

AIR - Homework 5

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1 Informed Search Strategies



2 IDA vs DFS

In state spaces with a very high number of states in every layer DFS (and thus a high branching factor) performs better than IDA

3 Informed Search Strategies Evaluation

Performance of IDA on three maps

	MAP1	MAP2	MAP3
Deepest level reached	511	255	1143
Total of stored nodes	7363	6999	35410
Total of visited nodes	22433	21943	116461

Table 1

Table 1 shows that the amount of visited and stored nodes strongly depends on the maps size. While searching the state space for solution, a greater state space has to be traversed. The deepest level reached stands for the state distance between to goals. On the second map the goals are almost sorted, resulting in less states to be visited when searching for the next goal.