1. **Introduction:**
   1. **Purpose**

This Proposal is designed for automatic irrigation system. Soil moisture sensor will be used for measuring moisture level of soil (ChipLM393PCB ).

Measured moisture level information will be sent to subjected person in his/her smart phone who can take further action to irrigate the plant that is being planted in soil. For the communication between subjected person and system we are using  WI-FI MCU ESP8266 interface to Arduino uno which continuously sends signal corresponding to the moisture level to the subjected person through a very famous IOT application called blynk.

**1.2 Problem Statement:**

The moisture of the soil plays an essential role in the irrigation field as well as in gardens for plants. As nutrients in the soil provide the food to the plants for their growth. Extreme soil moisture levels can guide to anaerobic situations that can encourage the plant’s growth as well as soil pathogens. So plants can’t grow well and are not productive if they are not irrigated at proper time. Peoples always tends to forgot those things and which makes worthless planting. Farmers nowadays are not aware of how much water actually plant need which leads to improper growth of plant and fruits and thus bad production.

* 1. **Objectives:**

**Specific:**

To notify moisture level of a soil

**Generalized:**

1.To increase the productivity of a plant

2.To decrease the time to be spent on plant to check for watering frequently

**1.4 Scope of the project:**

It is basically used in agricultural sectors at an affordable cost with

**5. Methodologies:**

Blynk

WIFI module

Arduino UNO

Sensor Probes

1. **Sensor probe:**

Soil moisture sensor probe is used to detect the moisture of the soil. It measures the volumetric content of water inside the soil and gives us the moisture level as output. The module has both digital and analog outputs and a potentiometer to adjust the threshold level.

1. **Arduino uno:**

Arduino is a microcontroller which controls and coordinates every components of the system. Arduino is coded so that