I added two functions for the DallasTemperature library. Starting on line 722 and ending on line 748 within DallasTemperature.cpp, there are two functions named “setFiledandAddr” and “getFieldandAddr”. The functions work with the DallasTemperature devices' scratchpad memory which is a 16bit re-writable EEPROM memory cell. The functions receive and store a two cell uint8_t array: uint8_t[2] where [0]=zone of sensor, and [1] =sensor number within the zone. DallasTemperature.h was modified on lines 235 and 236 with function prototypes:

```
uint8_t * getFieldandAddr(const uint8_t* deviceAddress);
void setFieldandAddr(const uint8_t* deviceAddress,uint8_t dat[2]);
```

For writezones.ino:

There are a few functions added.
void addrByZN(uint8_t _zn[], uint8_t* _addr) which returns void but replaces pointer to address passed to function with the address that matches the zone/number integer array

float getTempFrmZnAd(uint8_t _zn[]) returns a temperature in degress Fahrenheit as a floating point number

labler() this functions takes all wires of sensors on the board and burns zone/number int[2] into the EEPROM memory of each sensor on the wire. This way the address can be queried using the int[2].

Some TODO:

- Clean everything up to make it readable.(spellcheck)
- add a function to loopify the OneWire and DallasTemperature initialization
- clear out all debugging Serial.println()'s
- add function to get mean temperature of a zone.
- Test the validity of data being read