The client wants to calculate the distance (in miles) between two areas represented by two given ZIP codes.

| query inputs |  |  | query outputs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| parameter | associated ontology concept |  | parameter | associated ontology concept |  |  |
| firstZIPcode | address.owl\# ZipCode |  | distanceMiles | geography.owl\#DistanceMiles |  |  |
| secondZIPcode | address.owl\# ZipCode |  |  |  |  |  |
| needed services |  |  |  |  |  |  |
| service name |  | selected atomic processes |  |  |  |  |
| ZipCodes.owl |  | GetCityAndState |  |  |  |  |
| ZipCodes.owl |  | GetCityAndState |  |  |  |  |
| GeographicLocations.owl |  | GetDistanceBetweenTwoCoordinates |  |  |  |  |
| GeographicLocations.owl |  | GetCoordinatesByCityAndState |  |  |  |  |
| GeographicLocations.owl |  | GetCoordinatesByCityAndState |  |  |  |  |
| match details of query outputs |  |  |  |  |  |  |
| output produ |  | d by service |  |  | match degree | sim. value |
| DistanceMiles ${ }^{\text {a }}$ ( Geogr |  | icLocations.owl |  |  | exact match | 1 |
|  |  | match details of auxiliary concepts |  |  |  |  |
| aux. concept | pruduced by | matched concept | taken by |  | match degree | sim. value |
| city | ZipCodes.owl | cityName | GeographicLoc | s.owl | exact match | 0,8 |
| state | ZipCodes.owl | countryName | GeographicLoc | s.owl | exact match | 0,75 |

