**Heuristic Analysis**

**Part 1 - Planning problems**

* Air Cargo Problem 1:

|  |  |  |  |
| --- | --- | --- | --- |
| Search | Expansions | Goal Tests | Time Elapsed |
| Breadth First Search | 43 | 56 | 0.029 |
| Breadth First Tree Search | 1458 | 1459 | 0.824 |
| Depth First Graph Search | 21 | 22 | 0.012 |
| Depth Limited Search | 101 | 271 | 0.081 |
| Uniform Cost Search | 55 | 57 | 0.032 |
| Recursive Best First Search with H\_1 | 4229 | 4230 | 2.452 |
| Greedy Best First Graph Search with H\_1 | 7 | 9 | 0.004 |

* Air Cargo Problem 2:

|  |  |  |  |
| --- | --- | --- | --- |
| Search | Expansions | Goal Tests | Time Elapsed |
| Breadth First Search | 3343 | 4609 | 11.791 |
| Depth First Graph Search | 624 | 625 | 3.033 |
| Depth Limited Search | 222719 | 2053741 | 775.303 |
| Uniform Cost Search | 4853 | 4855 | 38.368 |
| Greedy Best First Graph Search with H\_1 | 998 | 8982 | 6.213 |

* Air Cargo Problem 3:

|  |  |  |  |
| --- | --- | --- | --- |
| Search | Expansions | Goal Tests | Time Elapsed |
| Breadth First Search | 14663 | 18098 | 88.398 |
| Depth First Graph Search | 408 | 409 | 1.495 |
| Uniform Cost Search | 18223 | 18225 | 334.743 |
| Greedy Best First Graph Search with H\_1 | 5578 | 5580 | 85.370 |