

# WEEK-2 ASSIGNMENT

**Aim:** Study of different types of Network cables and practically implement the cross-wired cable and straight through cable using clamping tool.

**Apparatus (Components):** RJ-45 connector, Clamping Tool, Twisted pair Cable

**Procedure:**

**1. Strip the cable:**

- Remove roughly 2 inches of plastic jacket from the cable's end.
- Be careful not to nick or damage the inner wires, as this can impair performance or render the connection unusable.
- Check the wiring for any damage. If you detect any cuts or nicks, snip the end off and start over.

**2. Separate the wires:**

- Gently spread the wires apart while holding the jacket's base to prevent them from untwisting inside the cable.
- Avoid leaving more than ½ inch of untwisted wire at the end, since this can cause the cable to be "out of spec."
- At this time, you will likely have more than ½ inch untwisted, which must be rectified later.


**3. Prepare for Connector Installation.**

- If you're dealing with a new cable, you'll need to add connectors at both ends.
- If you're using a pre-made cable with one end already attached, all you need to do is connect the crossed-over end.
- Refer to the wiring schematics for the proper layout depending on the type of cable you're building.

**Diagram shows you how to prepare straight through wired connection**

RJ45 Pin # (END 1)	Wire Color	Diagram End #1	RJ45 Pin # (END 2)	Wire Color	Diagram End #2
1	White/Orange		1	White/Green	
2	Orange		2	Green	
3	White/Green		3	White/Orange	
4	Blue		4	White/Brown	
5	White/Blue		5	Brown	
6	Green		6	Orange	
7	White/Brown		7	Blue	
8	Brown		8	White/Blue	

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4	Blue		4	White/Brown	
5	White/Blue		5	Brown	
6	Green		6	Orange	
7	White/Brown		7	Blue	
8	Brown		8	White/Blue	