

1A.

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

Country	customer_count
"India"	60
"China"	53
"United States"	36
"Japan"	31
"Mexico"	30
"Brazil"	28
"Russian Federation"	28
"Philippines"	20
"Turkey"	15
"Indonesia"	14

1B. I started by looking at my ERD and deciding which tables I would need to answer the question. Once I determined I would need customer, address, city, and country I started with customer because I customer has the address_id key within it which would then link to address and so on all the way down to country and then I simply input the syntax for joining all the tables and limited the results to 10 to get the top 10.

2A.

```

SELECT city, country,
COUNT (customer_id) AS customer_count
FROM customer
INNER JOIN address ON customer.address_id = address.address_id
INNER JOIN city ON address.city_id = city.city_id
INNER JOIN country ON city.country_id = country.country_id
WHERE country IN ('India', 'China', 'United States', 'Japan', 'Mexico', 'Brazil', 'Russian
Federation', 'Philippines', 'Turkey', 'Indonesia')
GROUP BY city, country
ORDER BY COUNT (customer_id) DESC
LIMIT 10

```

city	country	customer_count
"Aurora"	"United States"	2
"Atlixco"	"Mexico"	1
"Xintai"	"China"	1
"Adoni"	"India"	1
"Dhule (Dhulia)"	"India"	1
"Kurashiki"	"Japan"	1
"Pingxiang"	"China"	1
"Sivas"	"Turkey"	1
"Celaya"	"Mexico"	1
"So Leopoldo"	"Brazil"	1

2B. Since I already joined all the tables I would need for this question, I simply added city into the formula and added the “WHERE” function to limit it to the countries that were in my top 10.

3A.

```

SELECT customer.customer_id, first_name, last_name, country, city,

```

```

SUM (payment.amount) AS total_payment
FROM customer
INNER JOIN payment ON customer.customer_id = payment.customer_id
INNER JOIN address ON customer.address_id = address.address_id
INNER JOIN city ON address.city_id = city.city_id
INNER JOIN country ON city.country_id = country.country_id
WHERE city IN ('Aurora', 'Atlixco', 'Xintai', 'Adoni', 'Dhule (Dhulia)', 'Kurashiki', 'Pingxiang',
'Sivas', 'Celaya', 'So Leopoldo')
AND country IN ('India', 'China', 'United States', 'Japan', 'Mexico', 'Brazil', 'Russian
Federation', 'Philippines', 'Turkey', 'Indonesia')
GROUP BY customer.customer_id, first_name, last_name, country, city
ORDER BY total_payment DESC
LIMIT 5

```

3B.

	customer_id integer	first_name character varying (45)	last_name character varying (45)	country character varying (50)	city character varying (50)	total_payment numeric
1	84	Sara	Perry	Mexico	Atlixco	128.70
2	518	Gabriel	Harder	Turkey	Sivas	108.75
3	587	Sergio	Stanfield	Mexico	Celaya	102.76
4	537	Clinton	Buford	United States	Aurora	98.76
5	367	Adam	Gooch	India	Adoni	97.80