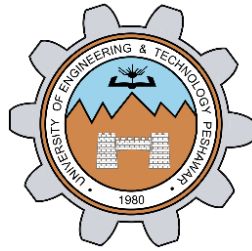


# DLD LAB PROJECT PROPOSAL



Submitted by:

**Osama khan marwat(1777)**

**Atta Ullah Khan(1746)**

**Ashfaq Ahmad(1795)**

Class Section: **B**

Submitted to:

**Engr. Abdullah Ahmad Sb**

## Water Level Indicator

### Introduction:

Water level indicator is a simple circuit mechanism. It needs for overhead water tank or container. The sensing is using some transistor (switching).

In this project we are not using any microcontroller. But in this method we can indicate total 3 steps of water level in any water tank.

### Principle of Water Level Indicator:

The working principle of a water level indicator is actually quite simple. Water level indicators work by using sensor probes to indicate water levels in a storage tank. These probes send information back to the control panel to trigger an alarm or indicator.

### Objectives:

The following objectives are likely to be focused and achieved at the end of the project.

- 1) To make the most commercial and reliable water level controller using as less resources as possible.
- 2) To study the controller model and observe its characteristics.
- 3) To compare the controller with the conventional controllers available in market.

### Applications :

Water level Indicator can be used in Hotels, Factories, Homes, Apartments, Commercial complexes, Drainage, etc. It can be fixed for single phase motor, three phase motors, fuel level indicator in vehicles. liquid level indicator in the huge container companies on the tank walls.

### Project feature:

1. Easy installation
2. Low maintenance
3. Fully automatic and saves man power
4. Consume very little energy

### Hardware Description:

1. BC-547
2. 220 ohm resistor
3. Buzzer
4. 9v Battery
5. LED

#### Condition 1:

When tank have no water there are no signal in the indicator. After starting flow water first LED is indicate the level of water

#### Condition 2:

When tank is medium full of water, then the 2<sup>nd</sup> LED is indicator is ON.

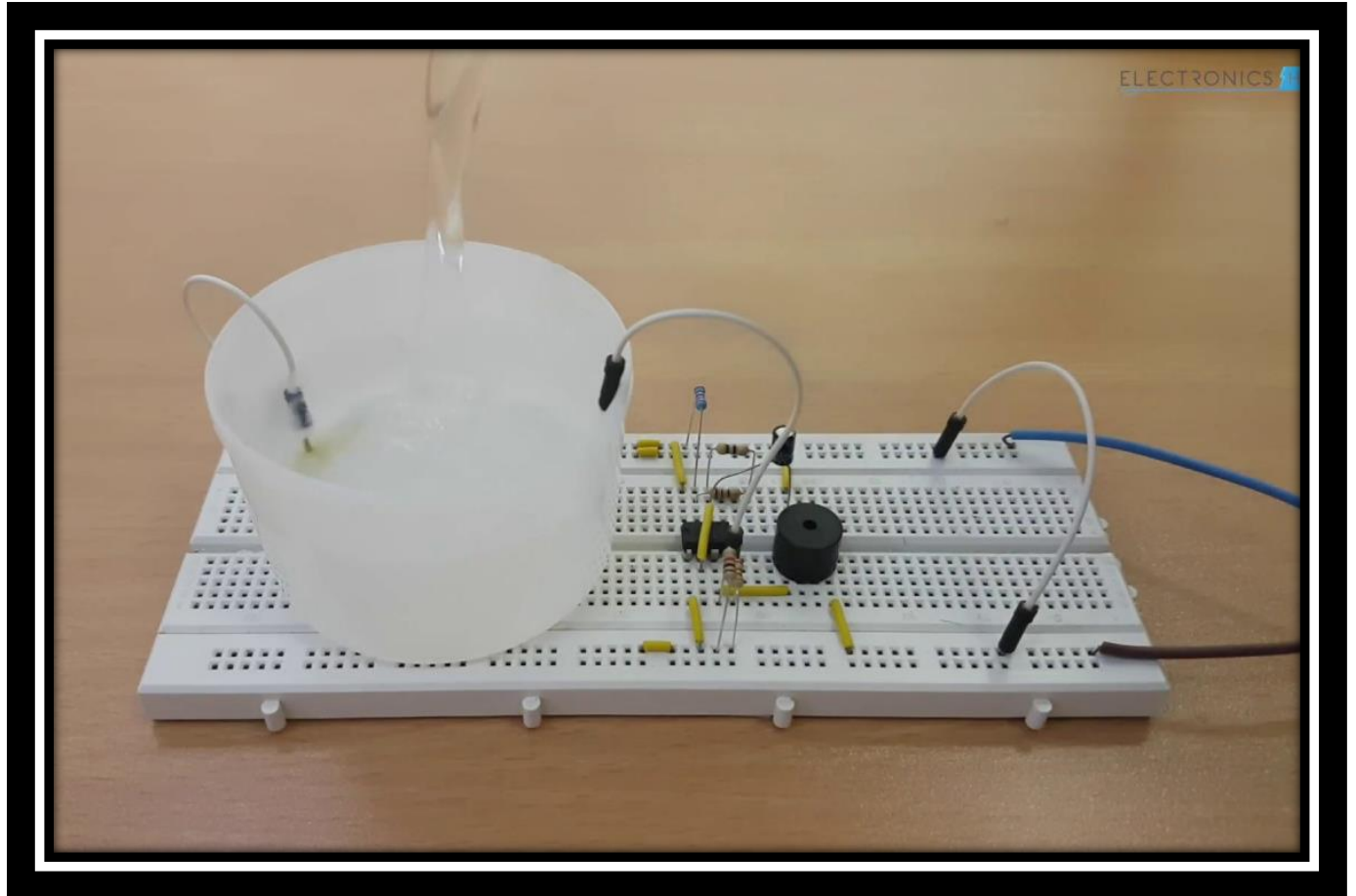
#### Condition 3:

