**World Traveler Challenge**

I want to visit many cities in the world C1,C2…CN. To visit a city Cx, I must visit dependent cities prior to visiting desired city Cx.

1. The database of countries and dependency is listed in input file Dependent.txt is of below format.

Brazil:Manus/India:Mumbai/India:Nagpur/India:Shimla/Japan:Tokyo

India:Mumbai/Brazil:Guarulhos/USA:California

Brazil:Manus/India:Delhi/China:Shanghai/Japan:Tokyo

Brazil:Manus / India:Mumbai/ India:Nagpur / India:Shimla

India:Bangalore/India:Bhopal/India:Pune/India:Nagpur/India:Ooty

India:Lucknow/USA:Newark/India:Ooty

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For example, to visit city Tokyo, either I must visit Brazil:Manus, India:Delhi, China:Shangai or, I must visit Brazil:Manus, India:Mumbai, India:Nagpur, India:Shimla. Shortest route is the former.

1. I also have a list of cities which I have already visited in the past. The input file Visited.txt is of below format:

China:Shanghai

India:Mumbai

USA:Newark

Brazil: Manus

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1. From the World Travel Authority, there is a list of countries which are restricted to travel in file RestrictedCountries.txt. Also there is a separate list of cities which are restricted to travel, RestrictedCities.txt
2. There is a list of cities which I want to travel. The input file is WantToVisit.txt

***Device a program***

1. Generate the shortest dependent and restriction free route for the cities listed in WantToVisit.txt provided I have visited the pre-dependent cities already. If route is not available, program should output “No route” for that city.
2. How many “No route” results are seen when the program completes?
3. Allow a user to input the country:city to find the shortest or longest dependent and restriction-free route.
4. Allow a user to input the country:city to find the all the dependent routes for that city (even if restricted).
5. Allow a user to input the country:city so that that city can be marked visited.

**You can't use scripting language to implement a program. You can use scripting language to test your program.**