

# Assignment - 1

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## Question

- 1) Create any 2 tables of your choice.
- 2) Apply:-
  1. TIME functions
  2. ROW\_NUMBER
  3. RANK
  4. DENSE\_RANK
  5. PARTITION\_BY
  6. FIRST\_VALUE
  7. PERCENT\_RANK
  8. All join operations

## Queries:

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Here I am going to create 2 tables named “Teams” And “Reviews”

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### 1. Table 1 - “Teams”

Query:

```
CREATE TABLE teams (  
    team_id INT PRIMARY KEY,  
    team_name VARCHAR(50),  
    guide_name VARCHAR(50),  
    department VARCHAR(5),  
    projectstart_date DATE
```

```
);
```

### Table 2 - “Reviews”

Query:

```
CREATE TABLE reviews (  
    review_id INT PRIMARY KEY,  
    team_id INT,  
    project_name VARCHAR(100),  
    score INT,  
    review_round VARCHAR(20),  
    review_time DATETIME
```

```
);
```

INSERTING DATA Into table 1

INSERT INTO teams VALUES

```
(101, 'Batch 1', 'Mr. Rao','CSM', '2026-01-03'),  
(102, 'Batch 2', 'Ms. Lakshmi', 'CSM', '2026-01-05'),  
(103, 'Batch 3', 'Mr. Suresh', 'CSM', '2026-01-07' ),  
(104, 'Batch 4', 'Ms. Priya', 'CSM', '2026-01-09');
```

INSERTING DATA Into table 2

INSERT INTO reviews VALUES

```
(1, 101, 'College Grievance System', 82, 'Round 1', '2024-09-01 10:00:00'),  
(2, 102, 'Face liveness Detection', 91, 'Round 1', '2024-09-01 10:30:00'),  
(3, 103, 'Library Management System', 82, 'Round 1', '2024-09-01 11:00:00'),  
(4, 104, 'ChatBot Application', 76, 'Round 1', '2024-09-01 11:30:00');
```

Inorder to display all the above info use the query's

```
SELECT * FROM teams;  
SELECT * FROM reviews;
```

## 2.(1)Time Functions

-CURDATE()-

```
SELECT team_name,  
DATEDIFF(CURDATE(), projectstart_date) AS days_active  
FROM teams;
```

-CURTIME()-

```
SELECT CURTIME();
```

## 2.(2) ROW\_NUMBER

```
SELECT project_name, score,  
ROW_NUMBER() OVER (ORDER BY score DESC) AS row_no  
FROM reviews;
```

### 2.(3) RANK

```
SELECT project_name, score,  
RANK() OVER (ORDER BY score DESC) AS rank_no  
FROM reviews;
```

### 2.(4) DENSE RANK

```
SELECT project_name, score,  
DENSE_RANK() OVER (ORDER BY score DESC) AS dense_rank_no  
FROM reviews;
```

### 2.(5) PARTITION\_BY

```
SELECT t.team_name, t.guide_name, r.score,  
RANK() OVER (  
    PARTITION BY t.guide_name  
    ORDER BY r.score DESC  
) AS guide_rank  
FROM teams t  
JOIN reviews r  
ON t.team_id = r.team_id;
```

### 2.(6) FIRST\_VALUE

```
SELECT review_round, project_name, score,  
FIRST_VALUE(score)  
OVER (PARTITION BY review_round ORDER BY score DESC) AS  
highest_score  
FROM reviews;
```

### 2.(7). PERCENT\_RANK

```
SELECT project_name, score,  
PERCENT_RANK() OVER (ORDER BY score) AS percent_rank  
FROM reviews;
```

## 2.(8) ALL JOIN OPERATIONS

-INNER JOIN()-

```
SELECT t.team_name, r.project_name, r.score FROM teams t  
INNER JOIN reviews r ON t.team_id = r.team_id;
```

-LEFT JOIN()-

```
SELECT t.team_name, r.project_name, r.score FROM teams t  
LEFT JOIN reviews r ON t.team_id = r.team_id;
```

-RIGHT JOIN()-

```
SELECT t.team_name, r.project_name, r.score FROM teams t  
RIGHT JOIN reviews r ON t.team_id = r.team_id;
```

-Full outer Join() -(UNION)-

```
SELECT t.team_name, r.project_name, r.score FROM teams t  
LEFT JOIN reviews r ON t.team_id = r.team_id  
UNION SELECT t.team_name, r.project_name, r.score FROM teams t  
RIGHT JOIN reviews r ON t.team_id = r.team_id;
```

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