```sql
-- SPRINT: Your Manager asked for:
    /*Employees: [
        ID,
        Full Name,
        PhoneNumber,
        TypeOfContact,
        FullAdress]
    */



-- Let's look the relations that each table has with others /tables (Change the table's name)
-- VERY IMPORTANT! I USED A LOTS TIMES

/* SELECT
    OBJECT_NAME(Referenced_Object_ID) as 'STRONG ENTITY',
    Name as 'Foreignkey',
    OBJECT_NAME(Parent_Object_ID) as 'WEAK ENTITY'
FROM SYS.FOREIGN_KEYS
WHERE Parent_Object_ID = OBJECT_ID('table_name_you_want') OR Referenced_Object_ID = OBJECT_ID('table_name_you_want'); */



-- Checking table's datas
SELECT * FROM Person.Address;  -- AddressLine1, City, StateProvinceID, PostalCode
SELECT * FROM Person.StateProvince; -- StateProvinceCode, CountryRegionCode, Name
SELECT * FROM Person.BusinessEntityAddress; -- AdressID, AddressTypeID
SELECT * FROM Person.AddressType; -- AddressTypeID, Name
SELECT * FROM Person.BusinessEntity;
SELECT * FROM Person.Person; -- BussinessEntityID, First Name, Middle Name, Last Name
SELECT * FROM Person.PersonPhone; -- PhoneNumber, PhoneNumberTypeID
SELECT * FROM Person.PhoneNumberType; -- PhoneNumberTypeID, Name
```
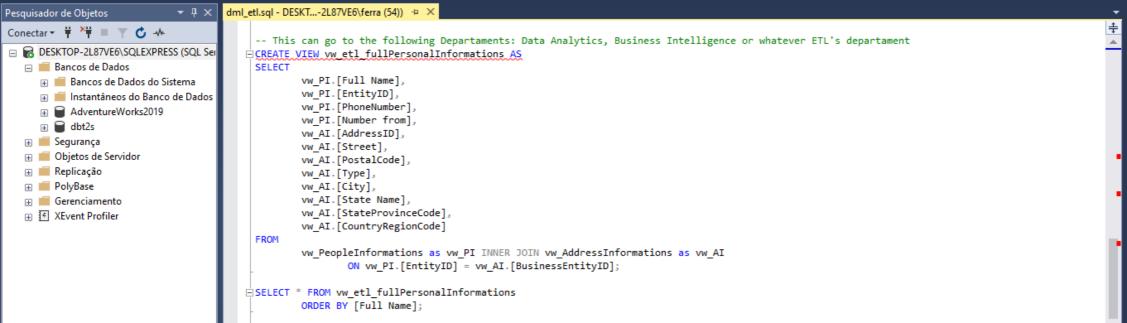
```sql
CREATE VIEW vw_PeopleInformations AS
    SELECT
        PE.BusinessEntityID as 'EntityID',
        CONCAT (PE.FirstName, ' ', PE.MiddleName, ' ', PE.LastName) as 'Full Name',
        PP.PhoneNumber,
        PNT.Name as 'Number from'
    FROM
        Person.Person as PE INNER JOIN Person.PersonPhone as PP
            ON PE.BusinessEntityID = PP.BusinessEntityID
        INNER JOIN Person.PhoneNumberType as PNT
            ON PP.PhoneNumberTypeID = PNT.PhoneNumberTypeID;

-- Part 2: Address Informations
/*ADT = AddressTpe (name), BEA = BusinessEntityAddress (AdressID), SP = StateProvince (StateProvinceCode, CountryRegionCode, Name), PA = (AddressLine1, City, PostalCode)  */

CREATE VIEW vw_AddressInformations AS
    SELECT
        BEA.BusinessEntityID,
        BEA.AddressID,
        PA.AddressLine1 as 'Street',
        ADT.name as 'Type',
        PA.City,
        PA.PostalCode,
        SP.StateProvinceCode,
        SP.CountryRegionCode,
        SP.name as 'State Name'
    FROM
        Person.AddressType as ADT INNER JOIN Person.BusinessEntityAddress as BEA
            ON ADT.AddressTypeID = BEA.AddressTypeID
        INNER JOIN Person.Address as PA
            ON BEA.AddressID = PA.AddressID
        INNER JOIN Person.StateProvince as SP
            ON PA.StateProvinceID = SP.StateProvinceID;
```

```sql
-- This can go to the following Departaments: Data Analytics, Business Intelligence or whatever ETL's departament
CREATE VIEW vw_etl_fullPersonalInformations AS
SELECT
        vw_PI.[Full Name],
        vw_PI.[EntityID],
        vw_PI.[PhoneNumber],
        vw_PI.[Number from],
        vw_AI.[AddressID],
        vw_AI.[Street],
        vw_AI.[PostalCode],
        vw_AI.[Type],
        vw_AI.[City],
        vw_AI.[State Name],
        vw_AI.[StateProvinceCode],
        vw_AI.[CountryRegionCode]

FROM

        vw_PeopleInformations as vw_PI INNER JOIN vw_AddressInformations as vw_AI
            ON vw_PI.[EntityID] = vw_AI.[BusinessEntityID];


SELECT * FROM vw_etl_fullPersonalInformations
        ORDER BY [Full Name];
```

```sql
    -- SPRINT 2: ETL of usefull insights about [State, City and Province]

-- Quantity of Cities, Amount People by CountryRegionCode
SELECT
    [CountryRegionCode],
    count([City]) as 'Quantity of Cities' ,
    COUNT([Full Name]) as 'Amount People'
FROM vw_etl_fullPersonalInformations
    GROUP BY [CountryRegionCode]
    ORDER BY  [CountryRegionCode];

-- Quantity of People by City
    SELECT
    [City],
    COUNT([Full Name]) as 'Amount People'
FROM vw_etl_fullPersonalInformations
    GROUP BY [City]
    ORDER BY [City];

-- Quantity of People by State, Quantity of City by State
SELECT
    [State Name],
    COUNT([City]) as 'Quantity of Cities',
    COUNT([Full Name]) as 'Quantity of People'
FROM vw_etl_fullPersonalInformations
    GROUP BY [State Name]
ORDER BY [State Name];
```

```sql
-- Quantity of Cities, Amount People by CountryRegionCode
SELECT
    [CountryRegionCode],
    count([City]) as 'Quantity of Cities' ,
    COUNT([Full Name]) as 'Amount People'
FROM vw_etl_fullPersonalInformations
    GROUP BY [CountryRegionCode]
    ORDER BY [CountryRegionCode];

-- Quantity of People by City
    SELECT
    [City],
    COUNT([Full Name]) as 'Amount People'
```

