

Ex.No.10
30.04.2025

DATA AND TIME FUNCTION

AIM

To perform SQL date and time functions.

CREATE TABLE

```
SQL> create table participant (event_id number(4), event_name varchar2(20), salary number(5),  
joining_date date);
```

Table created.

```
SQL> create table event(schedule_id number(4),event_name varchar2(30),event_start  
timestamp);
```

Table created.

INSERT VALUES

```
SQL> insert into participant values(100,'kavin',10000,to_date('12-mar-2022','dd- mon-  
yyyy'));
```

1 row created.

```
SQL> insert into participant values(101,'shangav',12000,to_date('25-jul-2023','dd- mon-  
yyyy'));
```

1 row created.

```
SQL> insert into participant values(102,'karthik',19000,to_date('03-sep-2022','dd- mon-  
yyyy'));
```

1 row created.

```
SQL> insert into participant values(103,'jegan',99000,to_date('14-oct-2024','dd- mon-  
yyyy'));
```

1 row created.

```
SQL> insert into participant values(104,'sanjai',92000,to_date('30-jun-2023','dd- mon-  
yyyy'));
```

1 row created.

```
SQL> insert into participant values(105,'mounish',21000,to_date('17-jan-2025','dd- mon-  
yyyy'));
```

1 row created.

```
SQL> insert into participant values(106,'kamalesh',21800,to_date('08-nov-2022','dd- mon-  
yyyy'));
```

1 row created.

ADDING EVENT:

SQL> insert into event values(100, 'paper presentation', to_timestamp('08:15:00', 'HH24:MI:SS'));
1 row created.

SQL> insert into event values(101, 'quiz-competition', to_timestamp('09:45:00', 'HH24:MI:SS'));
1 row created.

SQL> insert into event values(102, 'coding-competition', to_timestamp('10:20:00', 'HH24:MI:SS'));
1 row created.

SQL> insert into event values(103, 'project-presentation', to_timestamp('11:50:00', 'HH24:MI:SS'));
1 row created.

SQL> insert into event values(104, 'coding-hunt', to_timestamp('12:40:00', 'HH24:MI:SS'));
1 row created.

CURRENT DATE:

SQL> select

```
1  schedule_id,
2  event_name,
3  to_char(event_start, 'hh24:mi:ss') as start_time,
4  to_char(event_start + interval '1' hour, 'HH24:MI:SS') as end_time,
5  (interval '1' hour) as duration
6  from event;
```

SCHEDULE_ID	EVENT_NAME	START_TIME	END_TIME	DURATION
-----	-----	-----	-----	-----
100	Paper Presentation	08:15:00	09:15:00	+0001:00:00
101	Quiz-competition	09:45:00	10:45:00	+00 01:00:00
102	Coding-competition	10:20:00	11:20:00	+00 01:00:00
103	Project-Presentation	11:50:00	12:50:00	+00 01:00:00
104	Coding-Hunt	12:40:00	13:40:00	+00 01:00:00

5 rows selected.

```
SQL> select
1  schedule_id,
2  event_name,
3  to_char(event_start, 'hh24:mi:ss') as start_time
4  from event
5  where extract(hour from event_start) < 12;
```

SCHEDULE_ID	EVENT_NAME	START_TIME
-----	-----	-----
100	Paper Presentation	08:15:00
101	Quiz-competition	09:45:00
102	Coding-competition	10:20:00
103	Project-Presentation	11:50:00

ADDING DATE:

```
SQL> select
1  s1.schedule_id,
2  s1.event_name,
3  s1.event_start,
4  s2.schedule_id as duplicate_schedule_id,
5  s2.event_name as duplicate_event_name,
6  s2.event_start as duplicate_time
7  from event s1
8  join event s2 on s1.event_start = s2.event_start
9  where s1.schedule_id < s2.schedule_id;
no rows selected.
```

EMPLOYEES HIRED ON ALTERNATE DAYS:

```
SQL> select
1  schedule_id,
2  event_name,
3  to_char(event_start, 'HH24:MI:SS') as start_time
4  from event
5  order by event_start desc;
```

SCHEDULE_ID	EVENT_NAME	START_TI
-----	-----	-----
104	Coding-Hunt	12:40:00
103	Project-Presentation	11:50:00
102	Coding-competition	10:20:00
101	Quiz-competition	09:45:00
100	Paper Presentation	08:15:00

5 rows selected.

EXTRACT:

```
SQL> select
1  count(*) as afternoon_events
2  from event
3  where extract(hour from event_start) between 12 and 19;
```

AFTERNOON_EVENTS

1

ADDING END TIME TO THE TABLE EVENT:

```
SQL> select
2  schedule_id,
3  event_name,
4  to_char(event_start, 'HH:MI:SS AM') as start_time,
5  to_char(event_start + interval '1' hour, 'HH:MI:SS AM') as end_time
6  from event;
```

SCHEDULE_ID	EVENT_NAME	START_TIME	END_TIME
-----	-----	-----	-----
100	Paper Presentation	08:15:00 AM	09:15:00 AM
101	Quiz-Competition	09:45:00 AM	10:45:00 AM
102	Coding-Competition	10:20:00 AM	11:20:00 AM
103	Project-Presentation	11:50:00 Am	12:50:00 Pm
104	Coding-Hunt	12:40:00 Pm	01:40:00 Pm

5 rows selected.

TO VIEW THE TABLE:

```
SQL> select eid, ename, to_char(start_time, 'HH24:MI:SS') as start_time
```

```
1 from event
```

```
2 where extract(hour from start_time) >= 15;
```

no rows selected.

CONTENTS	MARKS ALLOTTED	MARKS OBTAINED
Aim,Algorithm,SQL,PL/SQL	30	
Execution and Result	20	
Viva	10	
Total	60	

RESULT

The SQL operations for ordering data by date and time were successfully performed. The records in the table were retrieved and sorted based on their event_start time.