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Assume we have the following units:

Take this into account :

“Notes:

The order of the actions is determined by the destination state whose identifier is the lowest, that is, if different (partial) destinations can be reached at a given point (intersection), they will be visited in increasing numerical order”.

## Understanding Data Input

**address**: zone of Albacete we are in .

**distance**: idk

**initial**: initial state

**final**: goal state

**intersections**: a list of dictionaries with attributes **identifier**, **longitude** and **latitude**

**segments**: a list of dictionaries with attributes **origin**, **destination**, **distance** and **speed**

I just added to the attributes of intersection a list of dictionaries containing destinations where I can go and its respective cost. It would be like this.

**intersections**: a list of dictionaries with attributes **identifier**, **longitude**, **latitude** and **whereto**.

Where **whereto** is a list of dictionaries.

## Statistics and Computational Complexity

|  |  |  |
| --- | --- | --- |
|  | Depth-First | Breadth-First |
| Expanded nodes | 27 | 25 |
| Explored nodes | 36 | 35 |
| Depth of solution | 12 | 8 |
| Nodes generated | 43 | 42 |
| Total cost | 27.519616666666664 | 20.15843333333333 |

This is just for ‘paseo\_simón\_abril\_albacete\_250\_1’ but now imagine our database after solving all the problems. I am thinking on doing the report on LaTeX. If I have time, at the end I will do. Now, let’s just do things as simple as possible.

When we get to heuristics and A\* we are going to be able to avoid recursion on recoverPath as we are going to know more or less where is the solution (don’t really mean is going to be the solution 100%).

How is the database going to be?

I don’t know, we will figure out.

## Heuristic

I am thinking for a heuristics. We can use the geodesical distance with the longitude and latitude.

I remember she mentioned in class that the heuristics could be the maximum speed of all the speeds or something like that. What is the heuristic? I have in my notes “maximum speed of all the speeds maybe” for the lab1 Heuristics.

Work with sets, hash for efficiency in explored or visited set (you have it as a list).

Métodos \_\_eq\_\_ y \_\_hash\_\_.