

## **EXPERIMENT**

**.....LDR INTERFACE-AUTOMATIC NIGHT LAMP.....**

**CIRCUIT DIGRAM:**

**THEORY:**

**CONCEPT USED:**

**➤ KIRCHOFF'S VOLTAGE LAW ➤ KIRCHOFF'S CURRENT LAW ➤ CONCEPT OF LDR SENSOR AND PHOTOWAVES**

**LEARNING & OBSERVATION:**

**• CONNECTIONS IN BREADBOARD AND WIRING • TO FORM DIFFERENT PATTERNS FROM LEDS • HOW TO CONTROL ARDUINO & ITS CODING • SENSOR CONCEPTS WITH CONCEPTS OF REVERBERATIONS AND ECHOES**

**OBSERVATIONS:**

**❖ CONTROL OF SENSOR ON CHANGING THE INTENSITY OF LIGHT ❖**  
**RELATION BETWEEN SOFTWARE AND HARDWARE**

**PROBLEMS AND TROUBLESHOOTING:**

✓ TO SELECT THE RIGHT PORT AND TYPE OF ARDUINO ✓ TO CHECK THE  
LOOSE CONNECTIONS ✓ TO CHECK THE CONTINUITY OF CIRCUIT ✓ TO CHECK  
THE FLOW OF CURRENT ✓ TO CHECK THE CONNECTIONS ACCORDING TO THE  
CODES ✓ TO CONNECT THE RIGHT PINS IN THEIR RESPECTIVE PINMODES  
ACCORDING TO THE CODES

**PRECAUTIONS:**

• HANDLE THE COMPONENTS CAREFULLY • AVOID CONNECTING ARDUINO  
TILL THE CIRCUIT IS COMPLETE • CONNECT THE LEDs WITH A RESISTANCE TO  
AVOID DAMAGE • DON'T PLUG THE COMPONENTS INTO UNKNOWN  
CIRCUITS AND MODES

**SUBMITTED BY: NAME: TUSHAR SRIVASTAVA**

**UID : 19BCS6113**

**COURSE: BE-CSE(AIML-2A)**