

# Code to get RSSI Values

Thursday, July 30, 2020 1:13 AM

```
//assumption is made that devices are connected and
//wired properly
//this is a pseudocode but I will mostly the real functions and their real input

//add this to setup
void setup(){
    Serial.begin(38400);
}

int getrssi(string master){

    int rssi_received = 0;
    vector<int> rssi_val;
    while(rssi_received <15){
        int check1 = Serial.write("AT+INQM=1,9,48"); //use the check 1 variable as error detection.
                                                    //not needed right now
        int check2 = Serial.write("AT+INQ");

        char[50] buffer;

        int check3 = Serial.readBytesUntil('\n', buffer, 50);

        //at this point buffer should be something like : "+INQ:1234:56:0,1F1F,FFC0"

        string test (buffer); //cast the array as a string

        string sub (test, 5, 9); //should be equal to "1234:56:0"

        if(sub == master){
            string sub2 (test, 20, 4); //should be equal to "FFC0"

            int rssi = sub2.convertHexInt() //not a real function have to research or do manually

            rssi_val.pushback(rssi);
            rssi_received++;
        }
        else{continue;}
    }

    int sum =0;
    for (auto& n : rssi_val)
        sum += n;
    int avg = sum/(rssi_val.size());

    int mode = mode(rssi_val); //not a real function. have to research or do manually.

    if(abs(mode-avg)/float(mode) < 0.1){
        return mode;
    }
    else{
        return -1;
    }
}
```