

# Case Study Bacchus Winery

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### Report One:

We created a python script to run a query on the Bacchus database in order to display detailed information on orders made by the company for supplies. Details displayed include delivery\_id, supplier\_id,, product\_id, and quantity ordered. We have tracked the date of expected delivery and the actual date the order arrived. These two values allow the owners of the winery to see if there are any large time gaps or any supplier orders placed that are in transit too long for proper business.

The list displayed in this query shows that the winery ordered some tubing in February 2025, expecting the deliver\_id 1 to to arrive 2-10, but it took an additional three days for the bottle and corks to arrive. All deliveries from suppliers are showing to arrive later than estimated, so this is knowledgeable feedback for the owners.

```
-- DISPLAYING Supplier Delivery Information --
DELIVERY ID: 1
PRODUCT ID: 1
QUANTITY DELIVERED: 20
SUPPLIER ID: 1
EXPECTED DELIVERY DATE: 2025-02-10
ACTUAL DELIVERY DATE: 2025-02-13
DELIVERY ID: 2
PRODUCT ID: 2
QUANTITY DELIVERED: 60
SUPPLIER ID: 2
EXPECTED DELIVERY DATE: 2025-02-12
ACTUAL DELIVERY DATE: 2025-02-18
DELIVERY ID: 3
PRODUCT ID: 3
QUANTITY DELIVERED: 90
SUPPLIER ID: 1
EXPECTED DELIVERY DATE: 2025-02-13
ACTUAL DELIVERY DATE: 2025-02-16
DELIVERY ID: 4
PRODUCT ID: 4
QUANTITY DELIVERED: 54
SUPPLIER ID: 2
EXPECTED DELIVERY DATE: 2025-02-15
ACTUAL DELIVERY DATE: 2025-02-19
DELIVERY ID: 5
PRODUCT ID: 5
QUANTITY DELIVERED: 80
SUPPLIER ID: 1
EXPECTED DELIVERY DATE: 2025-02-15
ACTUAL DELIVERY DATE: 2025-02-25
DELIVERY ID: 6
PRODUCT ID: 6
QUANTITY DELIVERED: 67
SUPPLIER ID: 2
EXPECTED DELIVERY DATE: 2025-02-28
ACTUAL DELIVERY DATE: 2025-02-23
```

```
-- DISPLAYING supplier TABLE --
SUPPLIER ID: 1
SUPPLIER NAME: Supplier 1
SUPPLIER PRODUCT 1: bottles
SUPPLIER PRODUCT 2: corks
SUPPLIER ID: 2
SUPPLIER NAME: Supplier 2
SUPPLIER PRODUCT 1: corks
SUPPLIER PRODUCT 2: boxes
```

## Report Two:

For the second report we created a python script to run a query on the Bacchus database for the suppliers and product tables to help automate confirmation of the winery's annual distribution reports. Stan and Davis want to confirm which distributor supports certain products. We use the product-id and order\_id to confirm which wines are being ordered the most. This report will display which wines are being ordered often, or not enough. This report shows that distributor three supports product number four, chardonnay, ordering four cases, while distributor five supports riesling, ordering nine cases!

```
-- DISPLAYING Order Information --
```

```
ORDER ID: 1
PRODUCT ID: 1
DISTRIBUTOR ID: 1
ORDER DATE: 2025-02-10
QUANTITY: 3
ORDER ID: 2
PRODUCT ID: 2
DISTRIBUTOR ID: 2
ORDER DATE: 2025-02-12
QUANTITY: 6
ORDER ID: 3
PRODUCT ID: 3
DISTRIBUTOR ID: 3
ORDER DATE: 2025-02-13
QUANTITY: 2
ORDER ID: 4
PRODUCT ID: 4
DISTRIBUTOR ID: 4
ORDER DATE: 2025-02-15
QUANTITY: 4
ORDER ID: 5
PRODUCT ID: 5
DISTRIBUTOR ID: 5
ORDER DATE: 2025-02-15
QUANTITY: 9
ORDER ID: 6
PRODUCT ID: 6
DISTRIBUTOR ID: 6
ORDER DATE: 2025-02-28
QUANTITY: 5
```

```
-- DISPLAYING products TABLE --
```

```
PRODUCT ID: 1
PRODUCT NAME: Merlot
INVENTORY: 100
PRODUCT ID: 2
PRODUCT NAME: Cabernet
INVENTORY: 100
PRODUCT ID: 3
PRODUCT NAME: Chablis
INVENTORY: 100
PRODUCT ID: 4
PRODUCT NAME: Chardonnay
INVENTORY: 100
PRODUCT ID: 5
PRODUCT NAME: Riesling
INVENTORY: 100
PRODUCT ID: 6
PRODUCT NAME: Pinot noir
INVENTORY: 100
```

### Report Three:

We created a python script to run a query on the Bacchus database for the employees and worked hours tables. The Third Report reviews employee hours for the owners to confirm who is obviously working less hours than their peers, which employees may earn unnecessary overtime hours. Having access to the team's working hours per pay period helps confirm that all employees are working under 45 hours a week, thus giving the presumption that the work balance is so far healthy. The report shows that Henry worked the most hours, and Janet worked the least this last week.

```
-- DISPLAYING Employee Work Hours Information --
HOURS ID: 1
EMPLOYEE ID: 1
WORK DATE: 2025-01-05
WORK HOURS: 40
HOURS ID: 2
EMPLOYEE ID: 1
WORK DATE: 2025-02-05
WORK HOURS: 38
HOURS ID: 3
EMPLOYEE ID: 2
WORK DATE: 2025-01-06
WORK HOURS: 42
HOURS ID: 4
EMPLOYEE ID: 2
WORK DATE: 2025-02-06
WORK HOURS: 40
HOURS ID: 5
EMPLOYEE ID: 3
WORK DATE: 2025-01-07
WORK HOURS: 40
HOURS ID: 6
EMPLOYEE ID: 3
WORK DATE: 2025-02-07
WORK HOURS: 39
HOURS ID: 7
EMPLOYEE ID: 4
WORK DATE: 2025-01-08
WORK HOURS: 45
HOURS ID: 8
EMPLOYEE ID: 4
WORK DATE: 2025-02-08
WORK HOURS: 44
HOURS ID: 9
EMPLOYEE ID: 5
WORK DATE: 2025-01-09
WORK HOURS: 40
HOURS ID: 10
EMPLOYEE ID: 5
WORK DATE: 2025-02-09
WORK HOURS: 41
```

```
-- DISPLAYING Employee Information --
EMPLOYEE ID: 1
FIRST NAME: Janet
LAST NAME: Collins
ROLE: Finance Manager
EMPLOYEE ID: 2
FIRST NAME: Roz
LAST NAME: Murphy
ROLE: Marketing Head
EMPLOYEE ID: 3
FIRST NAME: Bob
LAST NAME: Ulrich
ROLE: Marketing Assistant
EMPLOYEE ID: 4
FIRST NAME: Henry
LAST NAME: Doyle
ROLE: Production Manager
EMPLOYEE ID: 5
FIRST NAME: Maria
LAST NAME: Costanza
ROLE: Distribution Manager
EMPLOYEE ID: 6
FIRST NAME: Stan
LAST NAME: Bacchus
ROLE: Owner
EMPLOYEE ID: 7
FIRST NAME: Davis
LAST NAME: Bacchus
ROLE: Owner
```