SPRINT-II

Date	**29/10/2022**
Team ID	**PNT2022TMID49848**
Project Name	**Smart waste management system**

CODING:

```
  SoftwareSerial mySerial(9, 10);
#define trigPin 12
 #define echoPin 13
 void setup()
{
mySerial.begin(9600); // Setting the baud rate of GSM Module
Serial.begin (9600);
pinMode(trigPin, OUTPUT);
pinMode(echoPin, INPUT);
delay(100);
 }
void loop()
{
long duration, distance;
int max = 80; // Let consider as Height of the Garbage Bin is = 80 cm.
```

```
float diff, perc;
 digitalWrite(trigPin, LOW);
 delayMicroseconds(2);
 digitalWrite(trigPin, HIGH);
 delayMicroseconds(10);
digitalWrite(trigPin, LOW);
duration = pulseIn(echoPin, HIGH);
 distance = (duration/2) / 29.1;
diff = max - distance;       // 'diff' variable tells u that, how much the Garbage Bin is Left to fill.
 perc = (diff/max)*100;      // 'perc' variable tells u that, how much percentage the Garbage Bin is filled.
 if (perc>=90)
{
 //Serial.println("Garbage Bin is FULL.");
// When the Garbage Bin is filled more than 90%, then this Error Message will Displayed.
 // Call the Function of Send SMS.
 SendMessage();
 // Send Message Function Call.
}
 /*
 else
 {
 Serial.print("Garbage Bin is Filled ");
Serial.print(perc);
 Serial.print(" %.");                // These 3 Lines are print, that how much the Garbage Bin is Filled...Ex.
"Garbage Bin is Filled 70%.".
 }
```

```
 */
 /*
if (distance >= 400 || distance <= 2)
{
Serial.println("Out of range");
}
else
{
Serial.print(distance);
Serial.println(" cm");
 }
*/ delay(500);
}
void SendMessage()
{
mySerial.println("AT+CMGF=1");               //Sets the GSM Module in Text Mode
delay(1000);                              // Delay of 1000 milli seconds or 1 second
mySerial.println("AT+CMGS=\"+918792574742\"\r");        // Replace x with mobile number
 delay(1000);
mySerial.println("Garbage Bin is Full.");           // The SMS text you want to send
delay(100);
 mySerial.println((char)26);                  // ASCII code of CTRL+Z
delay(1000);
 }
```