**Section 4: Practical Application :**

**10. Demonstrate how to replace a CPU fan in a desktop computer.**

**Ans**: To replace a CPU fan, **first, power down and unplug your computer**. Open the case and locate the CPU cooler.

Carefully remove the old fan and heatsink, potentially needing to loosen screws or clips.

 Apply fresh thermal paste to the CPU, then install the new fan and heatsink.

Reconnect any necessary cables and secure the fan. Finally, close the case and test the new fan.

* + **Step-by-Step Demonstration:**

1. **Power Off and Unplug**
   * Shut down the computer.
   * Unplug the power cable and all connected devices.
   * Press the power button for 3–5 seconds to discharge static.
2. **Open the Case**
   * Remove the side panel using a screwdriver (usually Phillips-head).
3. **Ground Yourself**
   * Wear an anti-static wrist strap or touch a metal part of the case.
4. **Disconnect the Old CPU Fan**
   * Unplug the fan cable from the motherboard (usually labeled CPU\_FAN).
   * Unscrew or unclip the CPU fan from the heatsink or motherboard, depending on the model.
5. **Remove the Old Fan**
   * Carefully lift the fan off the CPU heatsink.
   * If the fan is attached to the heatsink as a single unit, remove both together.
6. **Install the New CPU Fan**
   * Align the new fan with the heatsink or CPU socket.
   * Clip or screw it into place securely.
7. **Reconnect the Fan Cable**
   * Plug the fan cable into the **CPU\_FAN** header on the motherboard.
8. **Close the Case**
   * Reattach the side panel and secure it with screws.
9. **Power On and Test**
   * Plug in the PC and power it on.
   * Enter BIOS or use system monitoring software to confirm the fan is spinning and CPU temperature is normal.