Homework 12 - Recursive relations, Graphs

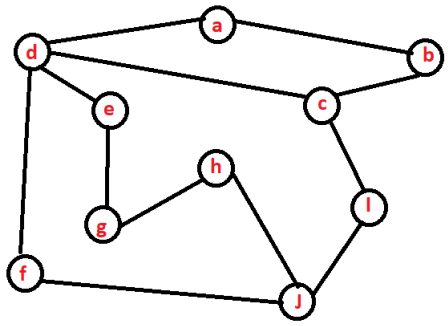
CS241

Recursive relations

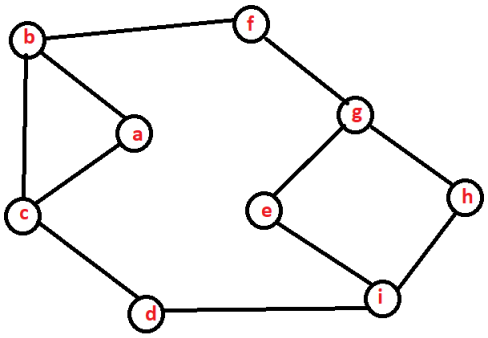
1. In section 7.2, solve 3 from: 11 - 23
2. (a) Solve: $T(n) = 3T(\frac{n}{3}) + n$
   (b) Solve: $T(n) = 4T(\frac{n}{2}) + n^2$
   (c) Solve: $T(n) = 2T(\frac{n}{2}) + n^2$ (hint: use the geometric sum)

Graphs

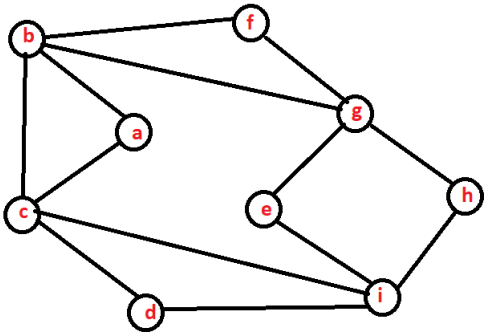
3. For each of the following graphs, find an Euler cycle / path, or, if no Euler path nor cycle:
   (a) G1:



   (b) G2:



(c) G3:



4. Section 8.6: 1,2,3,7