

Grading Rubric: Cross-Grain Brewing — Distribution Analysis

Schema: craftbrewery | 8 questions | 100 points total

Question Requirements

Q	Pts	Techniques	Required tables	Required fields	Clauses
1	8	select, where, order_by	craftbrewery.beers	beers.beerName, beers.abv, beers.ibu	WHERE, ORDER BY
2	11	join, order_by	craftbrewery.beers, craftbrewery.styles	beers.beerName, styles.styleName, styles.description	JOIN, ORDER BY
3	11	left_join, aggregate, group_by	craftbrewery.accounts, craftbrewery.orders	accounts.accountName, accounts.accountType, orders.orderId	JOIN, GROUP BY
4	12	join, group_by, having, aggregate	craftbrewery.styles, craftbrewery.beers	styles.styleName, beers.beerId	JOIN, GROUP BY
5	12	join, aggregate, group_by, order_by	craftbrewery.territories, craftbrewery.accounts, craftbrewery.orders, craftbrewery.orderLines	territories.territoryName, territories.salesRep, orderLines.lineTotal	JOIN, GROUP BY, ORDER BY
6	15	subquery, in_clause	craftbrewery.batches, craftbrewery.beerTags	batches.batchCode, batches.brewDate, batches.volumeLitres, batches.status	WHERE
7	16	case_when, aggregate, group_by, join	craftbrewery.beers, craftbrewery.taproomSales	beers.beerName, taproomSales.servingType, taproomSales.saleAmount	JOIN, GROUP BY
8	15	subquery, aggregate, group_by, having, join	craftbrewery.accounts, craftbrewery.orders, craftbrewery.orderLines	accounts.accountName, accounts.city, accounts.accountType, orderLines.unitPrice	JOIN, GROUP BY

Deduction Schedule

Each question starts at full credit. The deductions below are applied against that question's point value and cannot take it below zero.

Issue	Deduction
Required table missing from the query	-3 per table
Required field missing from the SELECT list	-2 per field
Required WHERE condition missing or using the wrong operator	-3 per condition
WHERE clause omitted entirely when one is required	-5

Issue	Deduction
JOIN omitted when the question requires one	-5
GROUP BY omitted when the question requires one	-4
ORDER BY omitted when one is required	-4
ORDER BY on the wrong field	-2 per field
ORDER BY in the wrong direction	-1 per field

Reference Solutions

For instructor and TA use. A student answer that differs from the reference but returns the correct result set earns full credit.

Q1 (8 pts)

```
SELECT beers.beerName, beers.abv, beers.ibu FROM craftbrewery.beers WHERE beers.isActive = 1 ORDER BY beers.abv D
```

Q2 (11 pts)

```
SELECT beers.beerName, styles.styleName, styles.description FROM craftbrewery.beers JOIN craftbrewery.styles ON b
```

Q3 (11 pts)

```
SELECT accounts.accountName, accounts.accountType, COUNT(orders.orderId) AS totalOrders FROM craftbrewery.account
```

Q4 (12 pts)

```
SELECT styles.styleName, COUNT(beers.beerId) AS activeBeerCount FROM craftbrewery.styles JOIN craftbrewery.beers
```

Q5 (12 pts)

```
SELECT territories.territoryName, territories.salesRep, SUM(orderLines.lineTotal) AS totalRevenue FROM craftbrew
```

Q6 (15 pts)

```
SELECT batches.batchCode, batches.brewDate, batches.volumeLitres, batches.status FROM craftbrewery.batches WHERE
```

Q7 (16 pts)

```
SELECT beers.beerName, SUM(CASE WHEN taproomSales.servingType IN ('Flight', 'Half Pint') THEN taproomSales.saleAm
```

Q8 (15 pts)

```
SELECT accounts.accountName, accounts.city, accounts.accountType, ROUND(AVG(orderLines.unitPrice), 2) AS avgUnitP
```