Methodology Our system uses two Arduino microcontroller units (MCUs), each equipped with a laser –2 diode and a laser phatanesistar sensor.Data Modulation: Manchester coding is a method of binary encoding in which each bit of data is represented by at least one voltage level change, which helps in synchronizing the clock and data recovery.Error Detection and Correction: You use Hamming codes, which are a family of linear error-correcting codes that can detect up to two-bit errors and correct one-bit errors without requiring a retransmission.Serial Communication: Each Arduino is connected to a PC .via serial communication