SQL

Time and Date Functions

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SQL provides various time and date functions to calculate, extract, and manipulate date and time data. Here are three common functions used across SQL dialects, with examples for clarity.

DATE_PART()

DATE_PART() is used to extract a specific part of a date or time, such as year, month, or hour, from a datetime value.

Example
a table called orders:

ORDER_ID	ORDER_DATE
1	2024-03-10 14:30:00
2	2024-07-15 09:45:00

Query to get the year and hour from order_date:

```sql
SELECT order_id,
       DATE_PART('year', order_date) AS year,
       DATE_PART('hour', order_date) AS hour
FROM orders;
```

ORDER_ID	YEAR	HOUR
1	2024	14
2	2024	9

EXTRACT()

EXTRACT() is used to pull out a portion of a date or time, such as day, month, or hour, from a datetime column

Example

To get the month and day from order_date

```sql
SELECT order_id,
       EXTRACT(MONTH FROM order_date) AS month,
       EXTRACT(DAY FROM order_date) AS day
FROM orders;
```

ORDER_ID	MONTH	DAY
1	3	10
2	7	15

INTERVAL

INTERVAL is used to add or subtract a specific amount of time (e.g., days, months) from a date value.

Example

Adding 5 days to order_date

```sql
SELECT order_id AS id,
       order_date AS date,
       order_date + INTERVAL '5 DAY' AS new_date
FROM orders;
```

ID	DATE	NEW_DATE
1	2024-03-10	2024-03-15
2	2024-07-15	2024-07-20