Faculty of Engineering
Cairo University

Biomedical Transducers (SBEN213)

Task 0

Liquid Level Indicator

(Alarm for saline solutions)

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Application:

Our idea revolves around the main idea of infusion pumps where the dose stopped on certain limits but in our case, we used a buzzer for alarm as to when the dose reaches a certain limit in our solution bottle the alarm would go off.

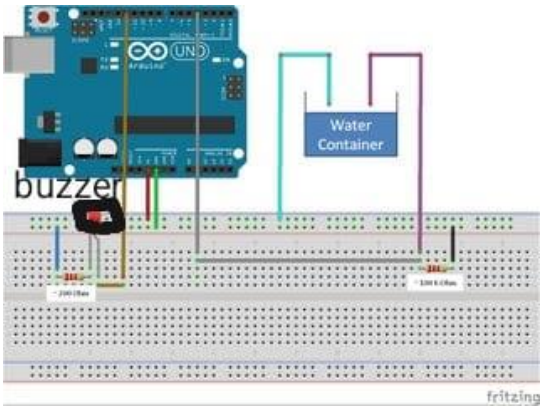
Equipment:

- Arduino Uno
- Jumpers
- 2 Resistors
- Buzzer
- Salted water

Demo:

Used Code:

```
void setup()
{
pinMode(out,OUTPUT);
 pinMode(in,INPUT); }
void loop(){
 rd=digitalRead(in);
if(rd==HIGH)
{digitalWrite(out,LOW);
delay(100); }
else
{digitalWrite(out,HIGH);
delay(100); }
}
```



When the circuit output high, this means that there is water conducting the current, so the out is set to low to turn off the buzzer, but when the circuit turns into an open circuit, this means that the water level decreased below the jumper's level, so the out is set to high to turn on the alarming buzzer.