

COMPUTACIÓN Y ESTRUCTURAS DISCRETAS I

Integrantes

- Juan Camilo González Torres
- Gabriel Esteban Restrepo Giraldo

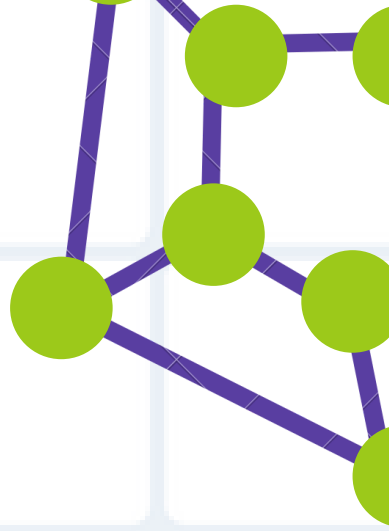


**TAREA INTEGRADORA 3
GRAFOS**



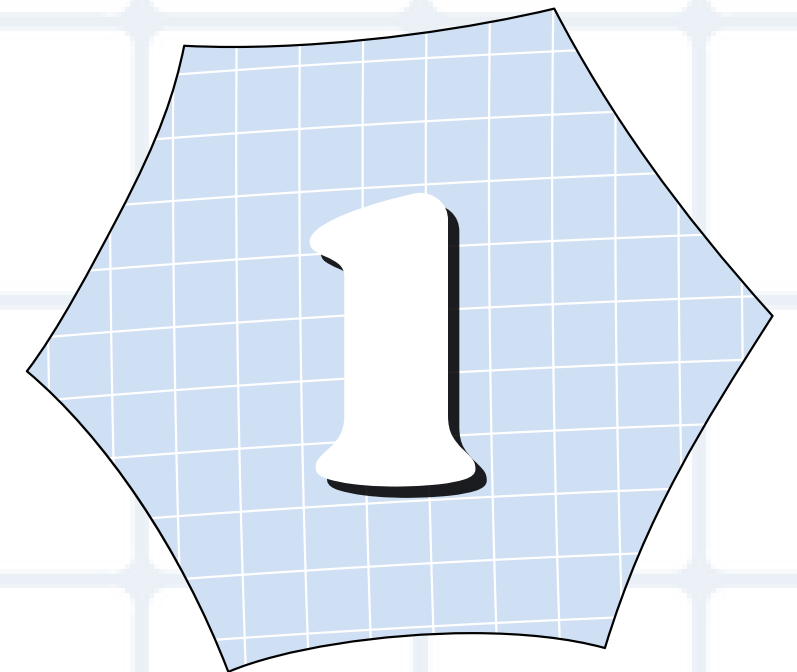


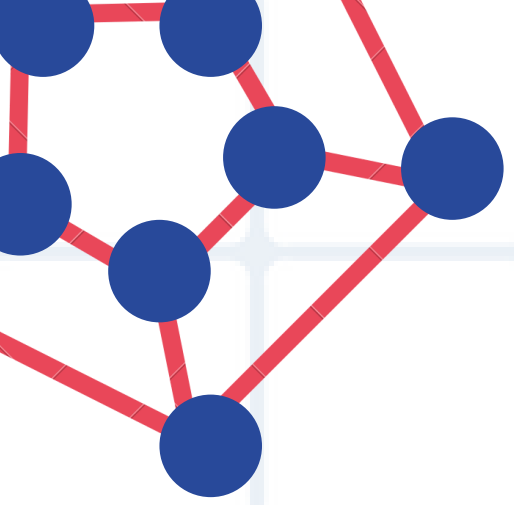
SELECCIÓN DEL TEMA



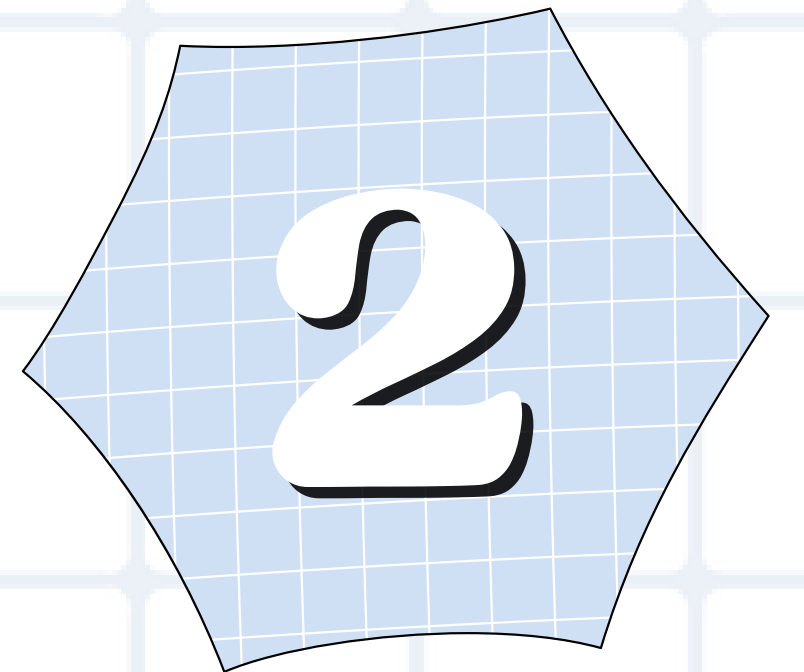
Se planteó el desarrollo de un software que simulara el recorrido que lleva a cabo una empresa de envíos a domicilio.

- ★ **TEORÍA DE GRAFOS**
- ★ **ALGORITMOS**
- ★ **IMPLEMENTACIÓN**





PLANTEAMIENTO DEL PROBLEMA



MARCO TEÓRICO

ALGORITMOS

RECORRIDO BFS

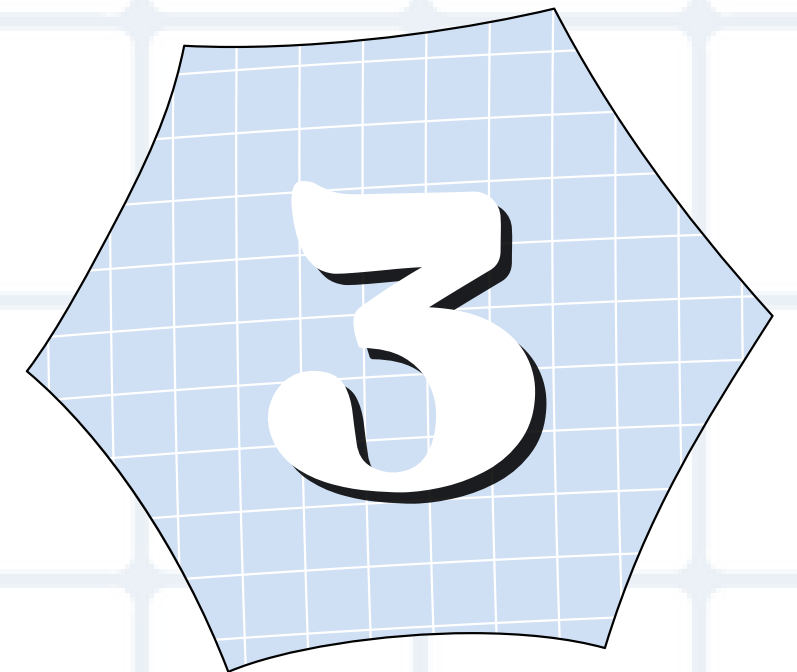
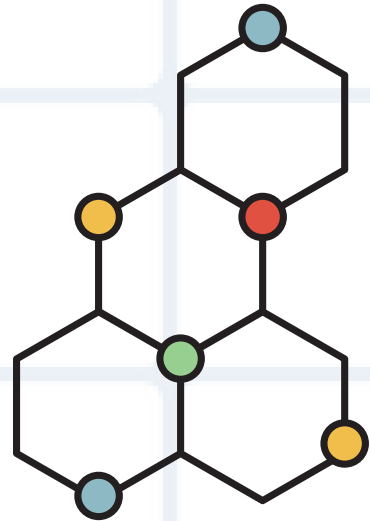
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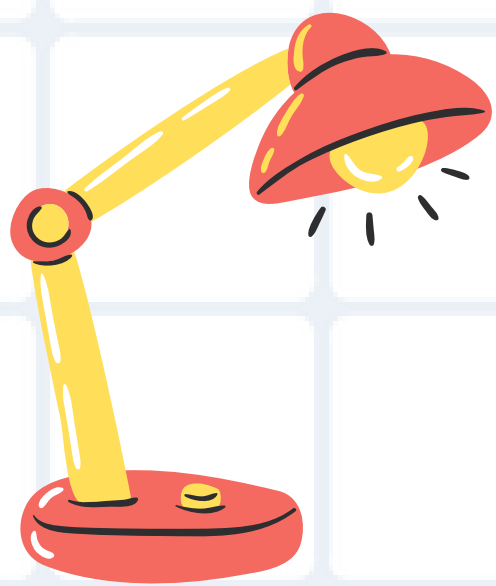
DIJKSTRA