stantâneos do Banco de Dados

100 %

Resultados | **Mensagens**

	CountryRegionCode	Quantity of Cities	Amount People
1	AU	3592	3592
2	CA	1573	1573
3	DE	1781	1781

	City	Amount People
4	Basing...	2
5	Baytown	1
6	Beaver...	210
7	Bell Ga...	1
8	Bellevue	38

	State Name	Quantity of Cities	Quantity of People
4	Bayern	228	228
5	Brandenb...	30	30
6	British Col...	1559	1559
7	California	4447	4447

Consulta executada com êxito.

```sql
SELECT * FROM vw_etl_fullPersonalInformations
        ORDER BY [Full Name];

    -- SPRINT 2: ETL of usefull insights about [State, City and Province]

    -- Quantity of Cities, Amount People by CountryRegionCode
```

100 %

Resultados | **Mensagens**

	Full Name	EntityID	PhoneNumber	Number from	AddressID	Street	PostalCode	Type	City	State Name	StateProvinceCode	CountryRegionCode
4992	Deanna Gill	9810	125-555-0154	Cell	18864	867 Maria Vega Court	94014	Home	Colma	California	CA	US
4993	Deanna Gomez	9774	1 (11) 500 555-0124	Cell	18828	Kalkweg 4435	45001	Home	Essen	Hamburg	HH	DE
4994	Deanna Jiménez	9784	1 (11) 500 555-0112	Home	18838	6410 Army Drive	4551	Home	Caloundra	Queensland	QLD	AU
4995	Deanna Martin	9771	1 (11) 500 555-0170	Home	18825	8162 Milden Road	4551	Home	Caloundra	Queensland	QLD	AU
4996	Deanna Martinez	9762	1 (11) 500 555-0144	Home	18816	9555 Wheel Ave..	KB9	Home	Kirkby	England	ENG	GB
4997	Deanna Moreno	9787	1 (11) 500 555-0129	Home	18841	7897 Standing Grove...	2580	Home	Goulburn	New South ...	NSW	AU
4998	Deanna Munoz	9790	1 (11) 500 555-0192	Home	18844	5825 B Way	3220	Home	Geelong	Victoria	VIC	AU
4999	Deanna Perez	9769	1 (11) 500 555-0191	Cell	18823	Marienplatz 56	66041	Home	Poing	Saarland	SL	DE
5000	Deanna Prasad	9746	1 (11) 500 555-0195	Cell	18800	3339, rue Surcouf	77127	Home	Lieusaint	Seine et Marne	77	FR
5001	Deanna Rodrig...	9767	1 (11) 500 555-0136	Cell	18821	9736 Montana	CM11	Home	Billericay	England	ENG	GB
5002	Deanna Srini	9745	1 (11) 500 555-0148	Home	18799	3794 Trees Drive	7001	Home	Hobart	Tasmania	TAS	AU
5003	Deanna Suarez	9822	1 (11) 500 555-0146	Cell	18876	Dunckerstr 22525	41485	Home	Grevenbroich	Bayern	BY	DE
5004	Deanna Subram	9754	1 (11) 500 555-0187	Cell	18808	26, rue de l'Esplanade	75012	Home	Paris	Seine (Paris)	75	FR
5005	Deanna Suri	9721	1 (11) 500 555-0122	Home	18775	Hellweg 4924	30601	Home	Hannover	Nordrhein-We...	NW	DE

✔ Consulta executada com êxito. | DESKTOP-2L87VE6\SQLEXPRESS ... | DESKTOP-2L87VE6\ferra ... | AdventureWorks2019 | 00:00:00 | 18.798 linhas