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**Lab Task - 2a**

**Section : BCS-5A**

## **Experiment 1 - Building a Category 6 (CAT 6) Straight-Through Ethernet Network Cable .**

### **Material:**

1. CAT 6 Ethernet cable
2. RJ45 connectors (two pieces)
3. Crimping tool
4. Cable tester

### **Procedure: For A Side:**

#### Step 1: Gather Materials

Ethernet cable, RJ45 connectors, crimping tool and a cable tester if available.

#### Step 2: Prepare the Cable

cut the Ethernet cable to your desired length

#### Step 3: Arrange the Wires

Orange-White, Orange, Green-White, Blue, Blue-White, Green, Brown-White, and Brown.

#### Step 4:

all the wires should be in equal length.

#### Step 5: Insert Wires into the RJ45 Connector

#### Step 6: Crimp the Connector

#### Step 7: Repeat for the Other End (B)

## **Experiment 2: Building a Category 6 (CAT 6) Cross-Over Ethernet Network Cable .**

Procedure: For A Side:

### **Step 1: Gather Materials**

Ethernet cable  
RJ45 connectors  
Crimping tool  
Cable tester

### **Step 2: Prepare the Cable**

Cut the Ethernet cable to your desired length.

### **Step 3: Arrange the Wires**

Orange-White, Orange, Green-White, Blue, Blue-White, Green, Brown-White, and Brown.

### **Step 4: Ensure Equal Length**

### **Step 5: Insert Wires into the RJ45 Connector**

### **Step 6: Crimp the Connector**

### **Step 7: Repeat for the Other End (B)**

For Side B:

green-white, green, orange-white, blue, blue-white, orange, brown-white.  
and brown. And punch it properly.