When tank is High full of water third LED is indicator is ON.

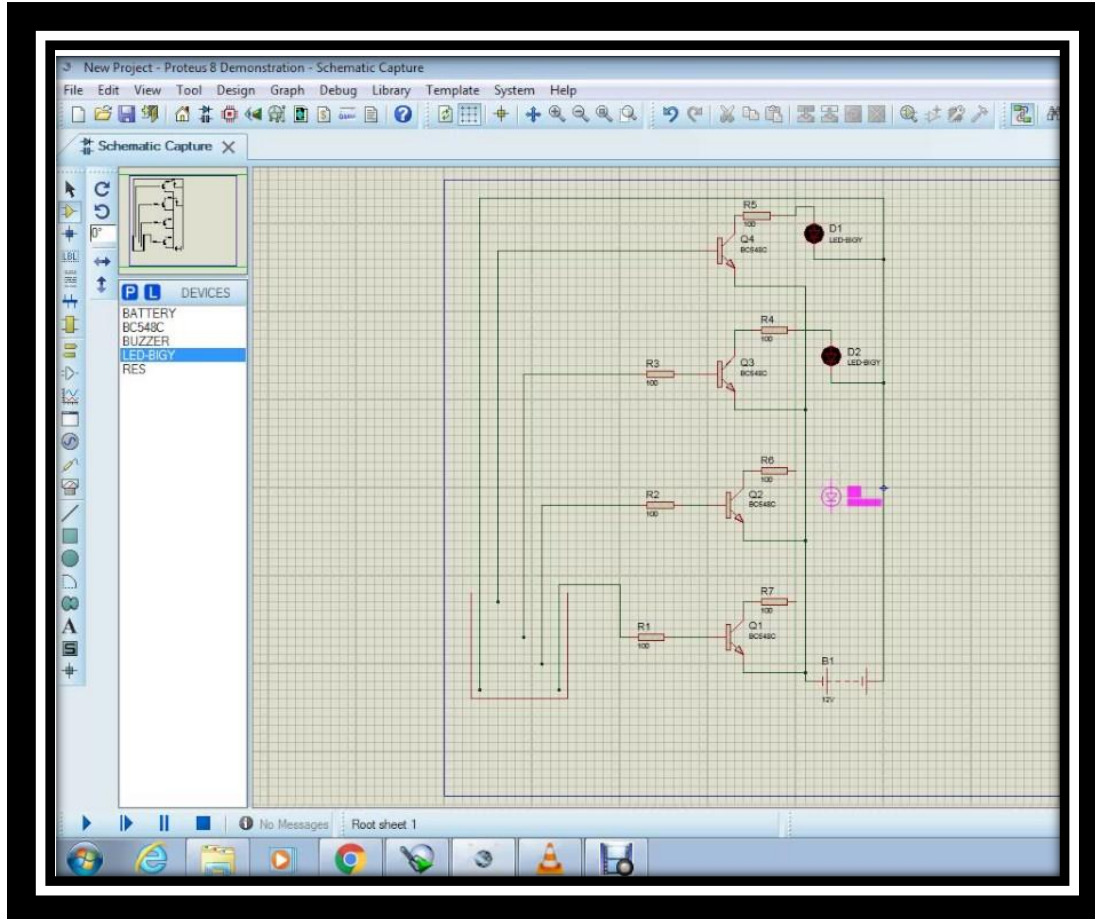
#### Final Condition:

After overflow the tank Buzzer is starting the sound.

