## Typescript Assignment

- 1. Create fields variable which contains the sample data given below
- 2. Combined all the items from Details, Measures, Dimensions, Hierarchies into single variable named fieldList
- 3. Filter fieldList to get the array that contains "calculatedFieldKey" key in it and save that array in variable named calculatedfields
- 4. Find the index of the item whose entityName is "Discount" and remove that item from the fieldList
- 5. Change the flag isNumericDataType to true and datatype to Numerical whose entityName is "City"
- 6. Combine variables array into single array from the calculated fields and find the variables list whose variable Type is "numerical"
- 7. From Dimensions array from fields store the index of the item whose Parent" = "Order Date" into array named dataIndex.
- 8. Loop over Dimensions array and check if the index of the item is present in dataIndex array and if present then print the entityName of that item
- 9. From Measures array from the fields change the key "datasetId" to "datasetKey" or add new key "datasetKey" with same value as "datasetId"
- 10. Find the item from the fieldList with "variableType" = "geographical" and then make unMappedLocationCount = 5
- 11. Find items from the fields array whose isNumericDataType = true and datatype = float then change subDatasetId to datasetId and save all the items in array named NumericalItems

```
Fields = {s

"Hierarchies": [],

"Dimensions": [

{

    "isNumericDataType": false,
    "entityName": "Order ID",
    "variableType": "categorical",
    "dataType": "text",
    "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
    "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
    },
    {

        "isNumericDataType": false,
        "entityName": "Order Date",
        "variableType": "interval",
        "dataType": "date",
```

```
"datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
{
  "entityName": "Order Date_Year",
  "Parent": "Order Date",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "variableType": "categorical",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16",
  "dataType": "int64",
  "subcol": true
},
  "entityName": "Order Date_Quarter",
  "Parent": "Order Date",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "variableType": "categorical",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16",
  "dataType": "int64",
  "subcol": true
},
{
  "entityName": "Order Date_Month",
  "Parent": "Order Date",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "variableType": "categorical",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16",
  "dataType": "int64",
  "subcol": true
},
  "entityName": "Order Date_Day",
  "Parent": "Order Date",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "variableType": "categorical",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16",
  "dataType": "int64",
  "subcol": true
```

```
},
  "entityName": "Order Date_Weekday",
  "Parent": "Order Date",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "variableType": "categorical",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16",
  "dataType": "str",
  "subcol": true
},
{
  "entityName": "Order Date_Week number",
  "Parent": "Order Date",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "variableType": "categorical",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16",
  "dataType": "int64",
  "subcol": true
},
  "isNumericDataType": false,
  "entityName": "Country",
  "variableType": "categorical",
  "dataType": "text",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
{
  "isNumericDataType": false,
  "entityName": "City",
  "variableType": "categorical",
  "dataType": "text",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
  "isNumericDataType": false,
```

```
"entityName": "State",
  "variableType": "geographical",
  "dataType": "text",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16",
  "mappingDetails": {
    "unMappedLocationCount": 0,
    "message": ""
  }
},
  "isNumericDataType": false,
  "entityName": "Region",
  "variableType": "categorical",
  "dataType": "text",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
  "isNumericDataType": false,
  "entityName": "Product ID",
  "variableType": "categorical",
  "dataType": "text",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
{
  "calculatedFieldKey": "2d2ea994-f27d-43a9-b3ee-d0c7baf5dcae",
  "variables": [
   {
     "entityName": "Customer Name",
     "variableType": "categorical",
     "dataType": "text"
   }
  ],
  "isCalCache": false,
  "isCalculatedField": "True",
  "parameters": [],
```

```
"parameterNameList": [],
    "isValid": "True",
    "isNumericDataType": false,
    "entityName": "Cal32",
    "variableType": "categorical",
    "dataType": "text",
    "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
    "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
 }
],
"Measures": [
 {
    "isNumericDataType": true,
    "entityName": "Row ID",
    "variableType": "numerical",
    "dataType": "integer",
    "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
    "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
 },
    "isNumericDataType": true,
    "entityName": "Postal Code",
    "variableType": "numerical",
    "dataType": "float",
    "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
    "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
 },
 {
    "isNumericDataType": true,
    "entityName": "Sales",
    "variableType": "numerical",
    "dataType": "float",
    "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
    "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
 },
    "isNumericDataType": true,
    "entityName": "Quantity",
```

```
"variableType": "numerical",
  "dataType": "integer",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
{
  "isNumericDataType": true,
  "entityName": "Discount",
  "variableType": "numerical",
  "dataType": "float",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
  "isNumericDataType": true,
  "entityName": "Profit",
  "variableType": "numerical",
  "dataType": "float",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
{
  "isNumericDataType": true,
  "entityName": "Blank Column",
  "variableType": "numerical",
  "dataType": "float",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
{
  "calculatedFieldKey": "aab7d6bc-2947-42b7-9923-c6fec9471978",
  "variables": [
     "entityName": "Cal1",
     "variableType": "numerical",
     "dataType": "float",
     "calculatedFieldKey": "9ebc4055-8b67-42f3-a6eb-2a49acddb80f",
     "parameters": [],
```

```
"parameterNameList": []
    },
      "entityName": "Sales",
     "variableType": "numerical",
     "dataType": "float"
  ],
  "isCalCache": false,
  "isCalculatedField": "True",
  "parameters": [],
  "parameterNameList": [],
  "isValid": "True",
  "isNumericDataType": true,
  "entityName": "Cal2",
  "variableType": "numerical",
  "dataType": "float",
  "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
  "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
},
  "calculatedFieldKey": "9ebc4055-8b67-42f3-a6eb-2a49acddb80f",
  "variables": [
    {
      "entityName": "Profit",
      "variableType": "numerical",
     "dataType": "float"
    },
      "entityName": "Sales",
     "variableType": "numerical",
      "dataType": "float"
    }
  ],
  "isCalCache": false,
  "isCalculatedField": "True",
  "parameters": [],
  "parameterNameList": [],
```

```
"isValid": "True",
     "isNumericDataType": true,
     "entityName": "Cal1",
     "variableType": "numerical",
     "dataType": "float",
     "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
     "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
   }
 ],
 "Details": [ {
     "isNumericDataType": false,
     "entityName": "Category",
     "variableType": "categorical",
     "dataType": "text",
     "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
     "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
   },
     "isNumericDataType": false,
     "entityName": "Sub_Category",
     "variableType": "categorical",
     "dataType": "text",
     "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
     "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
   },
     "isNumericDataType": false,
     "entityName": "Product Name",
     "variableType": "categorical",
     "dataType": "text",
     "datasetId": "0d455a70-942d-498b-80fe-68604d4b41b1",
     "subDatasetId": "95896f9e-c422-435d-bf1f-ad85e1aefd16"
   },
]
}
```