

This SQL query calculates the average amount paid by the top 5 customers, based on their total payment amount. The query uses CTEs to filter and aggregate data from the database.

-- CTE to identify the top 10 countries by count of customers

WITH top\_countries AS

```
(SELECT D.country,
FROM customer A
INNER JOIN address B ON A.address_id = B.address_id
INNER JOIN city C ON B.city_id = C.city_id
INNER JOIN country D ON C.country_id = D.country_id
GROUP BY D.country
ORDER BY COUNT(A.customer_id) DESC
LIMIT 10),
```

-- CTE to identify the top 10 cities within the top 10 countries

top\_cities AS

```
(SELECT C.city,
FROM customer A
INNER JOIN address B ON A.address_id = B.address_id
INNER JOIN city C ON B.city_id = C.city_id
INNER JOIN country D ON C.country_id = D.country_id
WHERE D.country IN
(SELECT *
FROM top_countries)
GROUP BY D.country, C.city
ORDER BY COUNT(A.customer_id) DESC
LIMIT 10),
```

-- CTE to select the top 5 paying customers within the top 10 cities

top\_customers AS

```
(SELECT SUM(A.amount) AS total_amount_paid
FROM payment A
INNER JOIN customer B ON A.customer_id = B.customer_id
INNER JOIN address C ON B.address_id = C.address_id
INNER JOIN city D ON C.city_id = D.city_id
INNER JOIN country E ON D.country_id = E.country_id
WHERE D.city IN
(SELECT *
FROM top_cities)
GROUP BY E.country, D.city, B.first_name, B.last_name
ORDER BY total_amount_paid DESC
LIMIT 5)
```

-- Final query to calculate the average amount paid by the top 5 customers

```
SELECT AVG(total_amount_paid)
FROM top_customers;
```