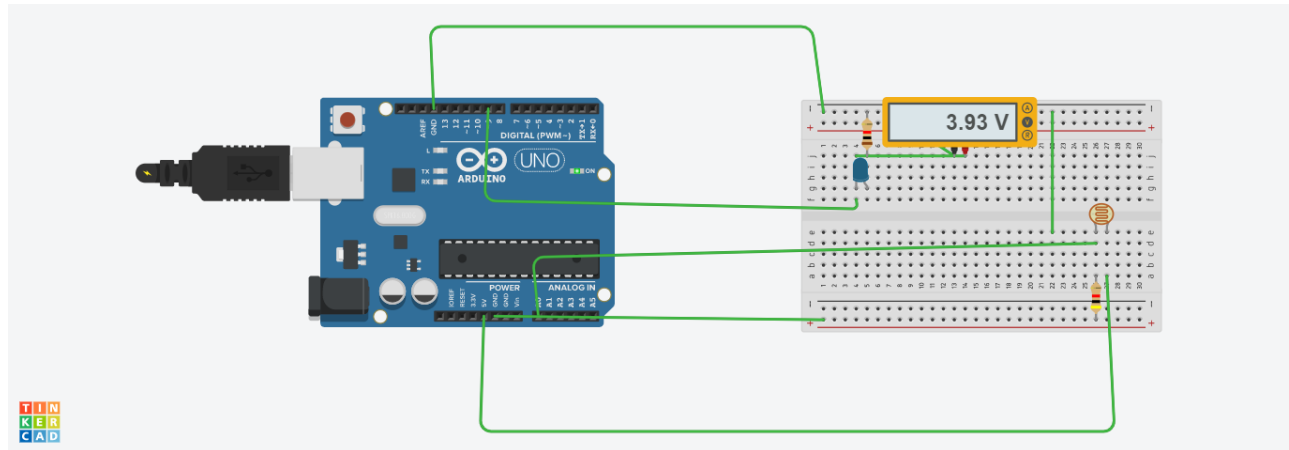


Experiment

Design an automated night lamp

Circuit diagram:



Theory:

CONCEPT USED:

1. By using kirchoff's voltage law
2. &
3. By using kirchoff's current law
4. Photoradiation
5. Use of LDR(Light Dependent resistor)
6. Use of potentiometer

LEARNING AND OBSERVATION'S:

1. Connections in Breadboard and wiring.
2. How to control arduino and its coding.
3. Use of multimeter for continuity.
4. Light sensor devices

OBSERVATION:

1. Sense of brightness and darkness
2. Relation between software and hardware.
3. Variation of voltage

PROBLEMS & TROUBLESHOOTING:

1. To select the right port and type of arduino
2. To check the loose connections
3. To check the connections according to the codes
4. To check the continuity of the circuit
5. To check the flow of current in the circuit
6. Errors in code
7. Setting up right connections
8. Display in proper order
9. Pinmodes of devices

PRECAUTIONS:

1. Do not connect arduino till the circuit is complete
2. Do not connect leds without a variable resistor

OUTCOMES:

1. Making of automated light devices
2. By sensing light
3. Proper use of Arduino and breadboard

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