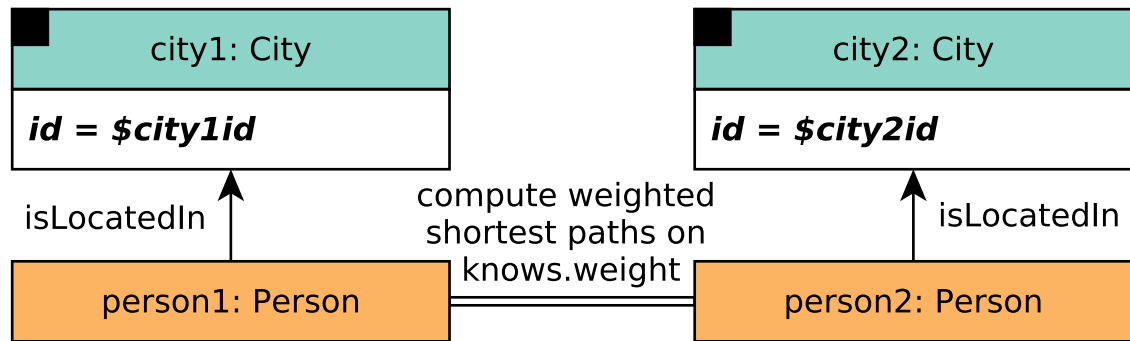
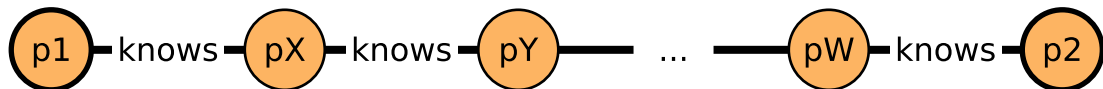


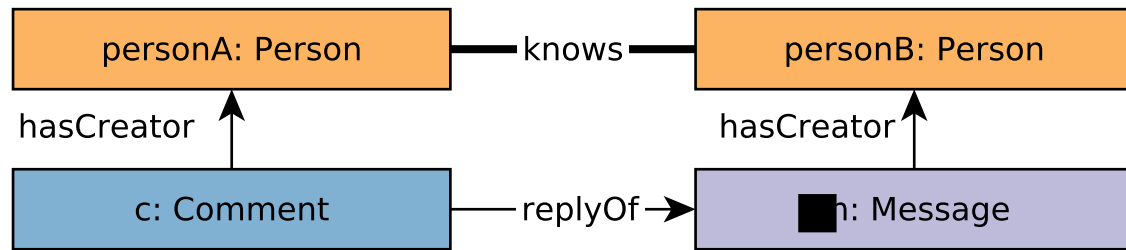
Find the shortest paths between all pairs of Persons in city1 and city2



The weight of a knows edge is based on the number of interactions between its Persons:  
 $\text{knows.weight} = 1 / (\text{count}(i1) + \text{count}(i2))$



Case i1: Reply from personA to Person B's Message



Case i2: Reply from personB to personA's Message

