CS367 Announcements
Tues, July 16th, 2013

- Midterms solns posted
- P2 due Wed 11:59pm
- H5 due Mon 6pm

Last Time

- Recursion Cont.

Today

- Finish Recursion
- Intro to Search
- Intro to Trees

Practice - Chain of Nodes

Write a recursive method that counts the number of nodes containing even values in a chain of nodes containing integers. Assume head points to the first node in the chain.

Analyzing Recursive `countEven`

Towers of Hanoi

How bad can 2^N really be?

N	N^2	2^N
5	25	
10	100	
15	225	
20	400	
25	625	
30	900	
35	1225	
40	1600	
45	2025	
50	2500	

Searching

Linear/Sequential Search:

Binary Search:

Categorizing ADTs

Linear:

Non-Linear:

Tree Data Structures

Tree Terminology

1. What is the **root**?
2. How man **leaves** are there?
3. What is the **height** of the tree?
4. What is the **depth** of J?
5. How many **children** does G have (**degree** of G)?
6. How many **decendents** does B have?
7. What are the **ancestors** of D?
8. What is the **length** of the **path** from B to D?
9. What are the **subtrees** of B?