

1 • **CREATE DATABASE** SALES;

2 • **USE** SALES;

3

4 • **CREATE TABLE** sales_data (

5 Sale_ID **INT**,

6 Customer_Name **VARCHAR**(50),

7 Product **VARCHAR**(50),

8 Sale_Amount **INT**,

9 Sale_Date **DATETIME**

10);

11

12 • **INSERT INTO** sales_data **VALUES**

13 (1, 'Rahul Sharma', 'Banana Chips', 250, '2023-05-01 14:30:00'),

14 (2, 'Neha Verma', 'Mango Juice', 180, '2023-06-15 10:45:00'),



15 (3, 'Akash Mehra', 'Coconut Water', 200, '2023-07-20 09:10:00'),

16 (4, 'Priya Malhotra', 'Lemonade', 150, '2023-12-10 16:20:00'),

17 (5, 'Aman Gupta', 'Banana Chips', 300, '2024-01-05 11:00:00');





18 • **SELECT * FROM** sales_data;

```
21      -- CAST , year ,month , day , time , dateadd, datediff , date part
22      -- 1. Extract parts of the date
23 •    SELECT
24         Sale_Amount,
25         Sale_Date,
26         YEAR(Sale_Date) AS sale_year,
27         MONTH(Sale_Date) AS sale_month,
28         DAY(Sale_Date) AS sale_day
29     FROM sales_data;
30
```

Result Grid |   Filter Rows: | Export:  | Wrap Cell Content: 

	Sale_Amount	Sale_Date	sale_year	sale_month	sale_day
▶	250	2023-05-01 14:30:00	2023	5	1
	180	2023-06-15 10:45:00	2023	6	15
	200	2023-07-20 09:10:00	2023	7	20
	150	2023-12-10 16:20:00	2023	12	10
	300	2024-01-05 11:00:00	2024	1	5
	250	2023-05-01 14:30:00	2023	5	1
	180	2023-06-15 10:45:00	2023	6	15
	200	2023-07-20 09:10:00	2023	7	20
	150	2023-12-10 16:20:00	2023	12	10
	300	2024-01-05 11:00:00	2024	1	5

```
44      -- 2. Extract time
45 •      SELECT sale_date ,
46          TIME(Sale_Date) AS sale_time
47      FROM sales_data;
48
49
50
51
```

Result Grid |   Filter Rows: | Export:  | Wrap Cell Content: 

	sale_date	sale_time
►	2023-05-01 14:30:00	14:30:00
	2023-06-15 10:45:00	10:45:00
	2023-07-20 09:10:00	09:10:00
	2023-12-10 16:20:00	16:20:00
	2024-01-05 11:00:00	11:00:00
	2023-05-01 14:30:00	14:30:00
	2023-06-15 10:45:00	10:45:00
	2023-07-20 09:10:00	09:10:00
	2023-12-10 16:20:00	16:20:00
	2024-01-05 11:00:00	11:00:00

```
54      -- 3. Add intervals to date
55 •    SELECT
56      Sale_Date,
57      DATE_ADD(Sale_Date, INTERVAL 7 DAY) AS next_week,
58      DATE_ADD(Sale_Date, INTERVAL 1 MONTH) AS next_month
59      FROM sales_data;
60
61
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	Sale_Date	next_week	next_month
▶	2023-05-01 14:30:00	2023-05-08 14:30:00	2023-06-01 14:30:00
	2023-06-15 10:45:00	2023-06-22 10:45:00	2023-07-15 10:45:00
	2023-07-20 09:10:00	2023-07-27 09:10:00	2023-08-20 09:10:00
	2023-12-10 16:20:00	2023-12-17 16:20:00	2024-01-10 16:20:00
	2024-01-05 11:00:00	2024-01-12 11:00:00	2024-02-05 11:00:00
	2023-05-01 14:30:00	2023-05-08 14:30:00	2023-06-01 14:30:00
	2023-06-15 10:45:00	2023-06-22 10:45:00	2023-07-15 10:45:00
	2023-07-20 09:10:00	2023-07-27 09:10:00	2023-08-20 09:10:00
	2023-12-10 16:20:00	2023-12-17 16:20:00	2024-01-10 16:20:00
	2024-01-05 11:00:00	2024-01-12 11:00:00	2024-02-05 11:00:00

```
61
62      -- 4. Date difference (from today)
63 •      SELECT
64          Sale_Date,
65          DATEDIFF(CURDATE(), Sale_Date) AS days_ago
66      FROM sales_data;
67
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	Sale_Date	days_ago			
►	2023-05-01 14:30:00	733			
	2023-06-15 10:45:00	688			
	2023-07-20 09:10:00	653			
	2023-12-10 16:20:00	510			
	2024-01-05 11:00:00	484			
	2023-05-01 14:30:00	733			
	2023-06-15 10:45:00	688			
	2023-07-20 09:10:00	653			
	2023-12-10 16:20:00	510			
	2024-01-05 11:00:00	484			

72

73 -- 5. Cast to only date and only time





74 • **SELECT** sale_date,

75 CAST(Sale_Date **AS** **DATE**) **AS** only_date,

76 CAST(Sale_Date **AS** **TIME**) **AS** only_time

77 **FROM** sales_data;

78

<div>Result Grid   Filter Rows: <input type="text"/> Export:  Wrap Cell Content: </div>			
	sale_date	only_date	only_time
►	2023-05-01 14:30:00	2023-05-01	14:30:00
	2023-06-15 10:45:00	2023-06-15	10:45:00
	2023-07-20 09:10:00	2023-07-20	09:10:00
	2023-12-10 16:20:00	2023-12-10	16:20:00
	2024-01-05 11:00:00	2024-01-05	11:00:00
	2023-05-01 14:30:00	2023-05-01	14:30:00
	2023-06-15 10:45:00	2023-06-15	10:45:00
	2023-07-20 09:10:00	2023-07-20	09:10:00
	2023-12-10 16:20:00	2023-12-10	16:20:00
	2024-01-05 11:00:00	2024-01-05	11:00:00