LAB 2

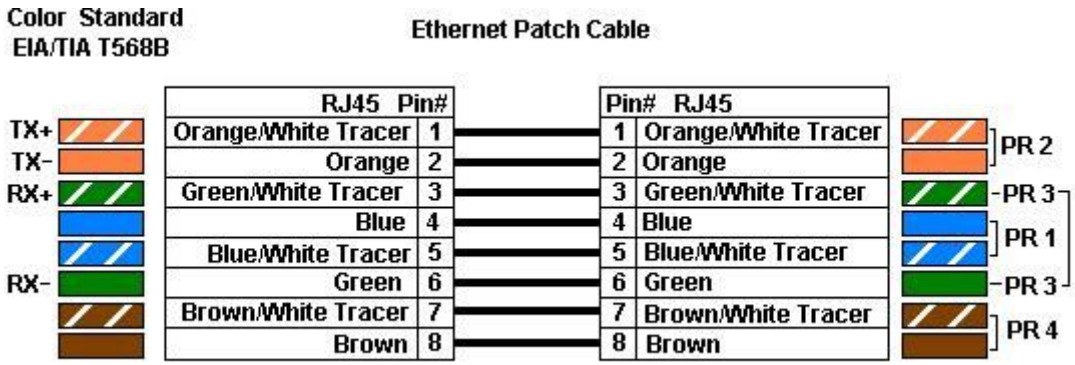
CAT 6 UTP EIA/TIA 568A/B straight and crossover wiring and testing.

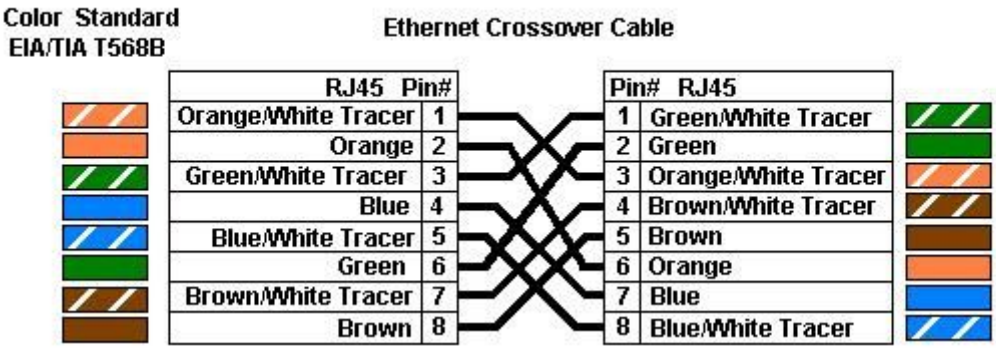
Objectives:

- To understand the colour coding standard of UTP cable.
- To create straight and crossover cable and test its connectivity.

Apparatus:

UTP CAT 6 Cable, RJ45, Crimper, LAN Tester.



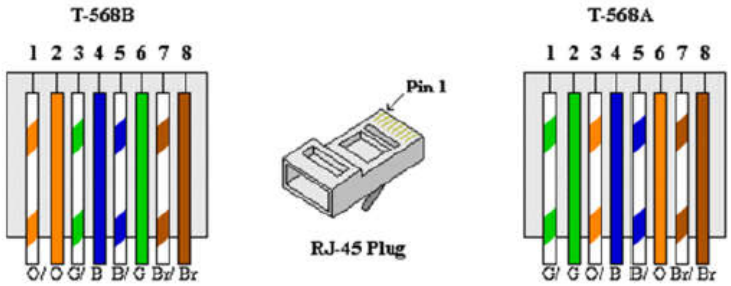


Steps:

1. Begin by stripping the outer covering from the end of cable.
2. Once you remove the outer covering, you need to untwist the twisted pair cables.
3. Once all the twisted pairs are untwisted pull them back and cut the exposed plastic core.
4. After that straighten the wires.
5. Once all the wires have been straightened arrange the wires in the order they need to be connected.
6. After arranging insert the wire into the RJ-45 connector and check if it is completely inserted.
7. After checking, clamp the wire in place using the clamper.
8. Repeat the above step for the next end.
9. Test for proper connectivity using LAN Tester.

Things to remember:

- Once the connector is clamped it cannot be reused.
- The order is followed from left to right.
- Odd number always holds partial colour and even number contains solid color.
- The Standards are:



568 B standards (wiring sequence)	568 A standards (wiring sequence)
Partial Orange (Orange with white stripe), Solid Orange, Partial Green, Solid Blue, Partial Blue, Solid Green, Partial Brown, Solid Brown	Partial Green (Green with white stripe), Solid Green, Partial Orange, Solid Blue, Partial Blue, Solid Orange, Partial Brown, Solid Brown

- The wire is said to be properly connected if the LAN Tester shows the proper sequence while testing.