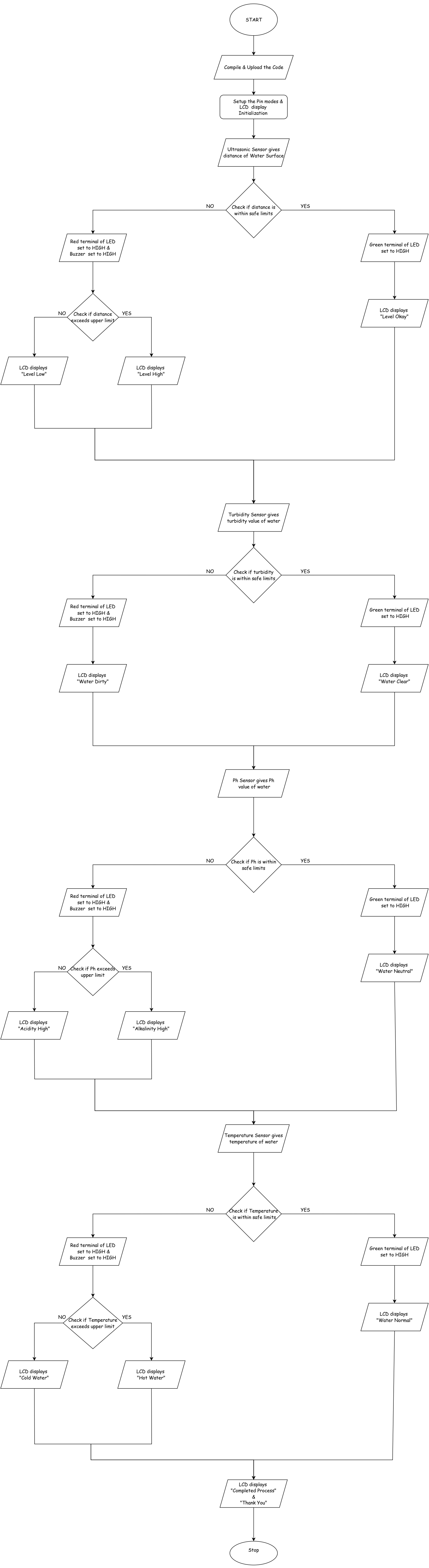
FLOW CHART


START
Compile & Upload the Code
Setup the Pin modes & LCD display Initialization
Ultrasonic Sensor gives distance of Water Surface
Check if distance is within safe limits
NO
YES
Red terminal of LED set to HIGH & Buzzer set to HIGH
Green terminal of LED set to HIGH
Check if distance exceeds upper limit
NO
YES
LCD displays "Level Okay"
LCD displays "Level Low"
LCD displays "Level High"
Turbidity Sensor gives turbidity value of water
Check if turbidity is within safe limits
NO
YES
Red terminal of LED set to HIGH & Buzzer set to HIGH
Green terminal of LED set to HIGH
LCD displays "Water Dirty"
LCD displays "Water Clear"
Ph Sensor gives Ph value of water
Check if Ph is within safe limits
NO
YES
Red terminal of LED set to HIGH & Buzzer set to HIGH
Green terminal of LED set to HIGH
Check if Ph exceeds upper limit
NO
YES
LCD displays "Water Neutral"
LCD displays "Acidity High"
LCD displays "Alkalinity High"
Temperature Sensor gives temperature of water
Check if Temperature is within safe limits
NO
YES
Red terminal of LED set to HIGH & Buzzer set to HIGH
Green terminal of LED set to HIGH
Check if Temperature exceeds upper limit
NO
YES
LCD displays "Water Normal"
LCD displays "Cold Water"
LCD displays "Hot Water"
LCD displays "Completed Process" & "Thank You"
Stop