**Romania’s Map**

**A diagram of a network

Description automatically generated**

**Start State: Arad**

**Goal Sate: Bucharest**

**Uniform Search Algorithm using Tree**

**Uniform Search Algorithm Trace Table**

|  |  |
| --- | --- |
| (Arad, 0) |  |
| (Zerind, 70), (Timisoara, 118), (Sibiu, 140) | (Arad, 0) |
| (Timisoara, 118), (Sibiu, 140), (Oradea, 146) | (Zerind, 70) |
| (Sibiu, 140), (Oradea, 146), (Lugoj, 229) | (Timisoara, 118) |
| (Oradea, 146), (Rimnicu Vilcea, 220), (Lugoj, 229), (Fagaras, 239) | (Sibiua, 140) |
| (Rimnicu Vilcea, 220), (Lugoj, 229), (Fagaras, 239), (Sibiua, 297) | (Oradea, 146) |
| (Lugoj, 229), (Fagaras, 239), (Sibiua, 297), (Pitesti, 317), (Craiova, 366) | (Rimnicu Vilcea, 220) |
| (Fagaras, 239), (Sibiua, 297), (Mehadia, 299), (Pitesti, 317), (Craiova, 366) | (Lugoj, 229) |
| (Sibiua, 297), (Mehadia, 299), (Pitesti, 317), (Craiova, 366), (Bucharest, 450) | (Fagaras, 239) |
| (Mehadia, 299), (Pitesti, 317), (Craiova, 366), (Rimnicu Vilcea, 377), (Fagaras, 396), (Bucharest, 450) | (Sibiua, 297) |
| (Pitesti, 317), (Craiova, 366), (Drobeta, 374), (Rimnicu Vilcea, 377), (Fagaras, 396), (Bucharest, 450) | (Mehadia, 299) |
| (Craiova, 366), (Drobeta, 374), (Rimnicu Vilcea, 377), (Fagaras, 396), (Bucharest, 418), (Bucharest, 450), (Craiova, 455) | (Pitesti, 317) |
| (Drobeta, 374), (Rimnicu Vilcea, 377), (Fagaras, 396), (Bucharest, 418), (Bucharest, 450), (Craiova, 455), (Drobeta, 486), (Pitesti, 504) | (Craiova, 366) |
| (Rimnicu Vilcea, 377), (Fagaras, 396), (Bucharest, 418), (Bucharest, 450), (Craiova, 455), (Drobeta, 486), (Craiova, 494), (Pitesti, 504) | (Drobeta, 374) |
| (Fagaras, 396), (Bucharest, 418), (Bucharest, 450), (Craiova, 455), (Pitesti, 474), (Drobeta, 486), (Craiova, 494), (Pitesti, 504), (Craiova, 523) | (Rimnicu Vilcea, 377) |
| (Bucharest, 418), (Bucharest, 450), (Craiova, 455), (Pitesti, 474), (Drobeta, 486), (Craiova, 494), (Pitesti, 504), (Craiova, 523), (Bucharest, 607) | (Fagaras, 396) |
| (Bucharest, 450), (Craiova, 455), (Pitesti, 474), (Drobeta, 486), (Craiova, 494), (Pitesti, 504), (Craiova, 523), (Bucharest, 607) | (Bucharest, 418) |

**Reached (Bucharest, 418) by traversing following nodes:**

(Arad, 0), (Zerind, 70), (Timisoara, 118), (Sibiua, 140), (Oradea, 146), (Rimnicu Vilcea, 220), (Lugoj, 229), (Fagaras, 239), (Sibiua, 297), (Mehadia, 299), (Pitesti, 317), (Craiova, 366), (Drobeta, 374),

(Rimnicu Vilcea, 377), (Fagaras, 396), (Bucharest, 418)