

EE 251: Homework 4

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., `hw4`
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_hw4.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_hw4.tar.gz hw4
```

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 hw4
```

1. Write a function that swaps the content of two pointers. Then, write a program to test your function.
2. Write a calculator program that has the simple operations of +, -, *, /. You need to ask the user to enter the number, then the operation he/she wants then the second number. For example, when you run the program you may get

```
Enter number: 10
Enter operation (+, -, *, /): *
Enter number: 2
Result: 20
```

3. Enhance the program in problem 2 to check if the user's input is invalid. If so inform the user and ask him/her to reenter.
4. Expand problem 2 to perform multiple operations until the user enters 'd'.

```
Enter number: 10
Enter operation (+, -, *, /): *
Enter number: 2
Result: 20
Enter operation (+, -, *, /): +
Enter number: 5
Result: 25
Enter operation (+, -, *, /): /
Enter number: 2
Result: 12.5
Enter operation (+, -, *, /): d
```