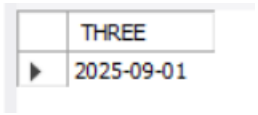
MySQL Date and Time - Exercises, Practice, Solution

1.] Write a query to display the first day of month (in datetime format) three month before the current date month.

- Output:

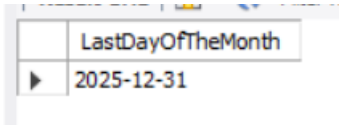


	THREE
▶	2025-09-01

2.] Write a query to display the last day of the month (in datetime format) three months before the current month.

- Output:

  SELECT (SUBDATE(ADDDATE(CURDATE(),INTERVAL 1 MONTH),INTERVAL DAYOFMONTH(CURDATE()) DAY))AS LastDayOfTheMonth;

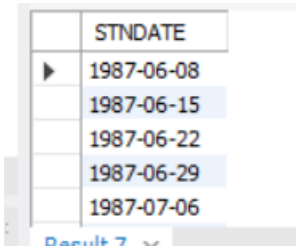


	LastDayOfTheMonth
▶	2025-12-31

3.] Write a query to get the distinct Mondays from hire_date in employees tables.

- Output:

  SELECT DISTINCT(STR_TO_DATE(CONCAT(YEARWEEK(hire_date),'1'), '%x%v%w'))AS STNDATE FROM employees ;

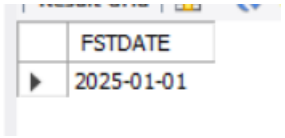


	STNDATE
▶	1987-06-08
	1987-06-15
	1987-06-22
	1987-06-29
	1987-07-06

4.] Write a query to get the first day of the current year.

- Output:

  SELECT MAKEDATE(EXTRACT(YEAR FROM CURDATE()), 1)AS FSTDATE;



	FSTDATE
▶	2025-01-01

5.] Write a query to get the last day of the current year.

- Output

  SELECT STR_TO_DATE(CONCAT(12,31,EXTRACT(YEAR FROM CURDATE())), '%m%d%Y') AS LSTDATE;

- Output:

	LSTDATE
▶	2025-12-31

6.] Write a query to calculate the age in year.

- Output:

```
SELECT YEAR(CURRENT_TIMESTAMP) - YEAR("1967-06-08") -
(RIGHT(CURRENT_TIMESTAMP, 5) < RIGHT("1967-06-08", 5)) AS AGE
```

AGE
58

7.] Write a query to get the current date in the following format.

- Output:

```
SELECT DATE_FORMAT(CURDATE(),'%M %e, %Y' ) AS 'Current_date';
```

Current_date
December 28, 2025

8.] Write a query to get the current date in Thursday September 2014 format.
Thursday September 2014

- Output:

9.] Write a query to extract the year from the current date.

- Output:

```
SELECT EXTRACT(YEAR FROM NOW())  AS curyear;
```

curyear
2025

10.] Write a query to get the DATE value from a given day (number in N).

- Output:

```
SELECT FROM_DAYS(730677) AS NUMBERISN;
```

NUMBERISN
2000-07-11

11.] Write a query to get the first name and hire date from employees table where hire date between '1987-06-01' and '1987-07-30'

- Output:

```
SELECT FIRST_NAME, HIRE_DATE FROM employees WHERE HIRE_DATE BETWEEN '1987-
06-01 00:00:00' AND '1987-07-30  23:59:59';
```

FIRST_NAME	HIRE_DATE
Steven	1987-06-17
Neena	1987-06-18
Lex	1987-06-19
Alexander	1987-06-20
Bruce	1987-06-21

12.] Write a query to display the current date in the following format.

- Output:

SELECT date_format(CURDATE(), '%W %D %M %Y %T') AS CHANGEFORMAT;

	CHANGEFORMAAT
▶	Sunday 28th December 2025 00:00:00

13.] Write a query to display the current date in the following format.

