CODE FOR BEES

```c
#define TRIGGER_PIN 12 // D6
#define ECHO_PIN    14 // D5

int min_distance = 980;
int max_distance = 80;
int diff_distance = max_distance - min_distance;

void setup() {
  Serial.begin(115200);
  pinMode(TRIGGER_PIN, OUTPUT);
  pinMode(ECHO_PIN,    INPUT);
}

int distanceInMillimeters() {
  digitalWrite(TRIGGER_PIN, LOW);
  delayMicroseconds(2);
  digitalWrite(TRIGGER_PIN, HIGH);
  delayMicroseconds(10);
  digitalWrite(TRIGGER_PIN, LOW);
  int duration = pulseIn(ECHO_PIN, HIGH);

  int distance = duration*0.34/2; // Schallgeschwindigkeit=0,34 mm/uS

  return distance;
}

int messen() {
  int distances[11];

  for(int i=0; i<11; i++) {
    int d = distanceInMillimeters();

    if (i==0) {
      distances[i] = d;
    } else {
      for(int j=i-1; j>=0; j--) {
        if (d>=distances[j]) {
          distances[j+1] = d;
          break;
        } else {
          distances[j+1] = distances[j];
          if (j==0) {
            distances[j] = d;
          }
        }
      }
    }
    delay(50);
  }

  return distances[5];
}

void loop() {
  int distance = messen();
  Serial.print(„Entfernung: „);
  Serial.print(distance);
  Serial.println(„ mm“);

  float fuellstand = (distance - min_distance) * 100 / diff_distance;
  Serial.print(„Fuellstand: „);
  Serial.print(fuellstand);
  Serial.println(„ %“);

  delay(5000);
}
```