

Grading Policy for homework 8

Total: $50 = 10+10+10+10+10$

Average scores:

	Pb1	Pb2	Pb3	Pb4	Pb5	All
Sec1	6.809524	8.166667	6.761905	8.52381	6.357143	36.61905
Sec2	6.714286	8.714286	6.666667	7.666667	7.047619	36.80952
Sec3	6.811321	8.603774	7.037736	8.924528	6.396226	37.77358

Regrading deadline: Dec. 11, 2002

Grader : Haibin Ling (hbling@cs.umd.edu).

Please contact hbling@cs.umd.edu if you have any questions about the grading, but we do appreciate you reading through the following explanations and the solutions before that.

Pb1 : 10pts

1. 5 pt for out-degree, 5pts for in-degree
2. if get $O(E)$ only, 2 pts for each case
3. if get $O(E)$ with some reasonable explanation so that I know your method is ok except you make a mistake when calculating the running time, the 3 pts for each case.
4. For the out-degree, some people get $O(|V|)$ by assuming that the length of link list of each vertex is stored in the head, that's ok ONLY if you give EXPLICIT explanation about this. That is, answer as $O(|V|)$ without proper explanation gets no points.
5. Algorithms slower than expected (refer to solution on class webpage) can get only small parts of points.

Pb2: 10pts

1. 5 pts for each case: adjacency-matrix and adjacency-list. And for the 5 points, 3 is for algorithm, while 2 for running time analysis.
2. Algorithms slower than expected (refer to solution on class webpage) can get only small parts of points.
3. NOTE: for adjacency-list case, when inserting edge to the new graph, i.e., G^2 , duplicate nodes should be removed! Although no points have been cut on this, but many students (more than half) ignored this.

Pb3: 10pts

1. 5 pts for each case: adjacency-matrix and adjacency-list. And for the 5 points, 3 is for algorithm, while 2 for running time analysis.
2. Algorithms slower than expected (refer to solution on class webpage) can get only small parts of points.

Pb4: 10pts (7 for running time analysis, 3 for algorithm)

1. This problem is more concerned on the running time analysis than on the algorithm. So 7 pts are for the running time analysis (i.e., $O(|V|^2)$), only 3 points is for the explanation.
2. Algorithms slower than expected (refer to solution on class webpage) can get only small parts of points.

Pb5: 10pts

1. Algorithm, 7pts
2. Explanation and running time analysis, 3pts. If give an $O(|V|)$ without explanation, 1 point will be cut.
3. Algorithms slower than expected (refer to solution on class webpage) can get only very small parts of points.