1. **Convert the entity relationship diagram into relational model.**

**2-Give the list the producers.**

SELECT \* FROM PRODUCER;

**3-Give the list of producers sorted by name.**

SELECT \* FROM PRODUCER

ORDER BY LastName;

**4-Give the list the producers of Sousse.**

SELECT \* FROM PRODUCER

WHERE (Region=’Sousse’)

**5-Calculate the total quantity of wine produced having the number 12.**

SELECT SUM (Quantity) FROM QUANTITY

WHERE NumW=12;

**6-Calculate the quantity of wine produced by category.**

SELECT SUM(QUANTITY.Quantity) , WINE.Category

FROM (WINE **INNER JOIN** QUANTITY ON WINE.NumW= QUANTITY.NumW)

GROUP BY Category;

**7-Which producers in the Sousse region have harvested at least one wine in quantities greater than 300 liters? We want the names and first names of the producers, sorted in alphabetical order.**

**SELECT** **PRODUCER**.FirstName, **PRODUCER**.LastName,

**FROM** (PRODUCER **INNER JOIN** QUANTITY **ON** PRODUCER.NumP=QUANTITY.NumP)

WHERE (Quantity) > 300 **AND** Region = ‘Sousse’

**ORDER BY** LastName ;

**8-List the wine numbers that have a degree greater than 12 and that have been produced by producer number 24**.

**SELECT** WINE.NumW FROM (QUANTITY **INNER JOIN** WINE **ON** WINE.NumW=QUANTITY=NumW)

**WHERE** Degree >12 **AND** NumP=24 ;