US215 – As an Agricultural Manager, I want access to the list of hubs where my customers can collect their orders. A customer may have associated a default hub – the location where they regularly collect purchased products. However, the collection point (hub) can be changed for each order. I can also change a customer's default hub.

The list of hubs is updated whenever necessary through the **table input_hub(input_string VARCHAR(25))** where the records are entered with this information, in csv format, by a an external component of my information system.

The following is an example of the csv file that is uploaded to the **input hub**:

```
Loc id;lat;lng; Customers-Producers
CT1;40.6389;-8.6553; C1
CT2;38.0333;-7.8833; C2
CT14;38.5243;-8.8926; E1
CT11;39.3167;-7.4167; E2
CT10;39.7444;-8.8072; P3
```

When this file is loaded into the database, the **input hub** table gets the following records:

```
CT1;40.6389;-8.6553; C1
CT2;38.0333;-7.8833; C2
CT14;38.5243;-8.8926; E1
CT11;39.3167;-7.4167; E2
CT10;39.7444;-8.8072; P3
```

This file has information about clients and hubs. Customers have acode in the Customers-Producers field that begins with the letter C (the first two records in the example above). These records should be ignored as they do not correspond to hubs; the remaining records correspond to hubs and must be persisted in the database in a **hub** table.

Acceptance Criterion [BDDAD]

- 1. There is a procedure to update the **hub** table from the **input_hub** table when it is updated. The code of a hub is the value of the **Loc id** field
- 2. It is possible to assign and change a customer's default hub.
- 3. When the customer makes an order, he can indicate a hub, other than his default hub, to collect the order. The indicated hub must be valid, i.e., must exist in the **hub** table.

US216 – As an Agricultural Manager, I want to include in my production and sales analysis system the local collection dimension (hub). This dimension has an aggregation hierarchy with two levels: hub type, hub. The hub type is given by the letter of your Customers-Producers code.

Acceptance Criterion [BDDAD]

- 1. The table has been added to the new dimension and is properly structured
- 2. The fact tables correctly integrate the Local collection dimension.
- 3. A SQL script to load the Star/Snowflake schema with enough data to support a proof of concept is available and runs without errors.
- 4. A SQL script to query the data warehouse and support a proof of concept is available and runs without errors. This script answers the following questions:
 - a) Analyze the evolution of monthly sales by type of culture and hub?