CSE-260 Project

Topic: Water Level Indicator

Section: 01

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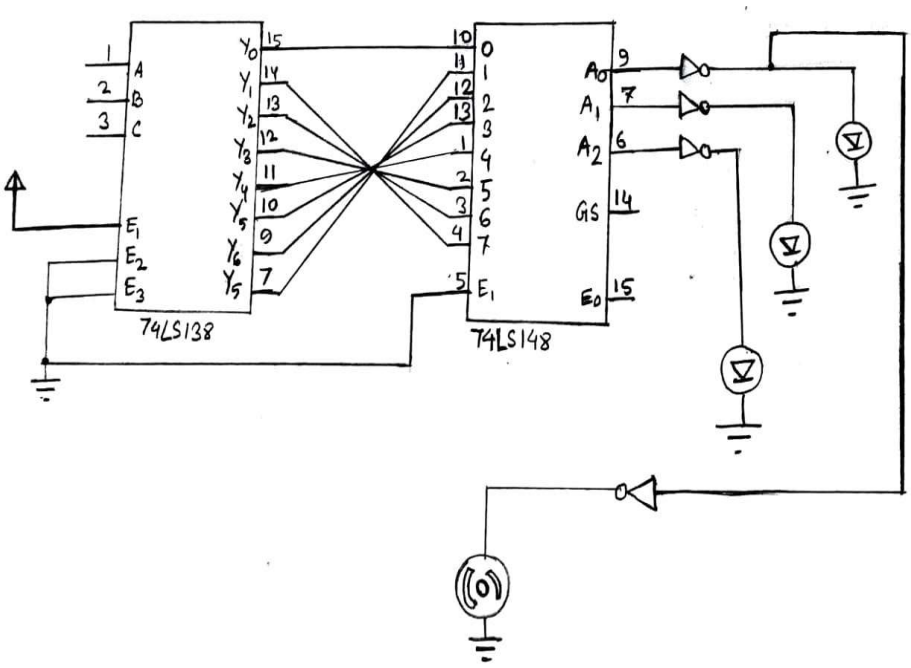
Introduction

The water level indicator is a system that can be used to get information about any reservoir. The water level indicator system is very helpful in reducing the waste of water from the reservoir. Water is the most important thing on earth for all living things. Therefore, do not waste tank overflow. The presence of a water level indicator in the reservoir helps control the waste and water shortages in such reservoirs. The water level indicator is used to display the water level in the overhead tank. This allows the user to keep track of the water level and prevent leaks.

Proposed Model

Here, there can be four situations.
Firstly, the water container may have no water or be empty.
In this case, all LED's become off and by this time the motor will be running. So that the water level can increase. If no LED is on, we should understand there is no water in the tank.
Secondly, the three portioned tank may fill up 1/3 portion. In this case, the Red LED will be on, that's why one can easily understand that the tank is filled up, about 1/3 portion. By this time the motor will be running.
Thirdly, the tank may fill up 2/3 of the tank. In this case, the middle LED or Blue LED will be on, which indicates the tank is filled up with 2/3 portion of water. The motor keeps on it's work at that time also.
Finally, the last LED which is green shows the tank is filled up. When the tank becomes full, then the motor will be off.
This incident will happen everytime, when the level of the water will be decreasing, then also the LED's show the water level and the motor will pump water gradually.

Experimental Setup



Truth Table:

Condition	A	B	C	Red LED	Blue LED	Green LED
Empty	0	0	0	0	0	0
⅓ full	1	0	0	1	0	0
⅔ full	1	1	0	0	1	0
full	1	1	1	0	0	1

Conclusion

The water level indicator is quite sufficient in detecting the water level as the mechanism it uses for detection is quite simple and effective. It is able to indicate the water level of any type of water reservoir with ease and accuracy. The design is quite simple, easy to comprehend and cost efficient. So, this technology can be very beneficial to the commoners and particularly people in rural areas as it will help in effective utilization of water and prevent water wastage.