Code (Temperature Sensor):

```
#include "mraa/aio.h" //for mraa_aio_read()
#include <math.h> // for math functions
#include <stdio.h> // for printf()
#include <unistd.h> //for sleep()
#include "jhd1313m1.h"
#include "grove.h"
int main()
{
    mraa_aio_context adc_a0;
    uint16_t adc_value = 0;
    const int B=4275;               // B value of the thermistor
    const int R0 = 100000;          // R0 = 100k
    adc_a0 = mraa_aio_init(0);
    if (adc_a0 == NULL) {
        return 1;
    }
    for (int i=10; i>0;i--) {
        adc_value = mraa_aio_read(adc_a0); //Max value @ 5V = 1024
        printf("ADC A0 read value : %d\n", adc_value);

        float R = 1023.0/((float)adc_value)-1.0;
        R = 100000.0*R;
        float temperature=1.0/(log(R/100000.0)/B+1/298.15)-273.15;//convert to temperature as per datasheet
;
        printf("Temperature value : %.2f Degree Celsius\n", temperature);

        sleep(1);
    }
    mraa_aio_close(adc_a0);
    printf("Exiting .. Bbye!");
    return MRAA_SUCCESS;
}
```