

SQL Queries

I. Solve the following questions using “World” Database

USE world ;

Question 1

Write an SQL query to find the country with the maximum population in the table.

```
SELECT Name, population  
FROM country  
WHERE Population = (SELECT MAX(population) FROM country);
```

Output :

	Name	population
▶	China	1277558000

Question 2

Write an SQL query to sum the populations of all cities per country.

```
SELECT Name, SUM(population) AS Total_Population  
FROM country  
GROUP BY Name ;
```

Output : (Only Top 5 are shown here)

	Name	Total_Population
▶	Aruba	103000
	Afghanistan	22720000
	Angola	12878000
	Anguilla	8000
	Albania	3401200

Question 3

Find the top 3 countries with the highest population density.

```
SELECT Name, Population, SurfaceArea,
```

```

        (Population/SurfaceArea) AS Population_Density
FROM country
ORDER BY Population_Density DESC
LIMIT 3 ;

```

Output :

	Name	Population	SurfaceArea	Population_Density
▶	Macao	473000	18.00	26277.7778
	Monaco	34000	1.50	22666.6667
	Hong Kong	6782000	1075.00	6308.8372

II. Solve the following questions using “Sakila” Database

USE sakila;

Question 1

Write an SQL query to find the customer_id who has the highest number of rentals.

```

SELECT customer_id, Count(*) AS Highest_rental
FROM Rental
GROUP BY customer_id
ORDER BY Highest_rental DESC
LIMIT 1 ;

```

Output :

	customer_id	Highest_rental
▶	148	46

Question 2

Write an SQL query to identify the month with the most rentals

```

SELECT MONTH(rental_date) AS Month, COUNT(*) AS Total_rental
FROM rental

```

```
GROUP BY rental_date  
ORDER BY Total_rental DESC  
LIMIT 1;
```

Output :

	Month	Total_rental
▶	2	182

Question 3

Find the total revenue generated per day.

```
SELECT DAY(payment_date) AS DAYS, SUM(amount) AS Total_Revenue  
FROM payment  
GROUP BY payment_date  
ORDER BY payment_date;
```

Output : (Shown only few)

	DAYS	Total_Revenue
▶	24	2.99
	24	2.99
	24	3.99
	24	4.99
	24	6.99
	24	0.99
	24	1.99
	24	4.99
	25	4.99
	25	5.99
	25	8.99
	25	4.99
	25	6.99
	25	25.99
	25	9.99

Question 4

Find the store that generated the highest total revenue

```
SELECT str.store_id, SUM(p.amount) AS Total_Revenue
```

```
FROM payment AS p
JOIN staff AS st ON p.staff_id = st.staff_id
JOIN store AS str ON st.store_id = str.store_id
GROUP BY str.store_id
ORDER BY Total_Revenue DESC
LIMIT 1;
```

Output :

	store_id	Total_Revenue
▶	2	33924.06

Question 5

Find the customers who have made exactly 5 payments.

```
SELECT customer_id, COUNT(*) AS Payment_count
FROM payment
GROUP BY customer_id
HAVING COUNT(*) = 5 ;
```

Output : (The output shows nothing because zero no. of customers have made exactly 5 payments.)

	customer_id	Payment_count