ALGORITHM ASSIGNMENT.

1. DISCUSS THE APPLICATION DEVELOPMENT FOLLOWING THE SOFTWARE DEVELOPMENT CYCLE.

Suppose we are considering the SPRINKLER TYPE IRRIGATION system, The preliminary planning of the ABUAD irrigation system consists of collecting and analyzing all available data for the purpose, securing additional data needed by limited field surveys and determining the feasibility of the proposed development.

* Method of financing the project construction.
* Desirable type of construction and development.
* Portable annual cost of water to the farmers.
* Cost of land preparation and farm distribution systems.
* Feasible crops, costs of production and portable crop returns.
* Has there been a decline in irrigated areas, change in cropping pattern or in land and water productivity of rice, particularly in the tail-end areas in recent years since external inputs stopped in ABUAD?
* Has water management deteriorated in terms of more water being used, head-to-tail preferential allotment or use?
* What is the current status of water user associations?

A noteworthy feature of the comparative analysis is the application of satellite remote-sensing techniques to generate objective and de-aggregated information on agricultural productivity during the rabi season, particularly on the rice productivity per unit of land.

Send value

Display

Less than 30%

Yes

Motor gets on

End

**FIG4: Flow chart of soil moisture sensor.**

Soil moisture sensors will measure the water content in soil. Moisture in the soil is an important component in the atmospheric water cycle. Sensor module outputs a high level of resistance when the soil moisture is low. It has both digital and analog outputs for reading. Digital output is simple to use, but it is not as accurate as analog output based on moisture level motor gets turn off/on automatically.

Check temperature/humidity

Sent value

Display value

End

**FIG3: Flowchart of temperature/humidity sensors.**

1. CRITICALLY DISCUSS THE HARDWARE AND SOFTWARE FEATURES.

* Automatic irrigation controllers: these are essentially electronic timers that are programmable to turn the irrigation valves on and off at specific times, or under certain conditions.
* Irrigation emitters: this is the method through which the water is delivered to the irrigated crop. There are many different choices here, and a specialized irrigation professional will be able to assist me in making the right choice for my particular applications.