|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 15 | 13 | 11 | 9 | 7 |
| 12 | G (16) | 14 |  | 5 |
| 10 |  |  | 4 | 2 |
| 8 | 6 | 3 | 1 | 0 |

# **Breadth-First-Search (BFS) (numbers denote order of adding nodes to the FIFO frontier)**

# **Depth-First-Search (DFS) (numbers denote order of adding nodes to the LIFO frontier)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 8 | 7 | 6 | 5 |
|  | G (10) | 9 |  | 4 |
|  |  |  | 3 | 2 |
|  |  |  | 1 | 0 |

# A\* search (UCS + GBFS) (numbers denote order of adding children to FIFO minimum value priority queue frontier, and subscripts denotes f = g(cost so far) + h(heuristic = Manhattan distance))

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1511+5 | 139+3 | 117+5 | 95+7 | 73+9 |
| 1210+2 | G (1612+0) | 1410+2 |  | 52+6 |
| 109+3 |  |  | 43+5 | 21+7 |
| 88+4 | 66+2 | 34+4 | 12+6 | 00+8 |

\*south wind; move south cost =3 (against wind), north =1 (with wind), west and east = 2 (side wind)