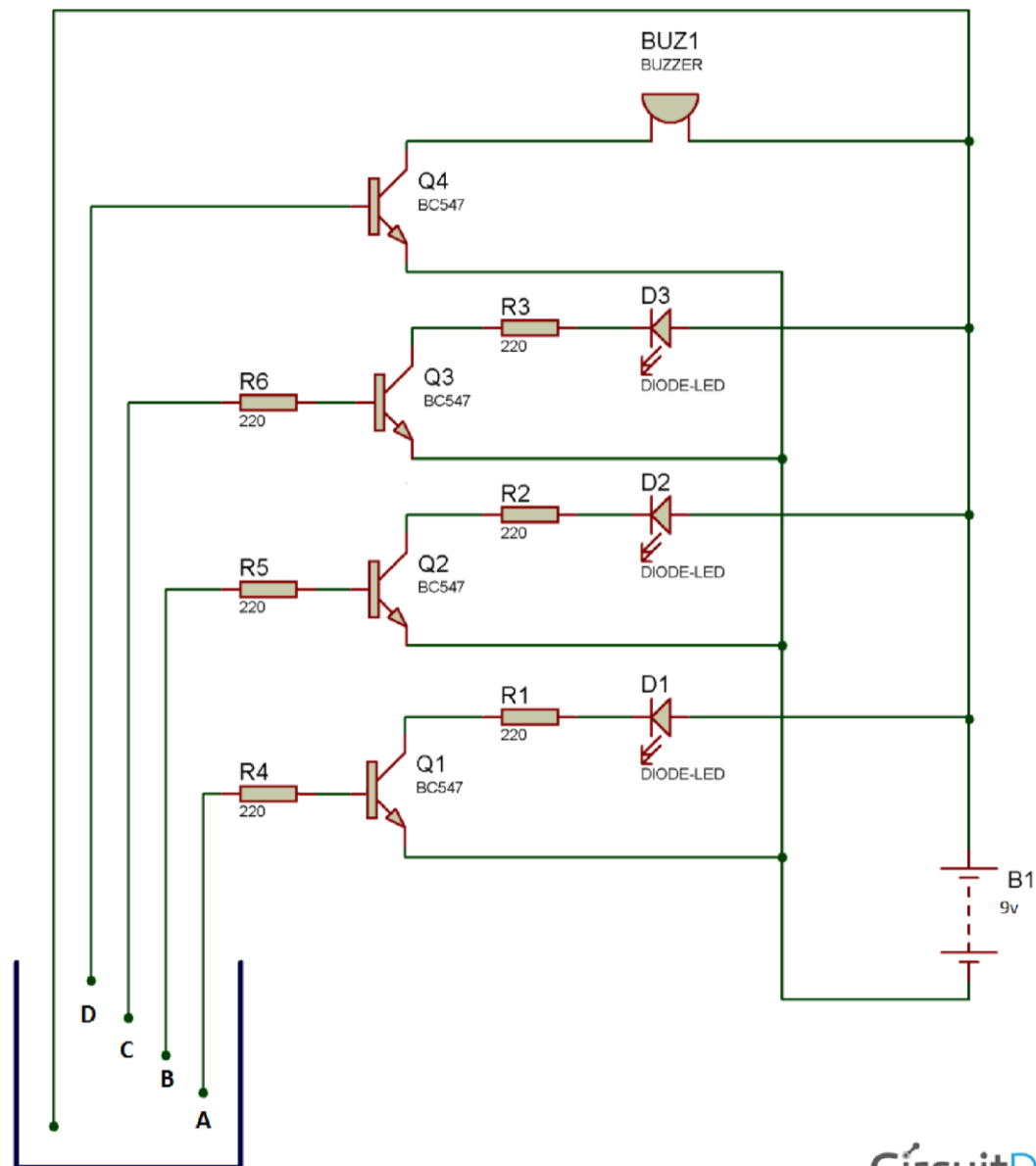
### Circuit Diagram:



water level indicator in pspice:



**Circuit Diagram:**



CircuitDigest

## CONCLUSION :

The water level Indicator employs a simple mechanism to detect and indicate the water level in an over head tank or any other water container. The sensing is done by using a set of four probes which are placed at four different levels. We can conclude that this system is very beneficial in rural as well as urban areas. It helps in the efficient utilization of available water sources. If used on a large scale, it can provide a major contribution in the conservation of water for us and the future generations. In these days, when the Earth's reserve of consumable water is decreasing every moment, every drop has its value. Water level controller is a simple

effective way to prevent wastage of water. Its simplicity in design and low cost components make it an ideal piece of technology for the common man.

**THE END**