# Task 3.2

## Goal

The objective of this task is to build a system that monitors the amount of light that falls on our terrarium and the duration as well along with sufficient notifications.

Please Note – I don’t have an ambient light sensor, so I am using dummy values and a hypothetical test for my solution.

# Q1)

## My Solution

The diagram below gives a rough explanation of my system.

A screenshot of a cell phone

Description automatically generated

Below is a schematic for connection between light sensor and particle argon

![A circuit board

Description automatically generated]()

### Overview of my System

The idea here is to place the light sensor and argon near the terrarium and power it with a portable battery pack. We would like to place a certain threshold above which we consider that our terrarium is getting sufficient light and required 2 hours of this level of light anything below the threshold does not account in the 2 hours. The biggest challenge is to find the right threshold which I believe can be found with trial and error with a light sensor and sunlight.

To make my system a little more robust I have built it using finite state machine paradigm.

A screenshot of a cell phone

Description automatically generated

Github link: