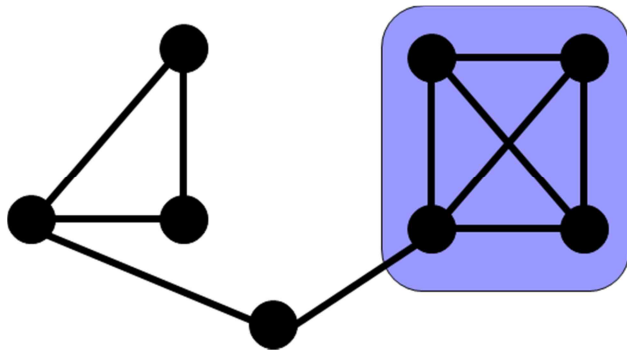


Homework #6
CS322/KAIST 2011 FALL
Choe, Kwang-Moo
Due date: 12/15, 14:30
2011/12/08

Exercise 1 (10pt) Prove that following problem is NP-complete.

A clique of size K is set of K nodes with all $K(K-1)/2$ possible edges between them.

E,g,) This graph contains a clique of size 4.



Given : (G, k)

Question : Does G contain a clique of size K ?

Exercise 2 (10pt) Construct primitive recursive function of Boolean functions:

$\neq, >, \geq, <, \leq : \mathbb{N} \times \mathbb{N} \rightarrow \{0,1\}$.