FLOYD WARSHALL

PRIM

KRUSKAL





IDEAS



RECORRIDO BFS



RECORRIDO DFS



DIJKSTRA



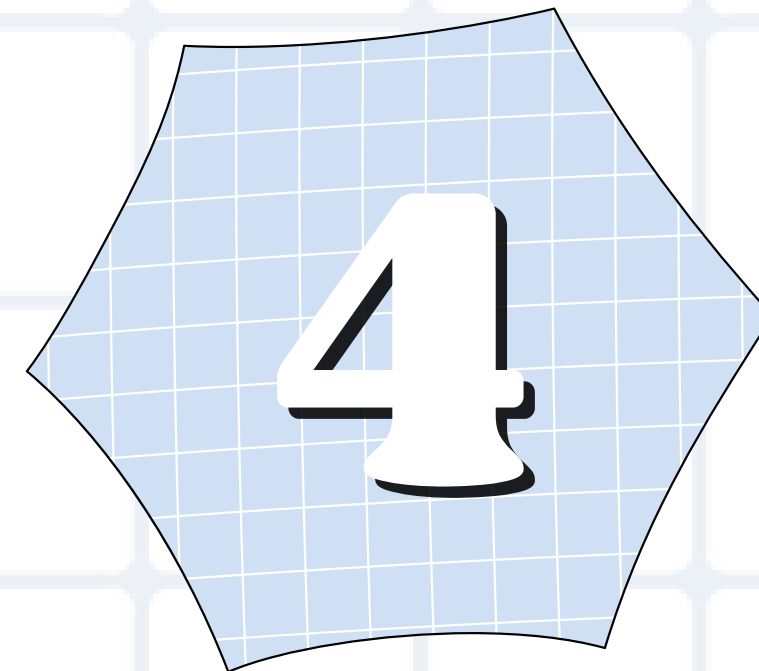
FLOYD WARSHALL



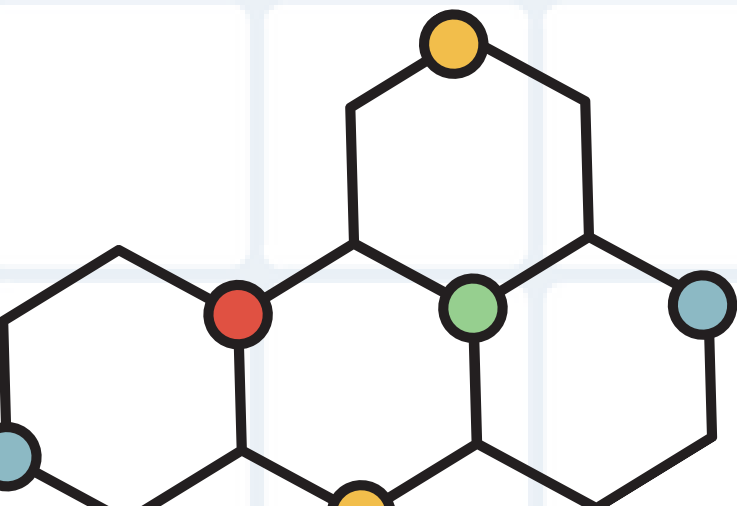
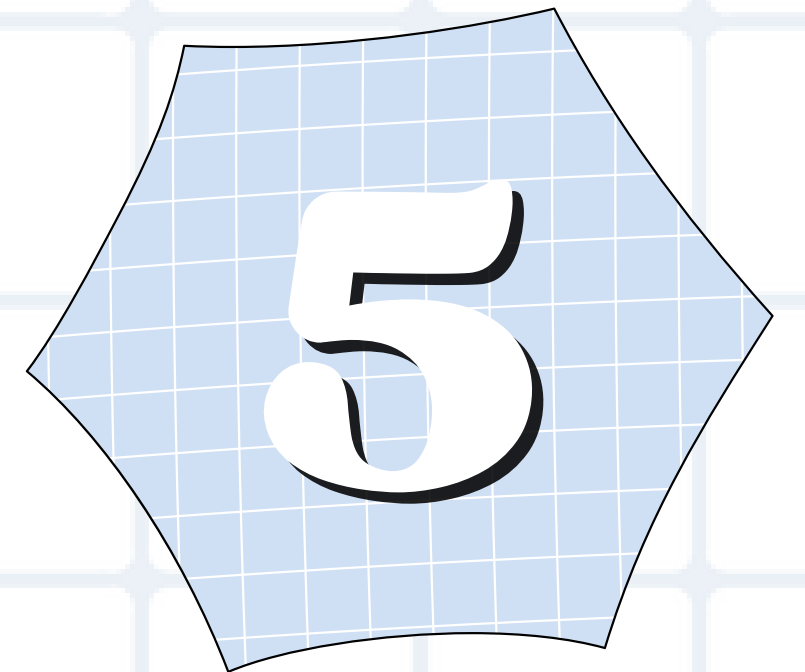
PRIM



