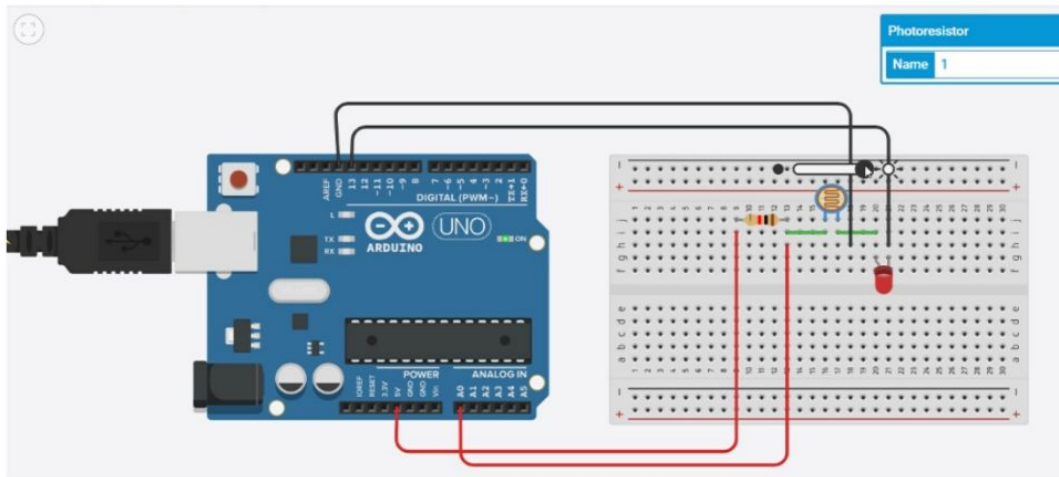


Exp. 4 Night lamp

Circuit Diagram:



Theory:

Concept Used: Way in which photo resistor reacts with light to perform certain functions like the turning ON and OFF of an LED.

Learning & Observations: Learned how photo resistor reacts with light. When light is put over the sensor, Led connected gets lit up, and when there is no light(below a certain value) Led does not glow.

Problems & Troubleshooting

1. Some errors in the circuit like connection of wires to the wrong ports were to be corrected in order to attain a working circuit.
2. Errors in the code for pin connections occurred that were resolved after some corrections.

Precautions

- Check every connection twice.

- Grounds should be connected, unless you know you want them separated.
- Don't plug in an LED without a current limiting resistor.
- Don't plug it into unknown circuit.

Learning Outcomes

- Familiar with Arduino environment and its applications.
- Getting familiar with the working of light sensor.
- Able to Design Smart systems applications.