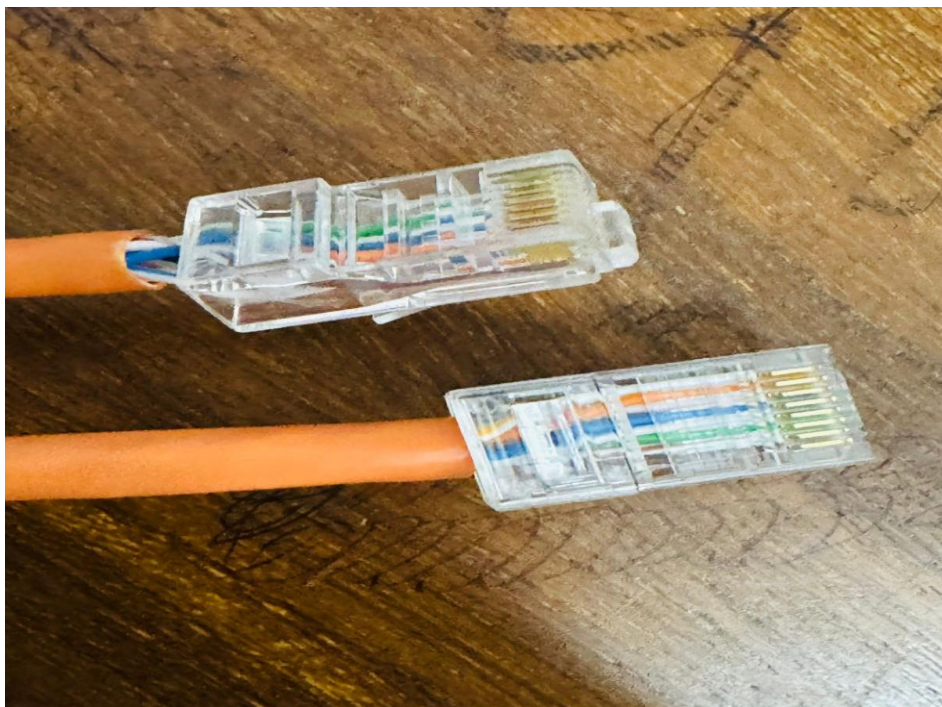
- 1.Green/White
- 2.Green
- 3.Orange/White
- 4.Bule
- 5.Bule/White
- 6.Orange
- 7.Brown/White
- 8.Brown

**Step 3: Preparing the Wires for the RJ45 Connector**

After arranging the wires in T568A order, I crimped them using the cutting edge of my crimping tool. I make sure the wires are straight, evenly aligned, and closed together. Then, I cut them so that about ½ inch of the wire jacket is sticking out from the end, and now it's ready to fit into the RJ45 connector.



Step 4: Inserting Wires into the RJ45 Connector.



After cutting the wires to the correct length for the RJ-45 connector, the wires are ready to be inserted into the connector. With the RJ-45 connector facing up (with the clip securing it at the bottom), insert the wires into the connector. Each wire will fit into each of the eight notches in the connector.

Step 5: Crimping and Testing Proper Crimp.

Finally, the RJ-45 connector needs to be crimped onto the wire. Squeeze the crimping tool very tightly and release. Squeeze the crimping tool a second time to make sure that all of the pins are pushed down on the connector. When crimping is complete, remove the wire (now with the connector crimped) from the tool and check the pins to make sure that they are all down.



Step 06: Testing network connectivity (cross cabling)

Now just check if the connection is OK with the help of the tester.

