



# **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

Discover. Learn. Empower.

## **Experiment1.1**

**Student Name:**Harsh Kumar

**Branch:**BE-CSE

**Semester:** 5th

**Subject Name:**Computer Networks

**Subject Code:**22CSH-312

**UID:**22BCS15754

**Section/Group:**FL\_IOT\_603(B)

**Date of Performance:**19/07/24

- 1. Aim:** Study of different types of Network cables & their Color coding and practically implement the cross-wired cable and straight through cable using crimping tool.

## **2. Requirements(Hardware/Software):**

RJ-45 connector, Crimping Tool, Twisted pair Cable.

## **3. Procedure:**

### **T568B(RJ 45) Wiring Color Order:-**

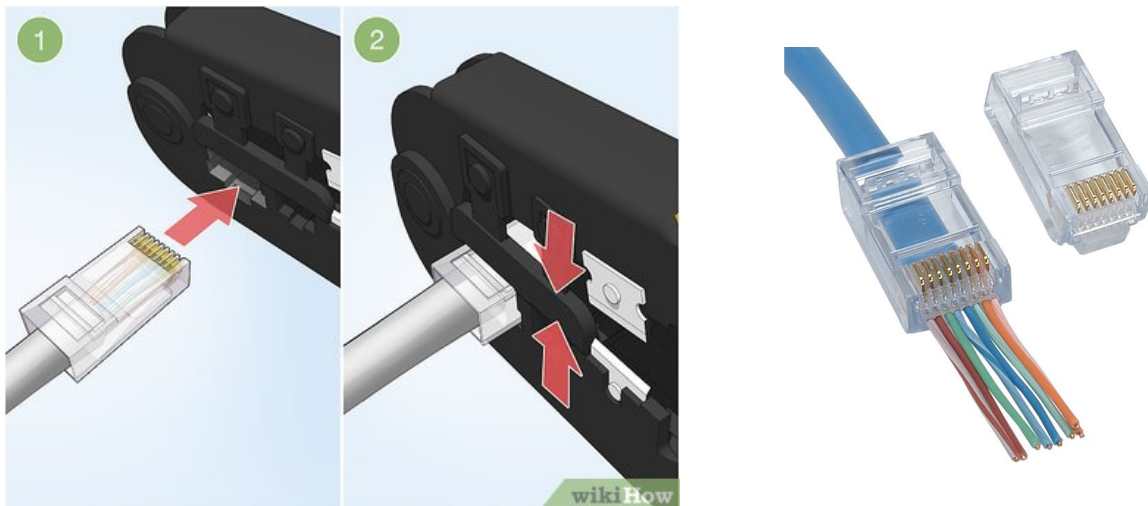
- White-Orange
- Orange
- White-Green
- Blue
- White-Blue
- Green
- White-Brown
- Brown

1. Remove about 1.5 inches of the cable jacket from the end of the cable.
2. Spread apart the four pairs of twisted wires.
  - For Cat 5e: Use the pull string to strip the jacket further if needed, then cut the pull string.

- For Cat 6: Cut the spine inside the cable.
- 3. Trim the Wires:
  - Cut the wires straight across, about 0.5 inches from the end of the jacket.
- 4. Insert Wires into Connector:
  - Carefully insert the wires into the RJ-45 connector, ensuring each wire follows the appropriate guide.
- 5. Crimp the Connector:
  - Insert the connector into the crimping tool and squeeze firmly to crimp.
- 6. Test the Cable:
  - Use a cable tester to check each pin for proper termination.

To ensure successful termination of each end of the cable, use a cable tester to test each connection.

## 4. Output:



## 5. Learning Outcome:

1. Learned how to strip the cable jacket.
2. Learned how to separate and untwist wire pairs.
3. To align wires in the order.
4. Insert wires into an RJ45 connector and crimp it.
5. Learned how to use a cable tester to verify the connections.



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