IOT BASED SMART WATER FOUNTAINS…..

PHASE 1: PROBLEM DEFINITION AND DESIGN THINKING

PROBLEM DEFINITION :

- The purpose of a water level indicator is to gauge and manage water levels in a water tank.
- The control panel can also be programmed to automatically turn on a water pump once levels get too low and refill the water back to the adequate level.

DESIGN THINKING:

- When a water tank overflows, a sensor is used to monitor the water level.
- If the water level rises above a certain threshold the motor pump can be turned off by the user.
- By adding a Wi-Fi module through which it can be controlled through mobile.

CODING:

```
#define SensorPin A8

float sensorValue = 0;

#include <AFMotor.h>

AF_DCMotor motor1(1);


void setup() {
  Serial.begin(9600);
  Serial.println("Reading From the Sensor ...");
  motor1.setSpeed(255);
```

```
  motor1.run(RELEASE);
  delay(2000);
}
void loop() {
  for (int i = 0; i <= 100; i++)
  {
    sensorValue = sensorValue + analogRead(SensorPin);
    delay(1);
  }
  sensorValue = sensorValue / 100.0;
  Serial.println(sensorValue);
  delay(30);
  if (sensorValue < 300)
  {
    motor1.run(RELEASE);
    Serial.println("Water Flow OFF");
  }
  else if (sensorValue > 900)
  {
    Serial.println("Water Flow ON");
    motor1.run(FORWARD);
  }
  delay(1000);
}
```

Click the “run simulation” button to start the simulation.