**COMP 304**
**Assignment 3**
**Due at 7:00 pm, Tuesday, October 14 , 2008**
All problems are of equal value.

## Reading

Cormen, Leiserson, Rivest and Stein, Chapters 15 and 25.

## Practice

CLRS, 15.2-1...5, 15.3-1, 15.3-2, 15.3-4, 15.4-1...6, 15-1, 15-3, 15-4, 15-7, 25.2-1...9, 25-2.

## To Be Handed In

1. CLRS, 15.3-3
2. CLRS, 15.3-5
3. CLRS, 15-2
4. CLRS, 15-6
5. CLRS, 25-1

## Bonus

Imagine the following gambling game: You are to make 5 bets on the outcome of a coin flip. If you bet $x$ dollars you will win $x$ additional dollars if you are right and lose the $x$ dollars otherwise. You can bet any amount you want on each bet. You have access to a fairy godmother who will tell you the correct outcome of each coin flip before you bet. The problem is the fairy godmother may get the answer wrong one time for every 4 times she gets it right and you have no idea which of her 5 predictions might be a wrong one. You start with $ 100. What is the maximum amount of money you can be guaranteed of winning?