## Template for Final Project Writeup

Generally, each subsection should be brief. Keep you comments to the point of meeting the needs of you company. Do not try to be funny or cute. Use professional language.

1. **Introduction** – short paragraph discussing the purpose of the report and contents
2. **Exhaustive Enumeration Approach**
3. Description of important data structures and key points of the algorithm
4. Time complexity of your implementation – theoretical and empirical (insight from table)
5. Pros and cons of this algorithm compared with the others
6. Possible improvements, if any that still fit with in the paradigm of **Exhaustive Enumeration**
7. **Greedy Approach**
8. Description of important data structures and key points of the algorithm
9. Time complexity of your implementation – theoretical and empirical (insight from table)
10. Pros and cons of this algorithm compared with the others
11. Possible improvements, if any that still fit with in the paradigm of **Greedy Algorithms**
12. **Dynamic Programming Approach**
13. Description of important data structures and key points of the algorithm
14. Time complexity of your implementation – theoretical and empirical (insight from table)
15. Pros and cons of this algorithm compared with the others
16. Possible improvements, if any that still fit with in the paradigm of **Dynamic Programming Algorithms**
17. **Branch and Bound Approach**
18. Description of important data structures and key points of the algorithm including:
    1. Search strategy
    2. Bounding function
19. Description of important data structures and key points of the algorithm
20. Time complexity of your implementation – theoretical and empirical (insight from table)
21. Pros and cons of this algorithm compared with the others
22. Possible improvements, if any that still fit with in the paradigm of **Branch and Bound Algorithms**
23. **Table and Detailed Recommendations**

Table (If your program fails to complete – give partial answer if possible, and reason for failure)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Easy20 | Easy50 | Hard50 | Easy200 | Hard200 |
| Exhaustive Enumeration | Value Weight  Time to complete | Not run | Not Run | Not run | Not Run |
| Greedy |  |  |  |  |  |
| Dynamic Programming |  |  |  |  |  |
| Branch and Bound |  |  |  |  |  |

\* Program interrupted before completion

\*\* Reason if program fails

1. **Conclusion - Recommendations**