SQL PORTFOLIO

datalab

DataFrames and CSVs DataFrame as df

```
--Which employee generated the most revenue?--
SELECT e.first_name || ' ' || e.last_name AS employee,
       SUM(s.quantity * s.price_per_unit) AS total_revenue
FROM "sales_orders.csv" s
JOIN "employees.csv" e ON s.employee_id = e.employee_id
GROUP BY employee
ORDER BY total_revenue DESC;
```

index	employee	total_revenue
0	Bryce Lewis	
1	Amina Khan	
2	Dante Nguyen	

Rows: 3 Expand

DataFrames and CSVs DataFrame as df1

```
--Average Salary by Department--
SELECT department, ROUND(AVG(salary), 2) AS avg_salary
FROM "employees.csv"
GROUP BY department;
```

index	department	avg_salary
0	HR	61
1	Operations	80
2	Sales	71

Rows: 3 Expand

DataFrames and CSVs DataFrame as df2

```
-- Top 3 highest-paid employees--
SELECT first_name || ' ' || last_name AS employee, salary
FROM "employees.csv"
ORDER BY salary DESC
LIMIT 3;
```

index	employee	salary
0	Dante Nguyen	80
1	Amina Khan	75
2	Bryce Lewis	68

Rows: 3 Expand

DataFrames and CSVs DataFrame as df3

```
--Total sales by region--
SELECT c.region,
       SUM(s.quantity * s.price_per_unit) AS region_sales
FROM "sales_orders.csv" s
JOIN "customers.csv" c ON s.customer_id = c.customer_id
GROUP BY c.region;
```

index	region	region_sales
0	West	
1	South	
2	Midwest	

Rows: 3 Expand

DataFrames and CSVs DataFrame as df4

```
--Customers with most orders--
SELECT c.customer_name, COUNT(*) AS total_orders
FROM "sales_orders.csv" s
JOIN "customers.csv" c ON s.customer_id = c.customer_id
GROUP BY c.customer_name
ORDER BY total_orders DESC;
```

	custome…	total…
0	Glow Cosmetics	2
1	Urban Goods	2
2	TechNest	1
3	FreshFoods	1
4	EcoTrend	1

Rows: 5 Expand

DataFrames and CSVs DataFrame as

```
-- Average order value by employee--
SELECT e.first_name || ' ' || e.last_name AS employee,
       ROUND(AVG(s.quantity * s.price_per_unit), 2) AS avg_order_value
FROM "sales_orders.csv" s
JOIN "employees.csv" e ON s.employee_id = e.employee_id
GROUP BY employee;
```

	empl…	avg_order…
0	Amina Khan	131.33
1	Dante Nguyen	90
2	Bryce Lewis	148.67

Rows: 3 Expand

DataFrames and CSVs DataFrame as

```
--Most sold product (by units)--
SELECT product, SUM(quantity) AS total_units
FROM "sales_orders.csv"
GROUP BY product
ORDER BY total_units DESC
LIMIT 1;
```

	pro…	tot…
0	Canvas Tote	35

Rows: 1 Expand

DataFrames and CSVs DataFrame as

```
--Monthly sales trend--
SELECT strftime('%Y-%m', order_date) AS month,
       ROUND(SUM(quantity * price_per_unit), 2) AS monthly_sales
FROM "sales_orders.csv"
GROUP BY month
ORDER BY month;
```

		monthl…
0	2023-01	250
1	2023-02	290
2	2023-03	390

Rows: 3 Expand

DataFrames and CSVs DataFrame as

```
--Employees hired before 2019--
SELECT first_name || ' ' || last_name AS employee, hire_date
FROM "employees.csv"
WHERE hire_date < '2019-01-01';
```

	empl…	hire_date
0	Amina Khan	2018-06-15T00:00:00.000
1	Dante Nguyen	2017-09-12T00:00:00.000

Rows: 2 Expand

DataFrames and CSVs DataFrame as

```
--Employees with no recorded sales--
SELECT first_name || ' ' || last_name AS employee
FROM "employees.csv"
WHERE employee_id NOT IN (
  SELECT DISTINCT employee_id FROM "sales_orders.csv"
);
```

	employee
0	Carla Martinez
1	Elena Owens

Rows: 2 Expand