

Teamwork_acrosby2

Version 1 10/16/24

1. Team name: Team Kyle
2. Individual names and netids:: Kyle Crosby, acrosby2
3. Link to github repository: <https://github.com/kylecrosby2/Project1TeamKyle>
4. Checklist of files submitted on repository (enter names of files)
 - a. Code files: dumbSatKnapsack_teamkyle.py, makePlot_teamkyle.py, testCaseGen_teamkyle.py
 - b. Data files used for validation: None, verified combination code with simple test cases (e.g. [1, 2, 3] → [], [1], [2], [3], [1, 2], [1, 3], [2, 3], [1, 2, 3]). Summing of combinations is so straightforward that I did not see it necessary to verify beyond simple cases.
 - c. Data files used in timing runs: data1_coins.txt, data2_coins.txt, data3_coins.txt, data4_coins.txt, data5_coins.txt, data6_coins.txt, data7_coins.txt, data8_coins.txt, data9_coins.txt, data10_coins.txt, data11_coins.txt, data12_coins.txt, data13_coins.txt, data14_coins.txt, data15_coins.txt
 - d. Output files: output_teamkyle.csv
 - e. Timing plots: plots_teamkyle.png
 - f. Readme_team: readme_teamkyle.pdf
 - g. Any extra files: README.md for GitHub repository aesthetics.
5. Approximate time spent personally on project (in hours): 9
6. Lessons Learned: I learned that execution time significantly increases as the number of variables increases in a DumbSAT problem, as modeled by the time my program took to find all the coin combinations, especially in worst case unsatisfiable scenarios.
7. Team Dynamics: Strong (I worked by myself)
8. Role of each team member: Me - everything
9. Anything extra