CS 367 Announcements
Thursday, December 4, 2012

Homework Assignment 9 – due tonight at 10:00 pm

Programming Assignment 4 – due Friday, 12/7 at 10:00 pm

Last Time
- finish Hashing
- handling collisions
  - chaining
  - open addressing
- Java support for hashing
  - hashCode()
  - Map ADT
  - Hashtable vs. HashMap
  - TreeMap vs. HashMap

Today
- Graphs
- graph terminology
- searches and traversals
- applications

Next Time
- continue Graphs
- implementation issues
- Dijkstra's algorithm (handout posted on Syllabus page)
- topological ordering

Graph terminology

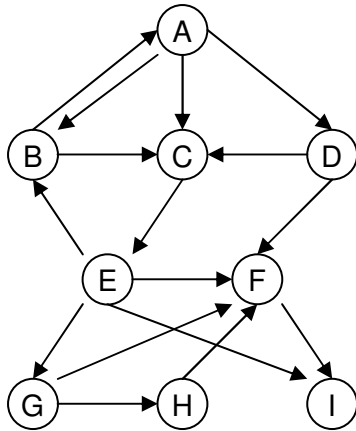**Graph terminology (continued)**

Searches and Traversals
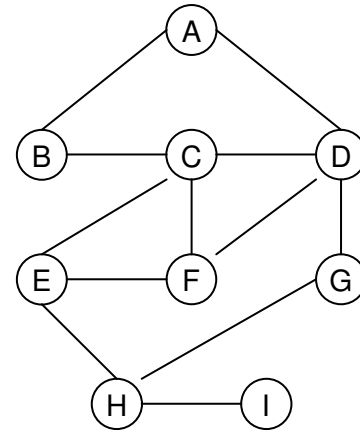
Search

Traversal

Depth-first search (DFS)

Breadth-first search (BFS)

Try it:

Graph 1

Graph 2

Give the order that nodes are visited for depth-first search (DFS) starting at A

　　Graph 1:

　　Graph 2:

Give the order that nodes are visited for breadth-first search (BFS) starting at A

　　Graph 1:

　　Graph 2:

Uses of Graph Traversals