Question 2:

a)

State: The salesman has visited n cities but no went back start city(A)

Initial State: The salesman in the start city(A) and has not visited any city

Goal State: The salesman has visited all cities and went back the start city(A)

Successor function: Generates all cities that have not visited yet

b)

we can choose heuristic function h = Euclidean distance to the nearest unvisited city from current city