KRUSKAL



IMPLEMENTACIÓN





SENDYS

FAST & SECURE

QUANTITY OF HOUSES

Adjacency by: ☐ Matrix ☐ List

START



SENDYS

FAST & SECURE

QUANTITY OF HOUSES

Adjacency by: ☒ Matrix ☐ List

START



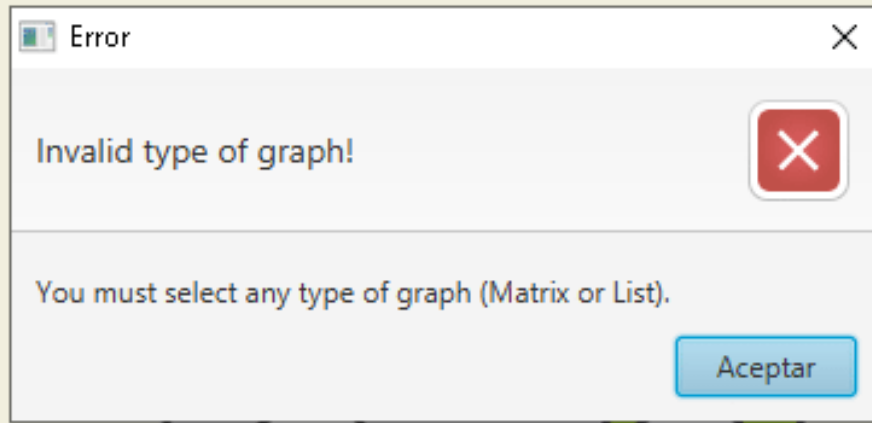
SENDYS

FAST & SECURE

QUANTITY OF HOUSES

Adjacency by: ☐ Matrix ☒ List

START



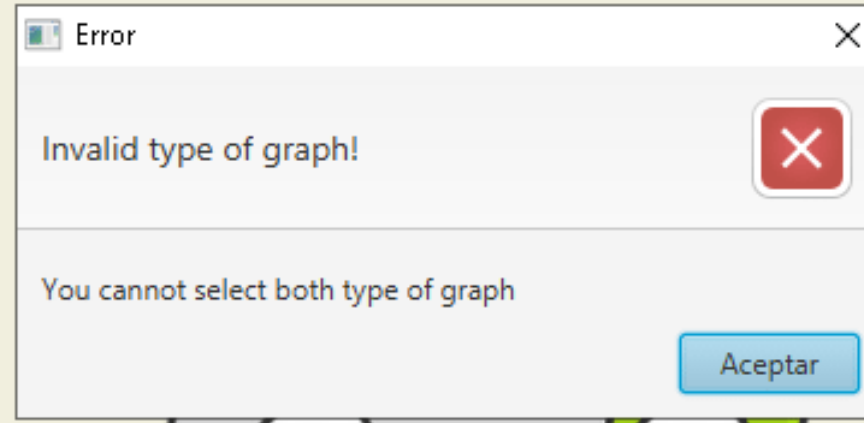
SENDYS

FAST & SECURE

15

Adjacency by: ☐ Matrix ☐ List

START



SENDYS

FAST & SECURE

15

Adjacency by: ☒ Matrix ☒ List

START



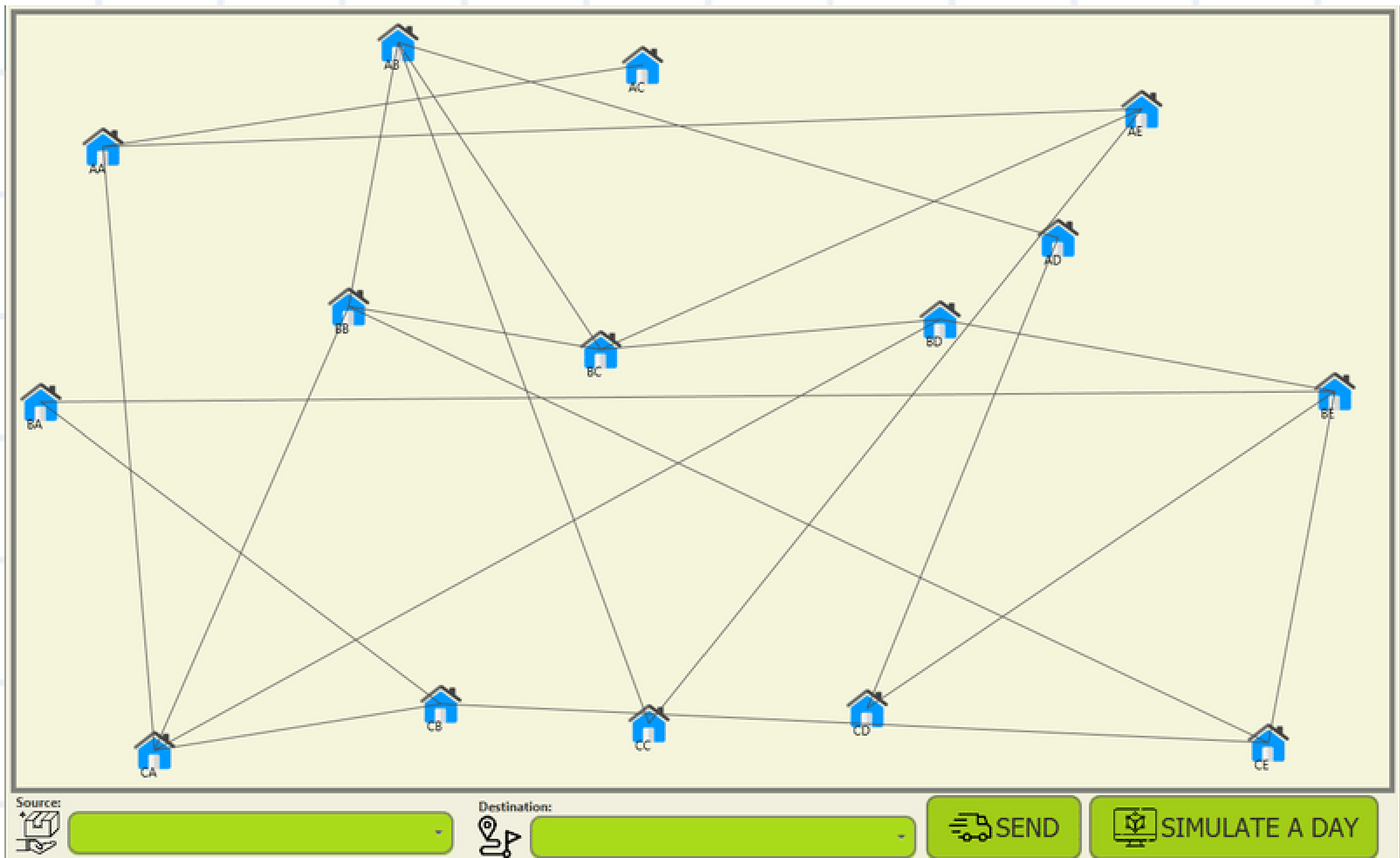
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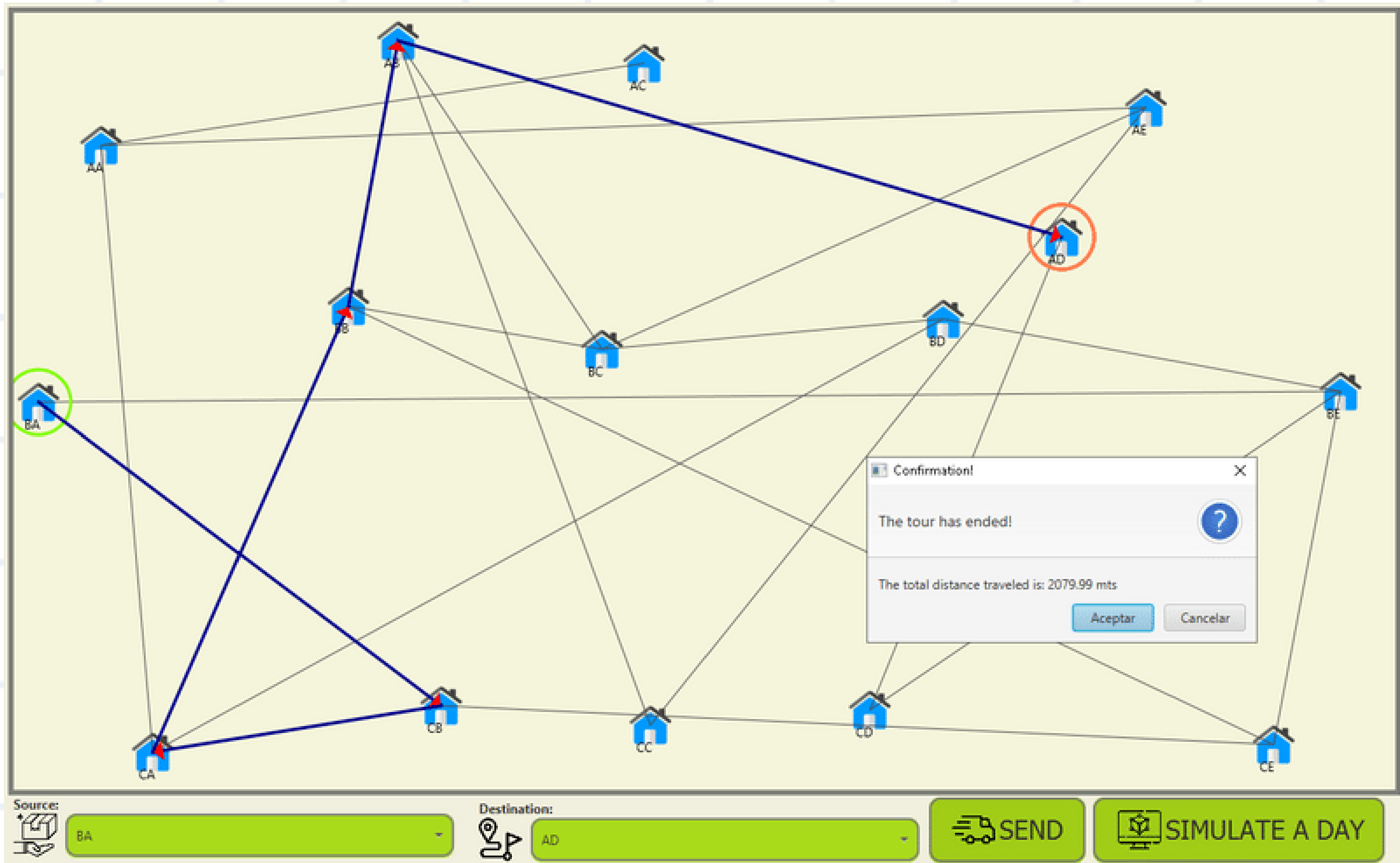
FAST & SECURE

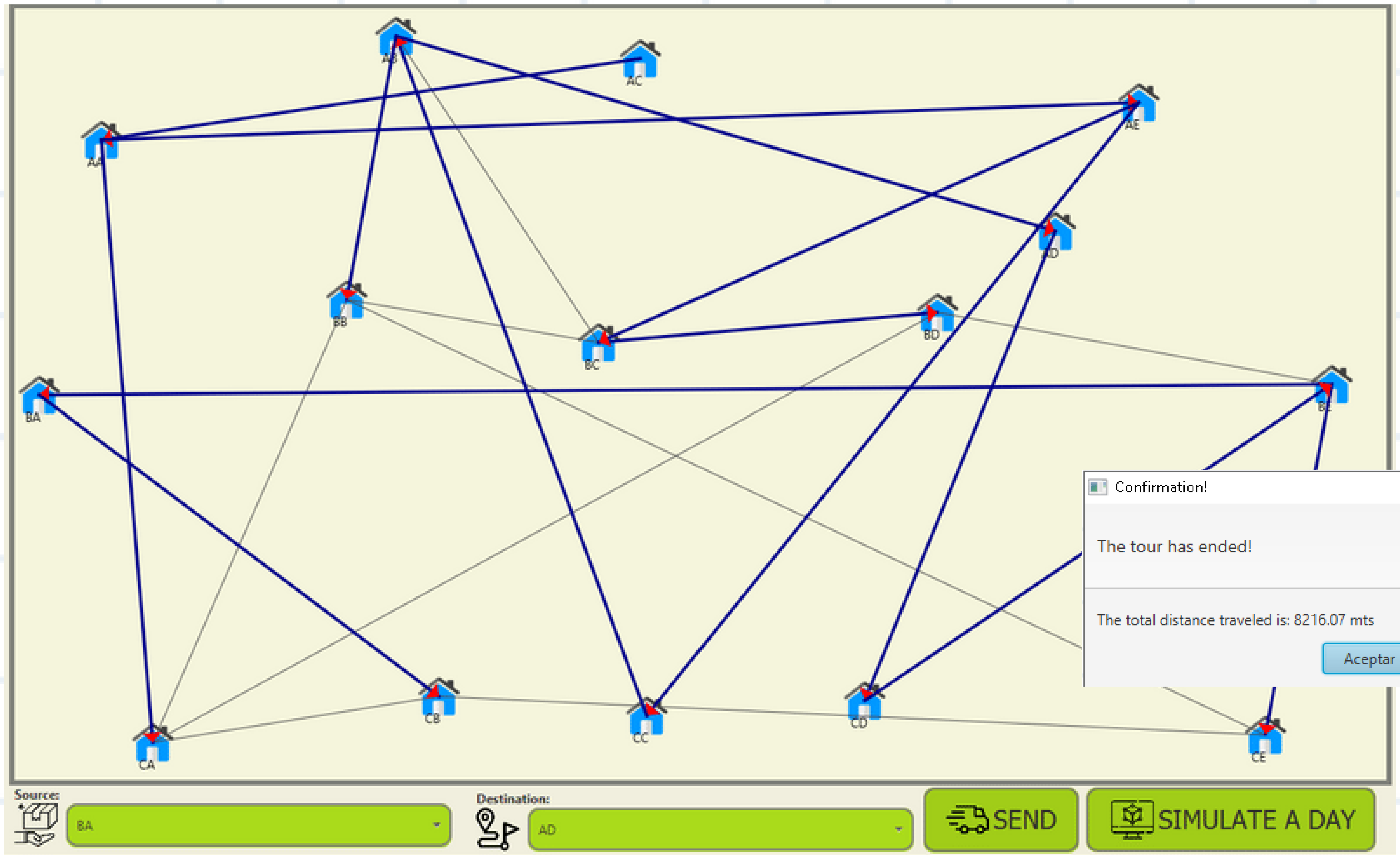
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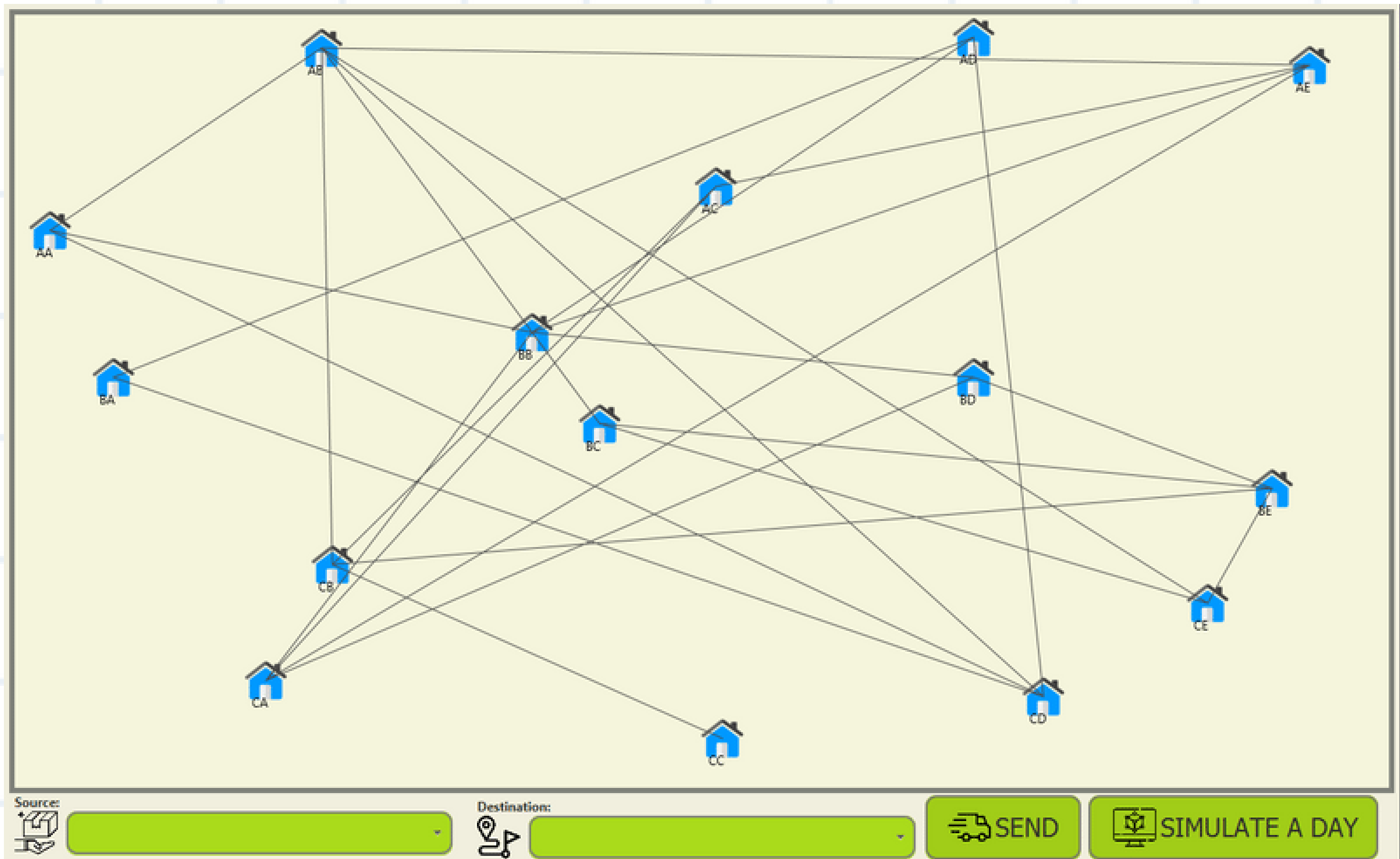
Adjacency by: ☒ Matrix ☐ List

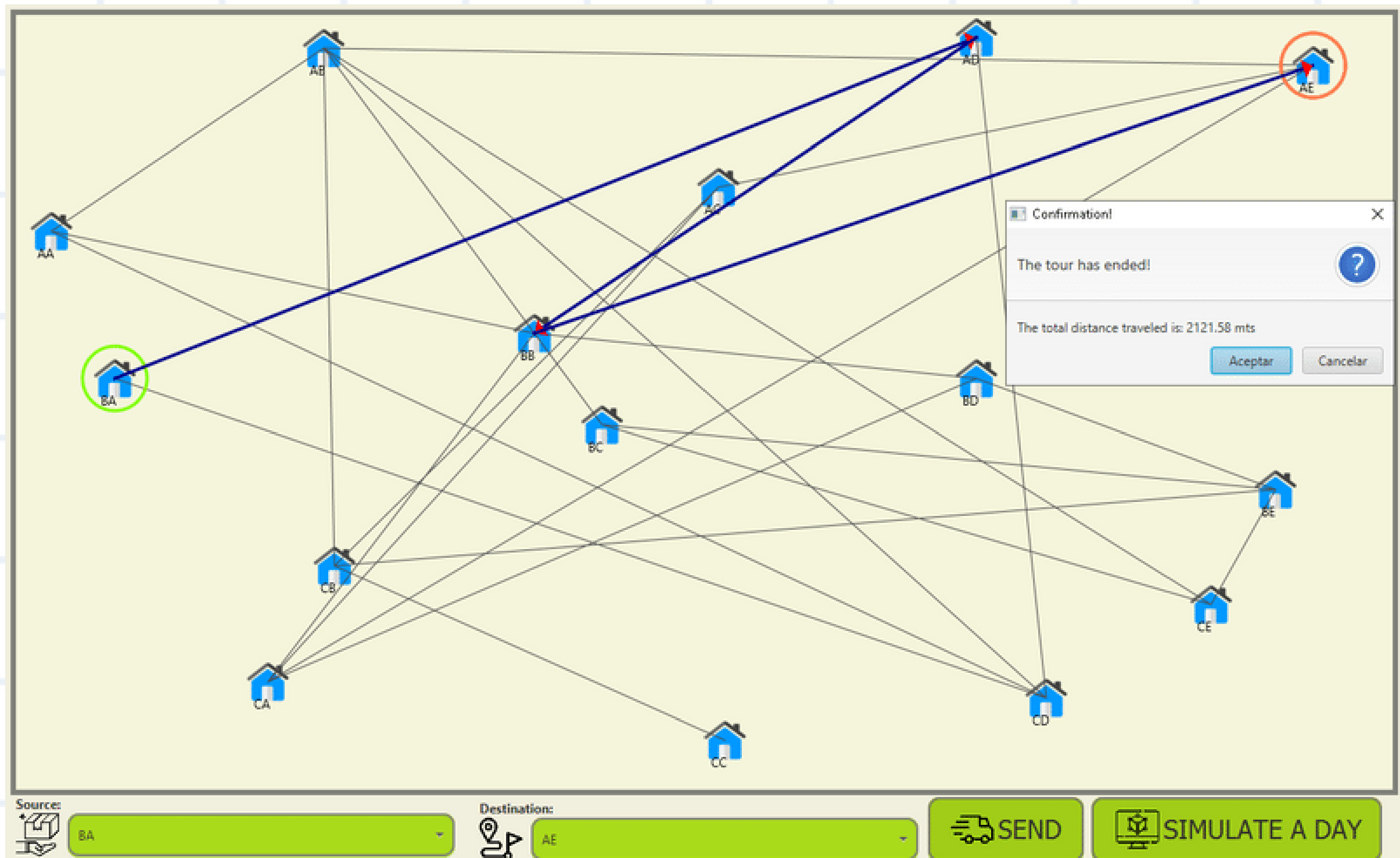
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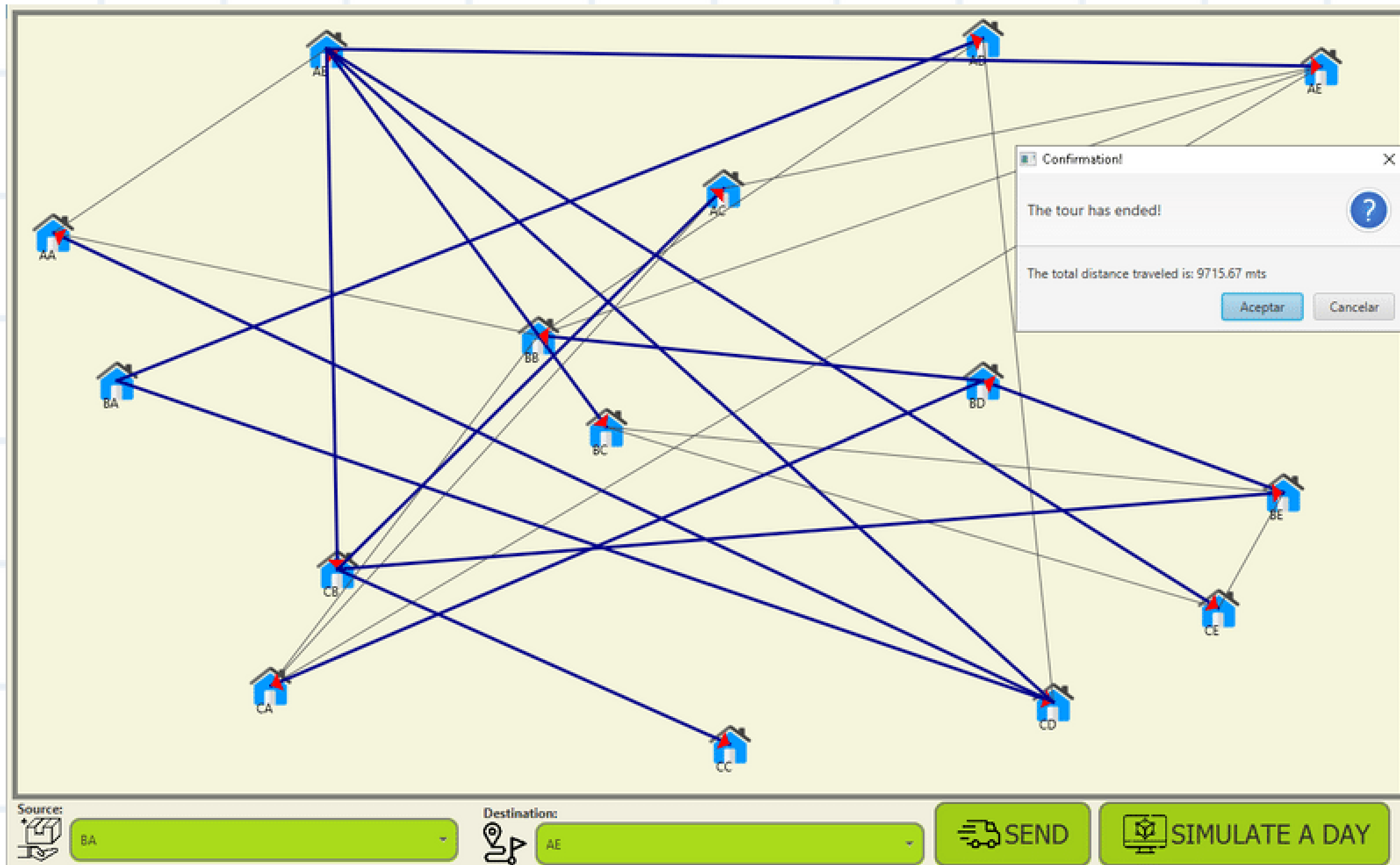


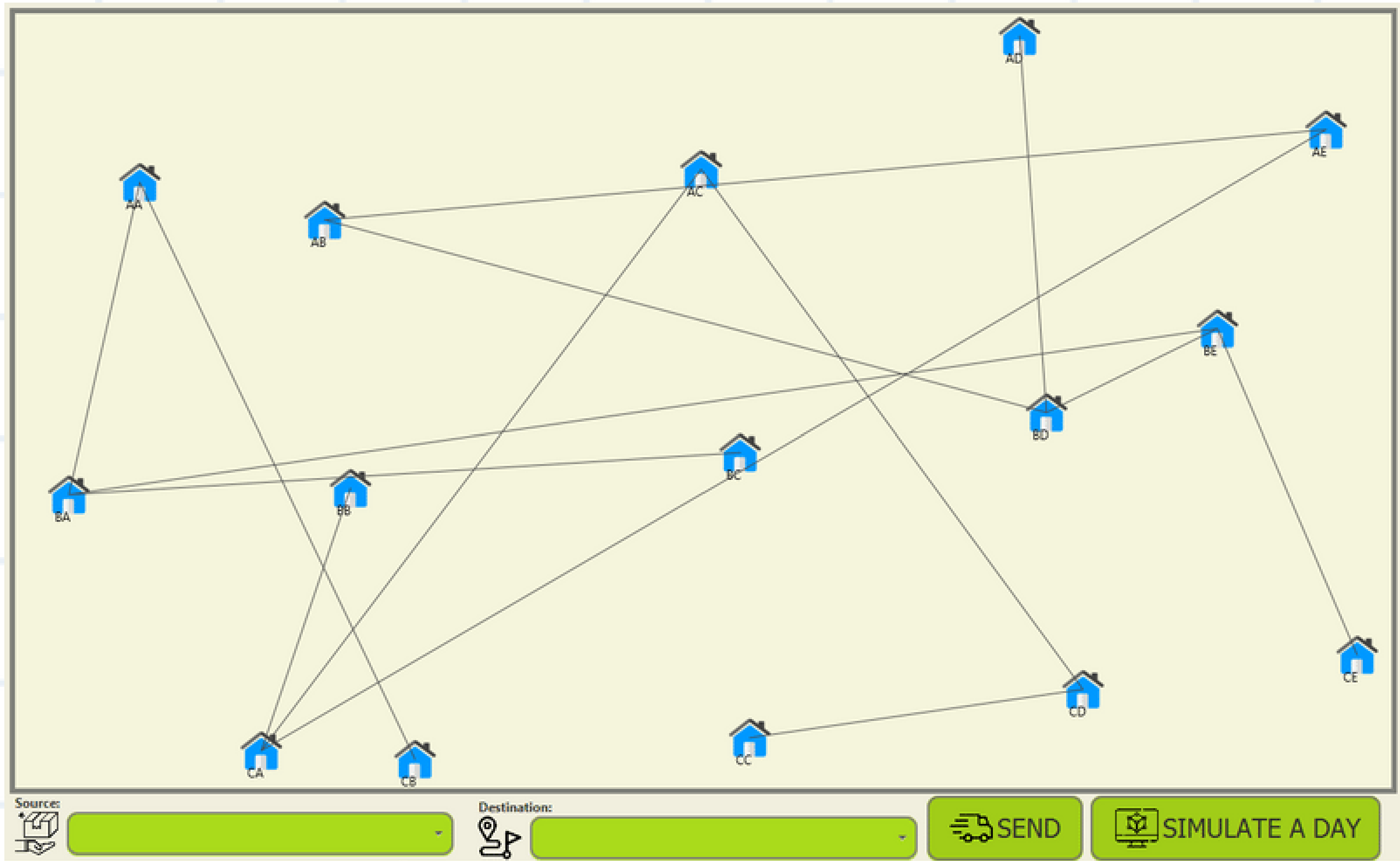












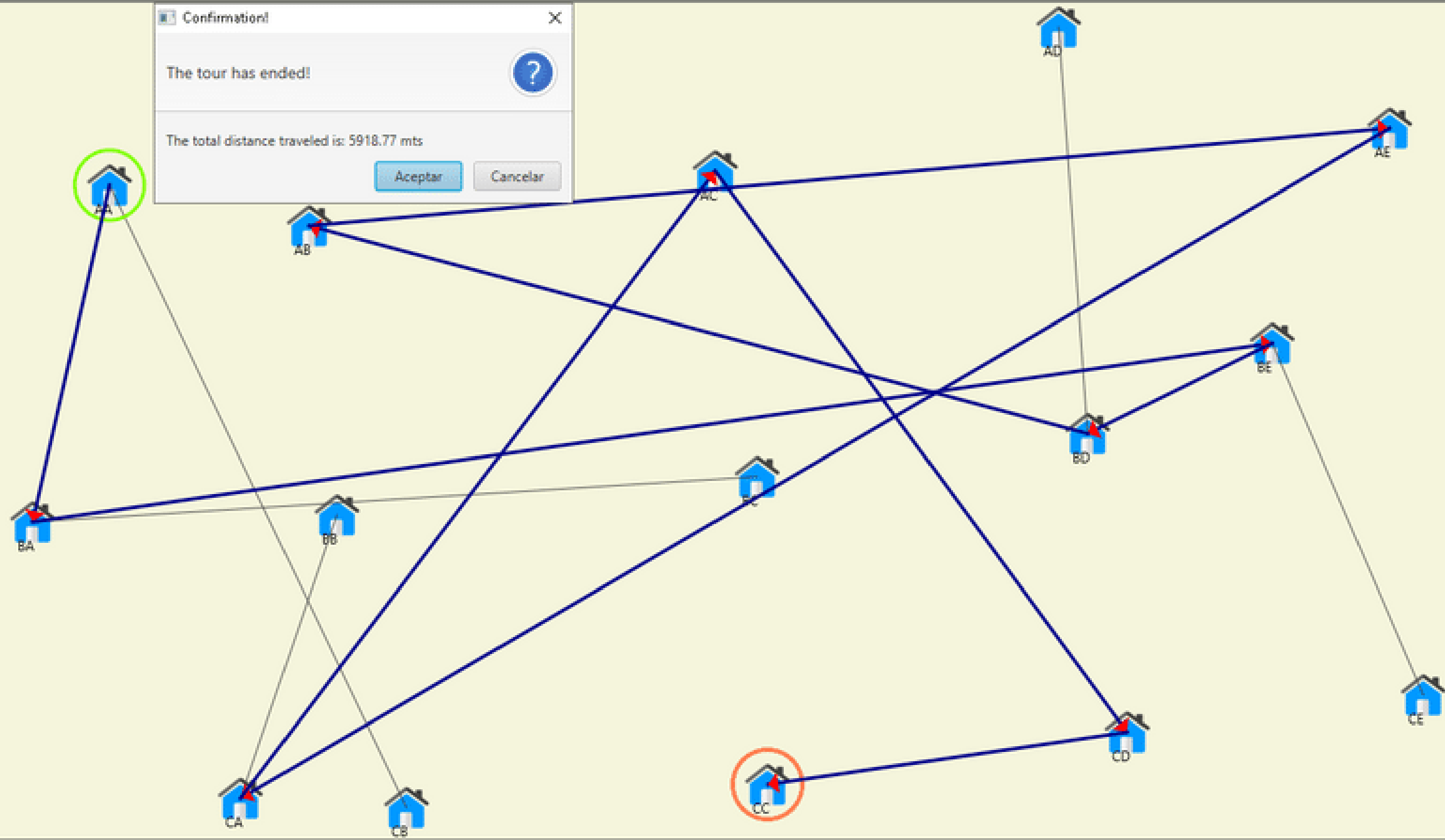
Confirmation!

The tour has ended!

The total distance traveled is: 5918.77 mts

Acceptar

Cancelar



Source:

AA

Destination:

CC

SEND

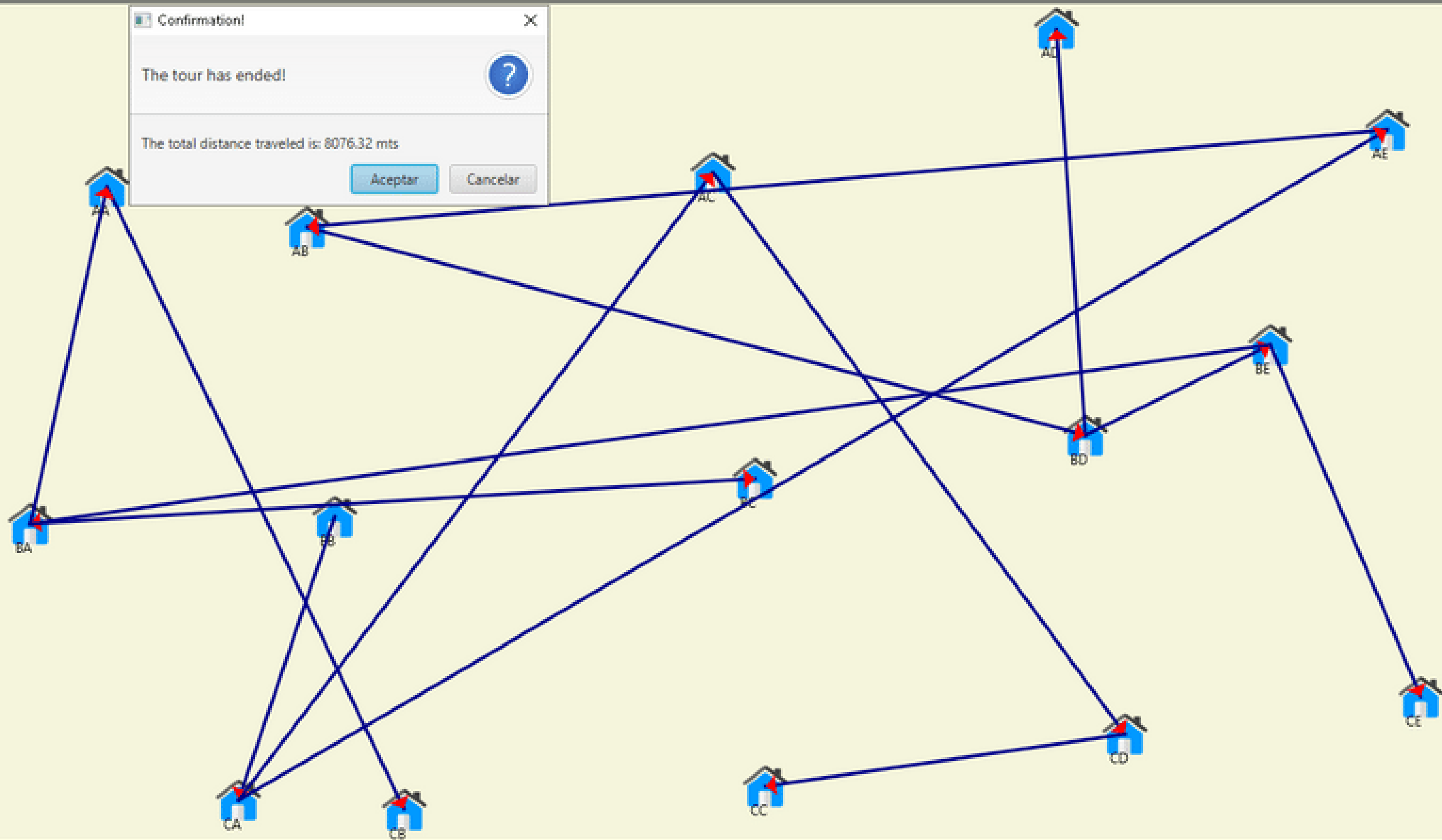
SIMULATE A DAY

Confirmation!

The tour has ended!

The total distance traveled is: 8076.32 mts

Aceptar Cancelar



Sources:

AA

Destination:



