Today: Graph algorithms: BFS, DFS; §§ 22.*.
Next class: HW03 written portion due. **Quiz 2**.
Reminders: HW03 electronic submission due Friday 11:05am.

1. List the members of your group below. Underline your name.

2. Depict the graph $K_5 = ([5], \{(i,j) \mid 0 < i < j < 6\})$, where $[k] = \{1, 2, 3, \ldots, k\}$.

3. The *line graph* $L(G)$ of a graph G has a vertex v_{ij} for each edge (i,j) of G. There is an edge between two vertices of $L(G)$ iff the corresponding edges share a vertex in G. Depict the line graph of K_5.

4. The *complement* of a graph $G = (V, E)$ is the graph $G' = (V, (V \times V) \setminus E)$. Depict the complement of the graph of Question 3.

5. Trace the action of the breadth-first search algorithm, BFS on p. 595 of the textbook, on the graph of Question 4 from a vertex of your choice.

6. Repeat Question 5 for the depth-first search algorithm, DFS on p. 604 of the textbook.