

EE 251: Homework 7

All programs must be emailed. Please follow the following steps

1. It is probably easier if you create a directory for each homework set, e.g., `hw7`
2. Name each problem as `prob_x.y.c`, where `x` is the problem number and `y` is the subproblem if any, e.g., `prob_1.a.c`. If there are no subpart to the problem then just use the format `prob_x.c`
3. Zip all the files (or the directory for that homework if you made one) using the following command

```
tar -czvf lastname_firstname_hw7.tar.gz prob_1.c prob_2.a.c
```

or if you put all the files for a particular homework in its own directory

```
tar -czvf lastname_firstname_hw7.tar.gz hw7
```

Don't forget to change `lastname_firstname` with your last and first name

4. Email me you `.tar.gz` file with EXACTLY the following as the subject

```
spring 2015 ee251 hw7
```

1. Evaluate the following:
 - (a) $1101\ 1010 \ \& \ 0011\ 1100$
 - (b) $1101\ 1010 \ | \ 0011\ 1100$
 - (c) $0x1C \ \& \ 0xF3$
 - (d) $0x30 \ \sim \ 0x55$
2. Write a program asks to enter a hex number, then provide him with a menu to either set, clear, or toggle a specific bit. When the user selects his/her option, ask for which bit should be modified. Finally, output the result in hex. Assume that all numbers are unsigned 16-bit.
3. Write a program that allows the user to enter a line at a time and if the line contains the word `EE251`, then reprint the entire line. *Hint: you may find the function `strstr` useful.*