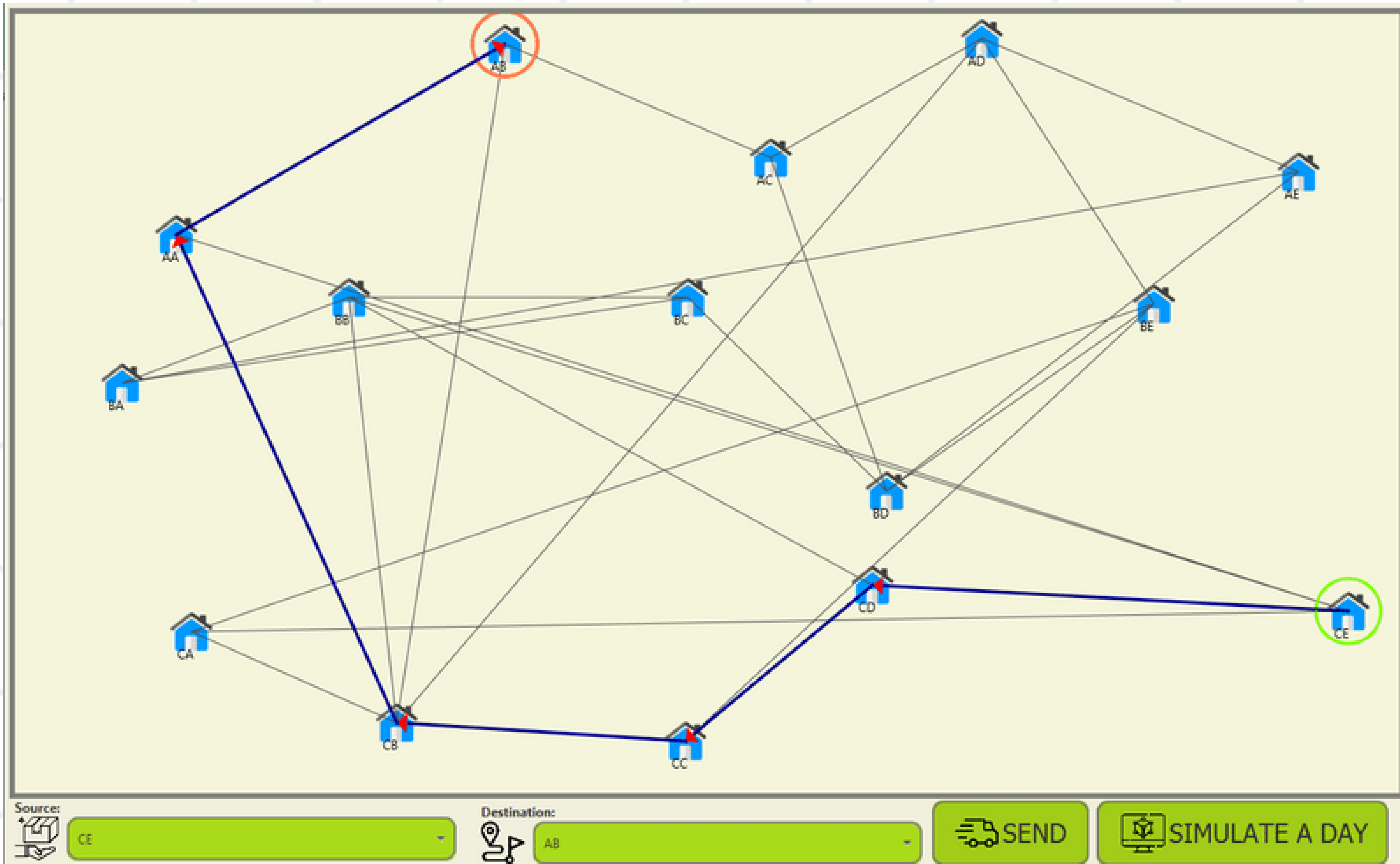
CC



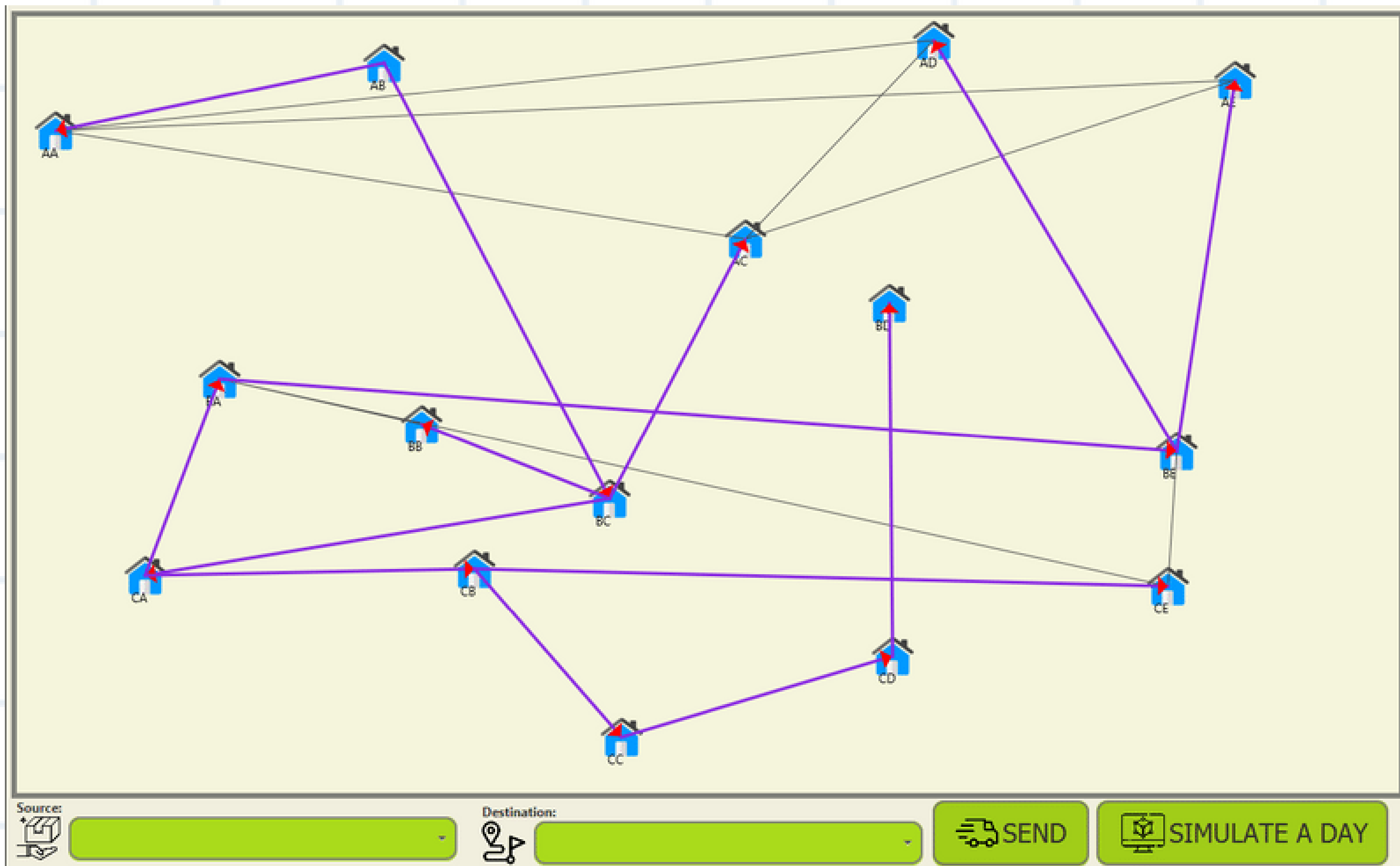
SEND



SIMULATE A DAY

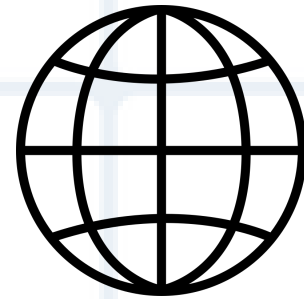
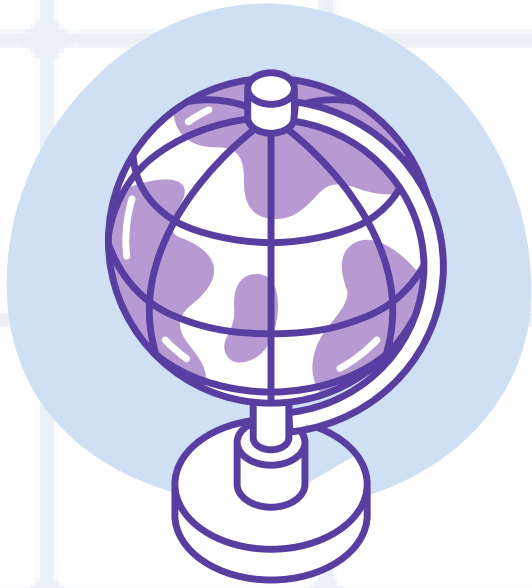


• PLUS



• PLUS

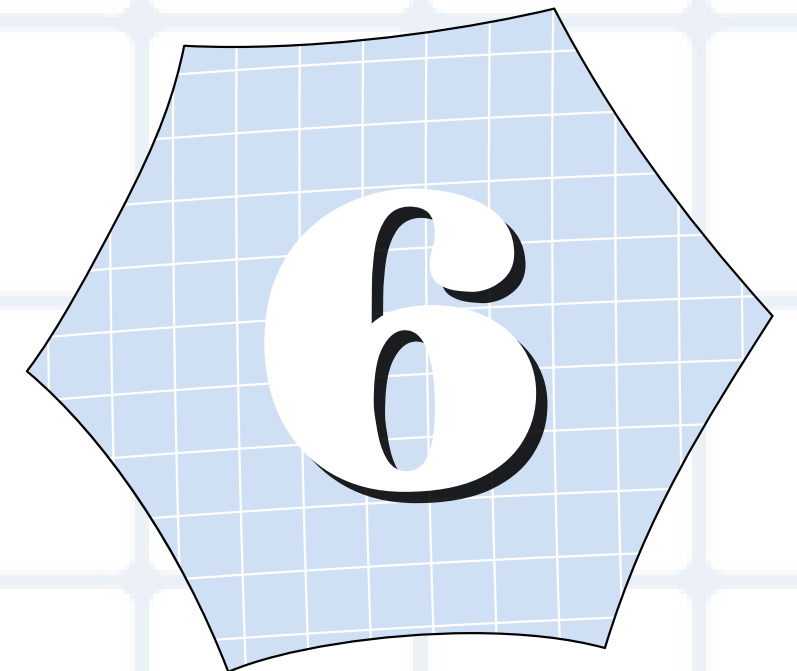
REFERENCIAS



SITIOS WEB



- http://163.10.22.82/OAS/recorrido_grafos/bfs__recorrido_en_amplitud.html (BFS-Recorrido en amplitud)
- [http://163.10.22.82/OAS/recorrido_grafos/dfs__recorrido_en_profundidad.html#:~:text=Un%20Recorrido%20en%20profundidad%20\(en,recorrido%20preorden%20de%20un%20%C3%A1rbol](http://163.10.22.82/OAS/recorrido_grafos/dfs__recorrido_en_profundidad.html#:~:text=Un%20Recorrido%20en%20profundidad%20(en,recorrido%20preorden%20de%20un%20%C3%A1rbol) (DFS-Recorrido en profundidad)
- https://www.ecured.cu/Algoritmo_de_Dijkstra (Ecured, Algoritmo de Dijkstra)
- https://es.wikipedia.org/wiki/Algoritmo_de_Floyd-Warshall (Algoritmo de Floyd-Warshall)





**Gracias por la
atención prestada**