

## Reference for local beam codes:

*Reference for other\_fn\_local\_beam\_code\_final.py:*

[1] “numpy.random.permutation — NumPy v1.24 Manual,” *numpy.org*.

<https://numpy.org/doc/stable/reference/random/generated/numpy.random.permutation.html>

[2] GeeksforGeeks, “Python Program for N Queen Problem | Backtracking3,” *GeeksforGeeks*, Jul. 21, 2011. <https://www.geeksforgeeks.org/python-program-for-n-queen-problem-backtracking-3/?ref=lbp> (accessed Mar. 13, 2025).

[3] “N-Queen Problem | Local Search using Hill climbing with random neighbour,” *GeeksforGeeks*, Jul. 25, 2020. <https://www.geeksforgeeks.org/n-queen-problem-local-search-using-hill-climbing-with-random-neighbour/>

[4] GeeksforGeeks, “Printing all solutions in NQueen Problem,” *GeeksforGeeks*, Feb. 19, 2017. <https://www.geeksforgeeks.org/printing-solutions-n-queen-problem/?ref=lbp> (accessed Mar. 13, 2025).

*Reference for local\_beam\_code\_final.py:*

[5] “9. Classes — Python 3.8.4rc1 documentation,” *docs.python.org*.

<https://docs.python.org/3/tutorial/classes.html>

[6] W3Schools, “Python Classes,” *W3schools.com*, 2019.

[https://www.w3schools.com/python/python\\_classes.asp](https://www.w3schools.com/python/python_classes.asp)

[7] geeksforgeeks, “Python Classes and Objects,” *GeeksforGeeks*, Oct. 15, 2019.

<https://www.geeksforgeeks.org/python-classes-and-objects/>

[8] GeeksforGeeks, “Convert List to Tuple in Python,” *GeeksforGeeks*, Dec. 19, 2018.

<https://www.geeksforgeeks.org/convert-list-to-tuple-in-python/> (accessed Mar. 13, 2025).

[9] GeeksforGeeks, “Python Program for N Queen Problem | Backtracking3,” *GeeksforGeeks*, Jul. 21, 2011. <https://www.geeksforgeeks.org/python-program-for-n-queen-problem-backtracking-3/?ref=lbp>

[10] “append() and extend() in Python,” *GeeksforGeeks*, Dec. 24, 2017. <https://www.geeksforgeeks.org/append-extend-python/>

[11] “Python Time Module,” *GeeksforGeeks*, Oct. 19, 2021. <https://www.geeksforgeeks.org/python-time-module/>

[12] GeeksforGeeks, “Python Program for N Queen Problem | Backtracking3,” *GeeksforGeeks*, Jul. 21, 2011. <https://www.geeksforgeeks.org/python-program-for-n-queen-problem-backtracking-3/?ref=lbp>

*Reference for both 3\_local\_beam\_figure\_1\_final.py and 4\_local\_beam\_figure\_2\_final.py:*

[13] “Pandas DataFrame duplicated() Method,” *www.w3schools.com*. [https://www.w3schools.com/python/pandas/ref\\_df\\_duplicated.asp](https://www.w3schools.com/python/pandas/ref_df_duplicated.asp)

[14] K. Willems, “Matplotlib Cheat Sheet: Plotting in Python,” *Datacamp.com*, Jun. 2021. <https://www.datacamp.com/cheat-sheet/matplotlib-cheat-sheet-plotting-in-python>

[15] “Matplotlib Labels and Title,” *www.w3schools.com*. [https://www.w3schools.com/python/matplotlib\\_labels.asp](https://www.w3schools.com/python/matplotlib_labels.asp)