//RTD float = atof(RTD_data);
//Uncomment this section if you want to take the pH value and convert it into floating point number.

float tmp_float;

int time_ = 600;

byte i = 0;
byte in_char = 0;

char RTD_data[20];

byte code = 0;
byte serial_event = 0;
byte received_from_computer = 0;

char computerdata[20];

//This code will output data to the Arduino serial monitor. Type commands into the Arduino serial monitor to control the EZO RTD Circuit in I2C mode.
//Many parts of this code can be truncated. This code was written to be easy to understand.
//This code has intentionally been written to be overly lengthy and includes unnecessary steps.
//**THIS CODE WILL WORK ON ANY ARDUINO**

serial_event = 0;

if(serial_event){

Wire.begin();
}

void setup()
{

//hardware initialization.

//counter used for RTD_data array.

//we make a 20 byte character array to hold incoming data from the RTD circuit.

//used to hold the I2C response code.

//a flag to signal when data has been received from the pc/mac/other.

//we need to know how many characters have been received.

//we make a 20 byte character array to hold incoming data from a pc/mac/other.

//reset the serial event flag.

//reset the counter i to 0.

//incur the counter for the array element.

//load this byte into our array.

//receive a byte.

//are there bytes to receive.

//means there is no further data to send.

//decimal 255.

//decimal 254

//means the command has failed.

//exits the switch case.

//decimal 1.

//switch case based on what the response code is.

//call the circuit and request 20 bytes (this is more than we need)

//call the circuit by its ID number.

//we wait 600ms so that the circuit has time to take the reading.

//if a command has been sent to calibrate or take a reading

//the main loop.

//stop the buffer from transmitting leftovers or garbage.

//how many characters have been received.

//we read the data sent from the serial monitor

//the serial monitor(pc/mac/other) is received.

//means the command was successful.

//the command has been sent over the serial port.

//the serial port.

//the serial port

//the serial port

//means the command was successful.

//the command has been sent over the serial port.

//if other commands have been sent we will only allow

//the max loop.

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