

Elements of Artificial Intelligence B551

Assignment 2 (Programming Assignment)

Search Algorithms (BFS, DFS and Iterative Deepening)

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Input file is comma separated.

The file used by me is also attached in the submitted zip.

Sample output for Arad – Bucharest:

Enter a source: arad

Enter a destination: bucharest

Which Search you want to perform

1 BFS

2 DFS

3 Iterative Deepening

4 Exit1

BFS:

Arad - Sibiu - Fagaras - Bucharest - 450

DFS:

Arad - Zerind - Oradea - Sibiu - Fagaras - Bucharest - 607

Iterative Deepening:

Arad - Sibiu - Fagaras - Bucharest - 450

Sample Output for Sibiu – Eforie:

BFS:

Sibiu - Fagaras - Bucharest - Urziceni - Hirsova - Eforie - 579

DFS:

Sibiu - Arad - Timisoara - Lugoj - Mehadia - Drobeta - Craiova - Rimnicu Vilcea - Pitesti -
Bucharest - Urziceni - Hirsova - Eforie - 1247

Iterative Deepening:

Sibiu - Fagaras - Bucharest - Urziceni - Hirsova - Eforie - 579

Sample output for Drobeta – Fagaras:

BFS:

Drobeta - Craiova - Rimnicu Vilcea - Sibiu - Fagaras - 445

DFS:

Drobeta - Mehadia - Lugoj - Timisoara - Arad - Zerind - Oradea - Sibiu - Fagaras - 770

Iterative Deepening:

Drobeta - Craiova - Rimnicu Vilcea - Sibiu - Fagaras - 445