**✅ Components Needed:**

* Arduino UNO
* 2 Servo motors (horizontal & vertical)
* 4 LDR sensors (Light Dependent Resistors)
* 4 resistors (10kΩ)
* Solar panel (mounted on servo platform)
* Jumper wires, breadboard

**📐 LDR Sensor Arrangement:**

mathematica

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[LDR1] [LDR2] <-- Top

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| Solar |

| Panel |

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[LDR3] [LDR4] <-- Bottom

**🔌 LDR to Analog Pins:**

| **LDR** | **Arduino Pin** |
| --- | --- |
| LDR1 | A0 |
| LDR2 | A1 |
| LDR3 | A2 |
| LDR4 | A3 |

**🧠 Servo Pins:**

* Horizontal servo → Pin 9
* Vertical servo → Pin 10

### ✅ Summary:

| **Feature** | **Function** |
| --- | --- |
| 4 LDRs | Detect light intensity difference |
| 2 Servos | Move panel horizontally & vertically |
| Analog Read | A0 to A3 for LDR values |
| Tolerance | Prevents unnecessary movement |