TDT4136 Assignment 2

Pictures are named task“number”p/np.png where p is with the shortest path and np is not with path shown. You can generate these pictures yourself by running the program and specifying task.

My code is heavily inspired by (Swift, u.d.), although the code was not functional or had the ability to use weighted maps.

Task: 1

[(27, 18), (28, 19), (29, 20), (29, 21), (28, 22), (27, 23), (28, 24), (27, 25), (27, 26), (28, 27), (28, 28), (29, 29), (29, 30), (29, 31), (29, 32), (29, 33), (29, 34), (29, 35), (28, 36), (29, 37), (30, 37), (31, 37), (32, 37), (33, 37), (34, 37), (35, 37), (36, 37), (37, 37), (38, 37), (39, 37), (40, 36), (40, 35), (40, 34), (40, 33), (40, 32)]

Task: 2

[(40, 32), (39, 33), (39, 34), (39, 35), (40, 36), (39, 37), (38, 37), (37, 37), (36, 37), (35, 37), (34, 37), (33, 37), (32, 37), (31, 37), (30, 37), (29, 37), (28, 36), (27, 35), (27, 34), (27, 33), (27, 32), (27, 31), (27, 30), (27, 29), (28, 28), (27, 27), (27, 26), (27, 25), (27, 24), (27, 23), (26, 22), (25, 21), (24, 20), (23, 19), (22, 18), (21, 18), (20, 18), (19, 18), (18, 18), (17, 18), (16, 18), (15, 17), (14, 16), (13, 15), (13, 14), (13, 13), (13, 12), (13, 11), (13, 10), (13, 9), (13, 8), (13, 7), (13, 6), (13, 5), (12, 4), (11, 4), (10, 5), (9, 5), (8, 5)]

Task: 3

[(28, 32), (27, 33), (27, 34), (27, 35), (28, 36), (27, 37), (26, 37), (25, 37), (24, 37), (23, 37), (22, 37), (21, 37), (20, 37), (19, 37), (18, 37), (17, 37), (16, 36), (15, 35), (15, 34), (15, 33), (15, 32), (15, 31), (14, 30), (13, 29), (12, 30), (11, 30), (10, 30), (9, 30), (8, 30), (7, 31), (6, 32)]

Task: 4

[(28, 32), (27, 31), (27, 30), (27, 29), (28, 28), (28, 27), (27, 26), (27, 25), (27, 24), (27, 23), (26, 22), (25, 21), (24, 20), (23, 19), (22, 18), (21, 18), (20, 18), (19, 18), (18, 18), (17, 18), (16, 18), (15, 19), (14, 20), (13, 21), (13, 22), (13, 23), (13, 24), (13, 25), (13, 26), (13, 27), (13, 28), (13, 29), (12, 30), (11, 30), (10, 30), (9, 30), (8, 30), (7, 31), (6, 32)]

# Works Cited

Swift, N., n.d. *Github.* [Online]   
Available at: https://gist.github.com/Nicholas-Swift/003e1932ef2804bebef2710527008f44  
[Accessed 24 September 2022].