



# Python

## Interview Questions



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### 1. What are set in SQL?

Ans. The set command is used with update keyword to specify which column and value should be updated in a table.

```
Update Employee
set Name = 'Anurag' , city = 'Hyderabad'
where emp_id = 8008
```

### 2. If set A = {L M N O P} and set B = {P Q R S T}, what sets are generated by the following operations?

- A union B
- A union all B

Ans.

1. A union B = {L M N O P Q R S T}
2. A union all B = {L M N O P P Q R S T}

### 3. On the above set also find out :

- A intersect B
- A except B

Ans.

1. A intersect B = {P}
2. A except B = {L M N O}

### 4. Write a compound query that finds the first and last names of all actors and customers whose last name starts with L.

Ans.

```
Select first_name, last_name from actor where last_name like 'L%'
UNION
Select first_name, last_name from customer where last_name like 'L%' ;
```

### 5. On the above question sort the sort the results by last name.

Ans

```
Select first_name, last_name from actor where last_name like 'L%'
UNION
Select first_name, last_name from customer where last_name like 'L%'
order by last_name;
```



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**6. How can you concatenate two strings in SQL?**

Ans.

```
select concat(fisrt_name, " ", last_name)
```

**7. Write a query to extract a specific portion of a string.**

Ans. Use the SUBSTRING function:

```
select Substring('Anurag', 2,3);
```

**8. How do you determine the length of a string in SQL?**

Ans.

```
select Length('Anurag');
```

**9. How can you convert a string to uppercase or lowercase?**

Ans. Use the UPPER or LOWER functions.

```
98 • SELECT UPPER(ColumnName) AS UppercaseString FROM TableName
```

**10. Explain different ways to trim leading and trailing spaces from a string.**

Ans. Use the LTRIM and RTRIM functions for left and right trimming, or TRIM for both.

**11. Write a query to replace a specific character in a string.**

Ans. Use the REPLACE function.

```
SELECT REPLACE(ColumnName, 'old', 'new') AS ModifiedString FROM TableName;
```

**12. Write a query that involves basic arithmetic operations on numeric columns.**

Ans. Use standard arithmetic operators (+, -, \*, /).

```
SELECT Column1 + Column2 AS Sum FROM TableName;
```



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13. Consider a table named employees with a column full\_name containing full names of employees in the format "First Last". Write a SQL query to retrieve the distinct last names (surnames) from the full\_name column.

Ans.

```
SELECT DISTINCT SUBSTRING_INDEX(full_name, ' ', -1) AS last_name  
FROM employees;
```

14. How can you round a numeric value to a specific number of decimal places?

Ans.

```
SELECT ROUND(Column1, 2) AS RoundedNumber FROM TableName;
```

15. Write a query to find the maximum and minimum values in a numeric column.

Ans.

```
SELECT MAX(Column1) AS MaxValue, MIN(Column1) AS MinValue FROM TableName;
```

16. How would you calculate the percentage of a total based on numeric column values?

Ans. Divide the part by the total and multiply by 100

```
SELECT (Column1 / Column2) * 100 AS Percentage FROM TableName;
```

17. Write a query that returns the 17th through 25th characters of the string 'Please find the substring in this string'.

Ans.

```
SELECT SUBSTRING('Please find the substring in this string',17,9);
```



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18 Write a query that returns the absolute value and sign (-1, 0, or 1) of the number -25.76823. Also return the number rounded to the nearest hundredth.

Ans.

```
SELECT ABS(-25.76823), SIGN(-25.76823), ROUND(-25.76823, 2);
```

	ABS(-25.76823)	SIGN(-25.76823)	ROUND(-25.76823, 2)
▶	25.76823	-1	-25.77

19. Write a query to return just the month portion of the current date.

Ans.

```
SELECT EXTRACT(MONTH FROM CURRENT_DATE());
```

Result Grid	Filter Rows:
EXTRACT(MONTH FROM CURRENT_DATE())	
12	

20. Modify your query from the above question to count the number of payments made by each customer. Show the customer ID and the total amount paid for each customer.

Ans.

```
Select customer_id, count(*), sum(amount)
from payment_table
group by customer_id;
```