Sprint-1

```
#include <OneWire.h>
#include <DallasTemperature.h>
#include <SoftwareSerial.h>
#include <NewPing.h>
#define SensorPin A2            Analog Input 0
#define Offset 0.00
unsigned long int avgValue;     feedback

#define TRIGGER_PIN  23  sensor.
#define ECHO_PIN     22
#define MAX_DISTANCE 200

NewPing sonar(TRIGGER_PIN, ECHO_PIN, MAX_DISTANCE);
unsigned int pingSpeed = 50;
unsigned long pingTimer;

SoftwareSerial mySerial(7, 8);

OneWire oneWire(ONE_WIRE_BUS);

DallasTemperature sensors(&oneWire);

#include <LiquidCrystal.h>
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

//const int pingPin =22;
int sensorPin = A0;
int blueled = 13;
int redled = 24;
int greenled = 25;
int tempblueled = 32;
int tempredled = 33;
int tempgreenled = 34;
int levblueled = 35;
int levredled = 36;
int levgreenled = 37;
int turbblueled = 38;
int turbredled = 39;
int turbgreenled = 40;
int buzzer = 31;
float phValue;
float temperatureC;
long duration, cm;

void setup(void)
{
  // start serial port
  Serial.begin(9600);
  pingTimer = millis();
  sensors.begin();
  lcd.begin(16, 2);.
```

```
  lcd.clear();
  pinMode(blueled, OUTPUT);
  pinMode(redled, OUTPUT);
  pinMode(greenled, OUTPUT);
  pinMode(tempblueled, OUTPUT);
  pinMode(tempredled, OUTPUT);
  pinMode(tempgreenled, OUTPUT);
  pinMode(levblueled, OUTPUT);
  pinMode(levredled, OUTPUT);
  pinMode(levgreenled, OUTPUT);
  pinMode(turbblueled, OUTPUT);
  pinMode(turbredled, OUTPUT);
  pinMode(turbgreenled, OUTPUT);
  pinMode(buzzer, OUTPUT);
    digitalWrite(buzzer, LOW);
  //initialization();
}

void loop() {
  sensors.requestTemperatures
  Serial.println(sensors.getTempCByIndex(0));
    int reading = analogRead(sensorPin);


  float voltage = reading * 5.0;
  voltage /= 1024.0;

  float temperatureC = (voltage - 0.5) * 100 ;
  PH();
    digitalWrite(blueled, LOW);
  digitalWrite(redled, LOW);
  digitalWrite(greenled, LOW);
  temperature ();
  digitalWrite(tempblueled, LOW);
  digitalWrite(tempredled, LOW);
  digitalWrite(tempgreenled, LOW);
  Water_level();
      digitalWrite(levblueled, LOW);
  digitalWrite(levredled, LOW);
  digitalWrite(levgreenled, LOW);
  turbidity();
   digitalWrite(turbblueled, LOW);
  digitalWrite(turbredled, LOW);
  digitalWrite(turbgreenled, LOW);
  send_sms();
  delay(4000);
  send_sms1();
    digitalWrite(greenled, LOW);
  digitalWrite(tempgreenled, LOW);
  digitalWrite(levgreenled, LOW);
  digitalWrite(turbgreenled, LOW);
  delay(8000);
}
```