

## Video-03

### Light Intensity Measurement using LDR Sensor and Arduino UNO

This project involves measuring ambient light intensity using an **LDR (Light Dependent Resistor)** and an **Arduino Uno**. The LDR is connected in a voltage divider configuration, and its analog output is read through **analog pin A0**. Based on the light level, the Arduino controls an **LED**—turning it **on in darkness** and **off in bright light**. This simple system demonstrates how LDR sensors can be used for **automatic lighting, smart energy systems, or day-night detection**. Real-time light readings can also be viewed on the **serial monitor** for monitoring or analysis.