

# SQL:

(I've created a Schema as "hackstudio" in MySQL workbench and imported the Tabes i.e "sales" & "customers". Therefore, below mentioned queries are in accordance to that.)

- **Objective:**

- SQL (Assume both files are imported as SQL tables):
  - Write a query to find total sales per city.
  - Find the top 3 customers by total sales amount.
  - Display monthly sales (sum of Amount grouped by month).
  - Write a query to find customers who haven't made any purchase.
  - Find the average age of customers per city.

- ```
SELECT customers.City, SUM(sales.Amount) AS Total_Sales FROM hackstudio.sales
INNER JOIN hackstudio.customers ON sales.CustomerID = customers.CustomerID
GROUP BY customers.City;
```

OUTPUT:

|   | City      | Total_Sales |
|---|-----------|-------------|
| ▶ | Mumbai    | 3650        |
|   | Delhi     | 2150        |
|   | Chennai   | 400         |
|   | Bangalore | 1700        |
|   | Kolkata   | 950         |

- ```
SELECT customers.*, sales.Amount FROM hackstudio.sales INNER JOIN
hackstudio.customers ON sales.CustomerID = customers.CustomerID ORDER BY
sales.Amount DESC LIMIT 3;
```

OUTPUT:

	CustomerID	CustomerName	City	Age	Amount
▶	C006	Frank	Mumbai	45	1800
	C004	David	Bangalore	30	1700
	C002	Bob	Delhi	35	1450

- `SELECT MONTH(SaleDate) AS SaleMonth, SUM(Amount) AS TotalAmount FROM hackstudio.sales GROUP BY MONTH(SaleDate);`

OUTPUT:

	SaleMonth	TotalAmount
▶	8	2850
	9	3900
	10	2100

- `SELECT customers.* FROM hackstudio.customers LEFT JOIN hackstudio.sales ON customers.CustomerID = sales.CustomerID WHERE sales.CustomerID IS NULL;`

OUTPUT:

	CustomerID	CustomerName	City	Age
▶	C007	Grace	Delhi	31
	C008	Henry	Chennai	40
	C009	Irene	Bangalore	34
	C010	John	Kolkata	29
	C025	Zara	Mumbai	33

- `SELECT customers.City, AVG(customers.Age) AS AverageAge FROM hackstudio.customers GROUP BY customers.City;`

OUTPUT:

	City	AverageAge
▶	Mumbai	35.3333
	Delhi	33.0000
	Chennai	41.0000
	Bangalore	32.0000
	Kolkata	27.5000