- Output:

SELECT date_format(CURDATE(), '%d/%m/%Y') AS NEWFORMAT;

	NEWFORMAT
▶	28/12/2025

14.] Write a query to display the current date in the following format.

- Output:

SELECT date_format(CURDATE(),'%l:%i %p %b %e, %Y')AS NEWFORMAT1;

	NEWFORMAT1
▶	12:00 AM Dec 28, 2025

15.] Write a query to get the firstname, lastname who joined in the month of June.

- Output:

SELECT first_name, last_name FROM employees WHERE MONTH(HIRE_DATE) = 6;

	first_name	last_name
▶	Steven	King
	Neena	Kochhar
	Lex	De Haan
	Alexander	Hunold
	Bruce	Ernst

16.] Write a query to get the years in which more than 10 employees joined.

- Output:

SELECT DATE_FORMAT(HIRE_DATE,'%Y') AS MORETHAN10 FROM employees GROUP BY DATE_FORMAT(HIRE_DATE,'%Y') HAVING COUNT(EMPLOYEE_ID) > 10 ;

	MORETHAN10
▶	1987

17.] Write a query to get first name of employees who joined in 1987.

- Output:

SELECT FIRST_NAME, HIRE_DATE FROM employees WHERE YEAR(HIRE_DATE)=1987;

	FIRST_NAME	HIRE_DATE
▶	Steven	1987-06-17
	Neena	1987-06-18
	Lex	1987-06-19
	Alexander	1987-06-20
	Bruce	1987-06-21

18.] Write a query to get department name, manager name, and salary of the manager for all managers whose experience is more than 5 years.

- Output:
  SELECT DEPARTMENT_NAME, FIRST_NAME, SALARY FROM departments D JOIN employees E ON (D.MANAGER_ID=E.MANAGER_ID) WHERE (SYSDATE()-HIRE_DATE) / 365 > 5;

DEPARTMENT_NAME	FIRST_NAME	SALARY
Marketing	Pat	6000.00
Purchasing	Alexander	3100.00
Purchasing	Shelli	2900.00
Purchasing	Sigal	2800.00
Purchasing	Guy	2600.00

19.] Write a query to get employee ID, last name, and date of first salary of the employees.

- Output:
  SELECT employee_id, last_name, hire_date, LAST_DAY(hire_date) FROM employees;

employee_id	last_name	hire_date	LAST_DAY(hire_date)
100	King	1987-06-17	1987-06-30
101	Kochhar	1987-06-18	1987-06-30
102	De Haan	1987-06-19	1987-06-30
103	Hunold	1987-06-20	1987-06-30
104	Ernst	1987-06-21	1987-06-30

20.] Write a query to get first name, hire date and experience of the employees.

- Output:
  SELECT FIRST_NAME, SYSDATE(), HIRE_DATE, DATEDIFF(SYSDATE(), hire_date)/365 AS hiredate FROM employees;

FIRST_NAME	SYSDATE()	HIRE_DATE	hiredate
Steven	2025-12-28 23:44:44	1987-06-17	38.5589
Neena	2025-12-28 23:44:44	1987-06-18	38.5562
Lex	2025-12-28 23:44:44	1987-06-19	38.5534
Alexander	2025-12-28 23:44:44	1987-06-20	38.5507
Bruce	2025-12-28 23:44:44	1987-06-21	38.5479

21.] Write a query to get the department ID, year, and number of employees joined.

- Output:
  SELECT DEPARTMENT_ID, DATE_FORMAT(HIRE_DATE,'%Y'),COUNT(EMPLOYEE_ID) FROM employees GROUP BY DEPARTMENT_ID, DATE_FORMAT(HIRE_DATE, '%Y') ORDER BY DEPARTMENT_ID;

DEPARTMENT_ID	DATE_FORMAT(HIRE_DATE,'%Y')	COUNT(EMPLOYEE_ID)
0	1987	1
10	1987	1
20	1987	2
30	1987	6
40	1987	1