Overview:
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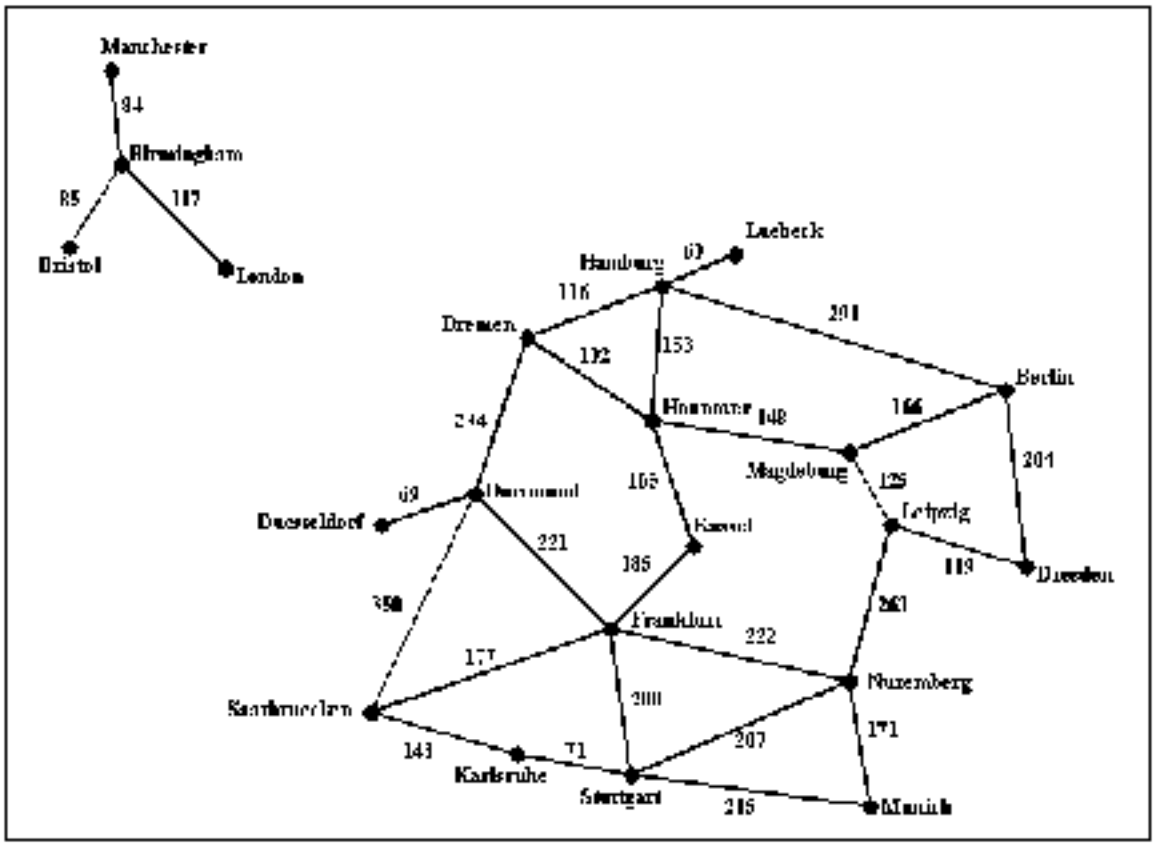


Implement a search algorithm that can find a route between any two cities. Your program will be called find_route, and will take exactly three commandline arguments, as follows:

***find_route input_filename origin_city destination_city***

Argument input_filename is the name of a text file such as input1.txt, that describes road connections between cities in some part of the world. For example, the road system described by file input1.txt can be visualized in Figure 1 shown above. You can assume that the input file is formatted in the same way as input1.txt: each line contains three items. The last line contains the items "END OF INPUT", and that is how the program can detect that it has reached the end of the file. The other lines of the file contain, in this order, a source city, a destination city, and the length in kilometers of the road connecting directly those two cities. Each city name will be a single word (for example, we will use New_York instead of New York), consisting of upper and lowercase letters and possibly underscores.

Programming Language:
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Java

Instructions to compile & run the code:
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Compile: Execute following command to compile the code.

javac find_route.java

Run: Execute following command to run the program.

**SYNTAX : java find_route input_filename origin_city destination_city**

For e.g. : java find_route input1.txt Luebeck Nuremberg

Output:
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distance: 455 km
route:
Bremen to Dortmund, 234 km
Dortmund to Frankfurt, 221 km

find_route input1.txt London Frankfurt

should have the following output, when there is no path from London and Frankfurt.

distance: infinity
route:
none