**Problem 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Dimension** | **Attributes** | **Hierarchies** | **Data Sources** |
| Customer | Custkey |  | ERP Database |
|  | Cust\_Name |  | ERP Database |
|  | Email\_Address |  | ERP Database |
|  | Location | Country/state/city/zip | ERP Database |
|  | Phone | Country code/Area code/prefix/line | ERP Database |
|  | Terms\_code |  | ERP Database |
| Location | Location\_Id |  | ERP Database |
|  | Location\_Name | State/city | ERP Database |
| Sales Agent | SalesAgent\_Id |  | ERP Database |
|  | SalesAgent\_Name |  | ERP Database |
|  | State | Country/state | ERP Database |
|  | Country | Continent/country | ERP Database |
| Machine Type | MachineType\_Id |  | ERP Database |
|  | Manfacturer |  | ERP Database |
|  | Model |  | ERP Database |
|  | Rate\_Per\_Hour |  | ERP Database |
|  | Number\_Of\_Machines |  | ERP Database |
| SalesClass | SalesClass\_Id |  | ERP Database |
|  | SalesClass\_Desc |  | ERP Database |
|  | BasePrice |  | ERP Database |
| CustLocation | Custkey |  | ERP Database |
|  | Cust\_Name |  |  |
|  | Email\_Address |  | ERP Database |
|  | City | Country/state/city | ERP Database |
|  | State | Country/state | ERP Database |
|  | Zip | Country/state/city/zip | ERP Database |
|  | Country | Continent | ERP Database |
| Time | Date\_First\_Order | Year/Month/Day | Customer |
|  | Date\_Invoiced | Year/Month/Day | Invoice |
|  | Date\_Due | Year/Month/Day | Invoice |
|  | Posting\_Date | Year/Month/Day | Invoice |
|  | Date\_Promised | Year/Month/Day | Job |
|  | Contract\_Date | Year/Month/Day | Job |
|  | Date\_Shipped | Year/Month/Day | Job |
|  | Date\_Prod\_Begin | Year/Month/Day | Sub Job |
|  | Date\_Prod\_End | Year/Month/Day | Sub Job |
|  | Actual\_Ship\_Date | Year/Month/Day | Shipment |
|  | ShipDate\_Requested | Year/Month/Day | Shipment |
|  | BeginDate | Year/Month/Day | Financial Sales Summary |
|  | EndDate | Year/Month/Day | Financial Sales Summary |