1.
        a) The tutorial used was openvim.com.
        b) The tutorial was completed.

2. vim was used to write the entire homework.

3. :r log.c

4.

```c
#include <stdio.h>
#include <stdlib.h>
#include <stdint.h>
#include <string.h>

// Divides by two until it can't anymore
// returns how many times it had to divide by 2
// log base 2 is rounded down since int is returned and not a floating point
uint32_t logbase2(uint32_t num)
{
        uint32_t sum = 0;
        if(num > 1) sum = 1 + logbase2(num / 2);
        return sum;
}

int main()
{
        // Creates an array with ten test integers
        uint32_t test[10] = {0,1,2,3,4,8,13,64,100,4294967295};

        // Tests each of the test integers
        for(int i = 0; i < 10; i++) printf("The log base 2 of %u is: %u\n",test[i],logbase2
(test[i]));

        return 0;
}
```

5.

```makefile
# Makefile for hw01_4

TARGET=hw01_4
OBJS=hw01_4.o
CFLAGS=-Wall -g -O2

all: $(TARGET)
$(TARGET): $(OBJS)
        $(CC) -o $(TARGET) $(OBJS)

clean:
        rm -f $(TARGET) $(OBJS) core*
```

6. enscript --header='$n %E %*|$%|Spencer Goulette' hw01.txt -o - | ps2pdf - output.pdf

I used this command to create a pdf so that I could print later since I didn't have a print
er hooked up.