

PROBLEM: Define the problem and indicate the complexity class of the corresponding decision problem (the proof is not required).

ALGORITHMS: For each (chosen) algorithm, describe the algorithm, analyse its time and space complexities and justify its approximation ratio. (The proof of the approximation ratio is not needed, but give a reference for it.)

TESTS: Characterize the instances used in the experiments (specifying if they come from available benchmarks or if they have been created by you).

TEST RESULTS: Present and analyse the experimental results.

Send me the report (PDF), the source code and the input files (with the instances used in the experiments).

If you haven't chosen the problem yet, here are some possibilities:

- Bin Packing
- Dominating Set
- k-Clustering
- (Weighted) Edge Cover
- Independent Set
- Knapsack
- Load Balancing
- (Weighted) Set Cover
- (Metric) Steiner Tree
- Subset Sum
- Metric Travelling Salesman
- (Weighted) Vertex Cover