



PROJECT WATER LEVEL INDICATOR

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INTRODUCTION

► WHAT IS WATER LEVEL INDICATOR ?

The water level indicator employs a simple mechanism to detect and indicate the water level in an overhead tank or any other water indicator.



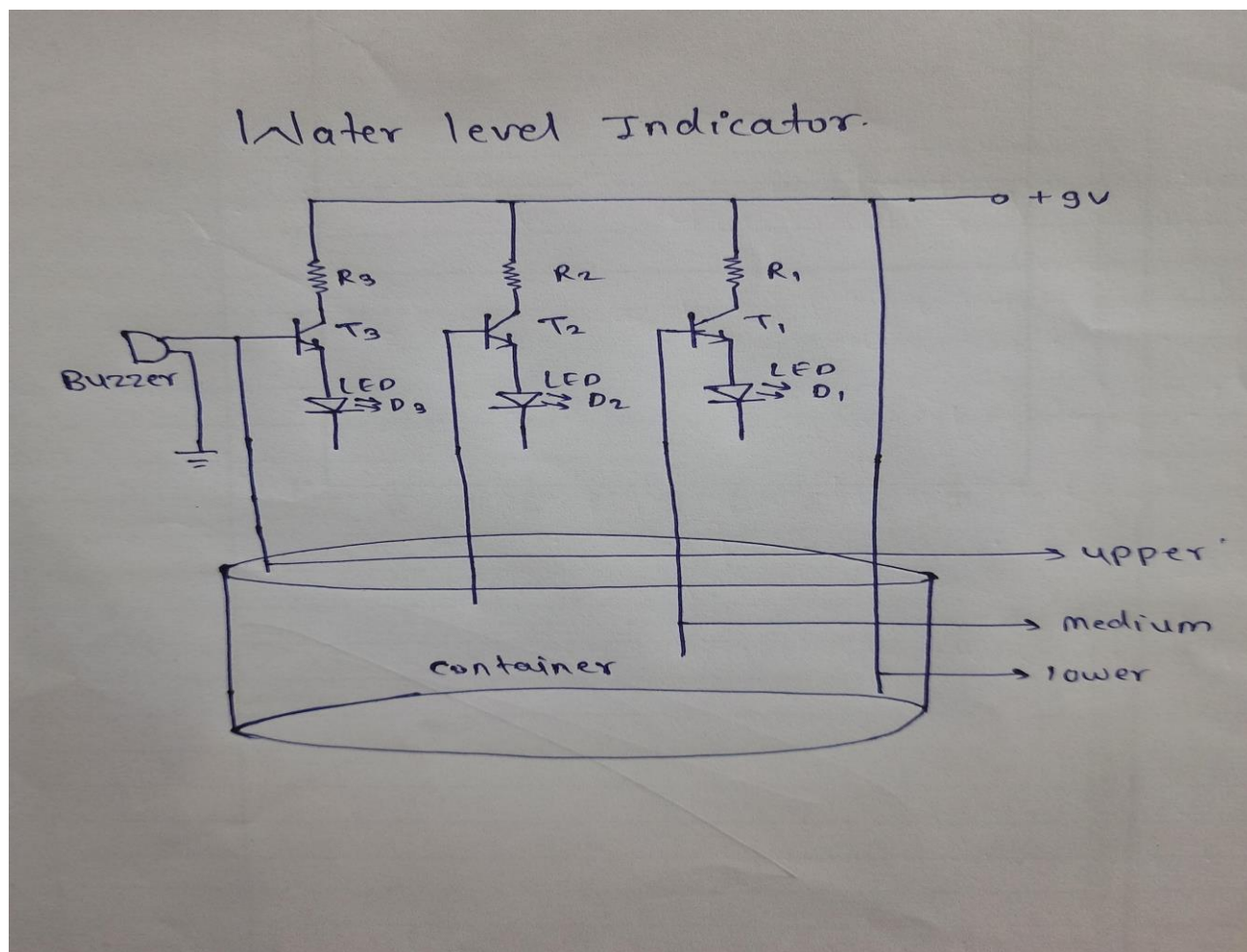
COMPONENTS

Following are the required components for making water level indicator circuit:-

- ▶ **REGISTOR**
- ▶ **LED**
- ▶ **TRANSISTOR**
- ▶ **DC BATTERY**
- ▶ **CONNECTING WIRES**
- ▶ **BUZZER**
- ▶ **BREAD BOARD**



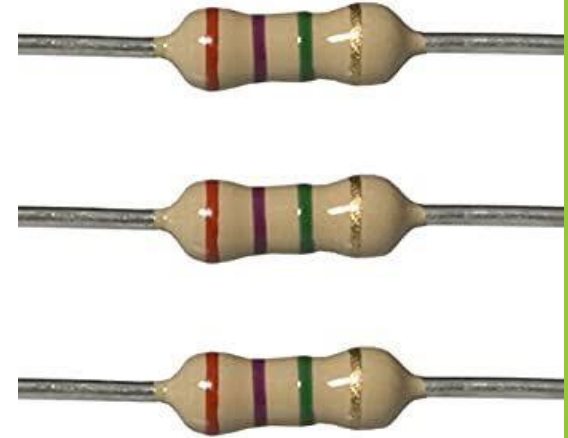
BASIC CIRCUIT DIAGRAM:-





DETAILS OF COMPONENTS:-

- ▶ **REGISTOR**:-It is passive component used to control current in circuit. Its resistance is given by the ratio of voltage applied across its terminals to the current passing through it.
- ▶ **LED**:-A LED is a two load semiconductor light source. It is p-n junction diode and emits light when activated.





- ▶ **TRANSISTOR:**-In this circuit we use n-p-n transistor. This is basically used for amplification and switching purpose.
- ▶ **POWER SUPPLY:**-DC power supply of 9v is taken.
- ▶ **CONNECTING WIRES:**-Connecting wires are used for connection in circuit.





- **BUZZER:-** The buzzer produces sound. It is also used in alarm circuit.



- **BREADBOARD:-** Breadboard is used for temporary experimenting with circuit diagram.





WORKING:-

- ▶ The operation of this project is very simple and can be understood easily. In this project "water level indicator" there are main conditions:
- ▶ There is no water or very less water available in the source tank.
- ▶ There is ample amount of water available in the source tank or about to overflow.



After establishing the required connection as shown in the circuit diagram, we place the other ends of the three wires which are connected to the base of the three transistors into a bowl at three different levels of height.

Suppose wire1 is at a lower height.

Wire2 at a medium height ,Wire3 at a height from which water is supposed to overflow.



- ▶ As we start pouring water into the bowl, the water level touches the first wire (Wire1) which is at a lower level and the circuit gets completed and current starts flowing and the first led (D1) glows.
- ▶ Gradually, as the level of water goes on increasing the other two LEDS (D2 and D3 glows) indicating that the water has reached to maximum height.
- ▶ AS the water level crosses the maximum limit, the buzzer starts beeping and thus sends an alarm so that we can stop the supply of the water.
- ▶ Thus, this simple circuit depicts how a Simple water level indicator help us in preventing the flow of water and further help in reducing the wastage of water and power.
- ▶ So, it turns us to be a very useful appliance which can used.



SAVE BLUE, LIVE GREEN

SAVE WATER



