FETCH ALL DEPARTMENTS

```
242   -- ========================================================
243
244   -- Fetch all departments
      ▷ Run | + Tab | JSON | ⌨ Ask AI
245   SELECT * FROM Department;   5ms
246
247   -- Fetch all employees
      ▷ Run | + Tab | JSON | ⌨ Ask AI
248   SELECT * FROM Employee;
249
250   -- Fetch all projects
      ▷ Run | + Tab | JSON | ⌨ Ask AI
251   SELECT * FROM Project;
252
253   -- Fetch all performance records
      ▷ Run | + Tab | JSON | ⌨ Ask AI
254   SELECT * FROM Performance;
```

▭ Department ✕

Search Results ⚙ ✉ ⊙ + + 🗑 ↻ ↺ ↑ ↓ Export ▷ 👁 Cost: 12ms < 1 > Total 5

		🔑 DeptID int	* DeptNam varchar(50)	Location varchar(50)
☐	>	101	IT	Bangalore
☐	>	102	HR	Delhi
☐	>	103	Finance	Mumbai
☐	>	104	Marketing	Pune
☐	>	105	Operations	Hyderabad

FETCH ALL EMPLOYES

```sql
246
247     -- Fetch all employees
        ▷ Run | +Tab | JSON | Ask AI
248  ✓  SELECT * FROM Employee;  3ms
249
250     -- Fetch all projects
        ▷ Run | +Tab | JSON | Ask AI
251     SELECT * FROM Project;
252
253     -- Fetch all performance records
        ▷ Run | +Tab | JSON | Ask AI
254     SELECT * FROM Performance;
255
256     -- Fetch all rewards
        ▷ Run | +Tab | JSON | Ask AI
257     SELECT * FROM Reward;
258
```

Employee ×

Search Results ⚙ ✉ ⊗ + + 🗑 ↻ ↺ ↑ ↓ Export ▷ 👁 Cost: 7ms ‹ 1 › Total 6

EmpID int	EmpName varchar(50)	Gender enum('M','F')	DOB date	HireDate date	DeptID int
1	Asha	F	1990-07-12	2018-06-10	101
2	Raj	M	1988-04-09	2020-03-22	103
3	Neha	F	1995-01-15	2021-08-05	101
4	Amit	M	1992-10-20	2019-11-15	103
5	Karan	M	1993-05-12	2022-01-03	104
6	Priya	F	1997-12-02	2024-07-01	101

FETCH ALL PROJECTS

```
250   -- Fetch all projects
      ▷ Run | +Tab | JSON | ⊡Ask AI
✔ 251 SELECT * FROM Project;   3ms
252
253   -- Fetch all performance records
      ▷ Run | +Tab | JSON | ⊡Ask AI
254   SELECT * FROM Performance;
255
256   -- Fetch all rewards
      ▷ Run | +Tab | JSON | ⊡Ask AI
257   SELECT * FROM Reward;
258
      ▷ Run | +Tab | JSON | ⊡Select | ⊡Ask AI
259 ∨ SELECT
260       e.EmpID,
261       e.EmpName,
262       e.Gender,
```

Project ✕

Search Results ⚙ ✉ ⑧ + + 🗑 ↻ ↺ ↑ ↓ Export ▷ 👁 Cost: 39ms ‹ 1 › Total 5

ProjectID int	ProjectName varchar(100)	DeptID int	StartDate date	EndDate date
201	Payroll System	103	2020-01-01	2020-12-31
202	HR Portal	102	2021-03-01	2021-09-30
203	TechNova App	101	2022-01-15	2022-11-30
204	Marketing Dashboard	104	2023-04-01	2023-10-15
205	ERP Integration	101	2024-01-10	(NULL)

FETCH ALL REWARDS

```
Day 6 MySql Database  >  TechNova_Assignment.sql  > ...
256    -- Fetch all rewards
       ▷ Run | + Tab | JSON | ⌨Ask AI
✓257   SELECT * FROM Reward;  4ms
258

       ▷ Run | + Tab | JSON | ⬚Select | ⌨Ask AI
259    SELECT |
260        e.EmpID,
261        e.EmpName,
262        e.Gender,
263        e.DOB,
264        e.HireDate,
265        d.DeptName,
266        d.Location AS DeptLocation,
267        p.ProjectName,
268        pr.Rating AS PerformanceRating,
269        pr.ReviewDate,
270        r.RewardMonth,
```

☐	Q	🔑 🗐 Emp int	🔑 RewardMon date	RewardAmount decimal(10,2)
☐	›	1	2024-03-01	2500.00
☐	›	2	2024-02-01	1800.00
☐	›	3	2024-04-01	3000.00
☐	›	5	2024-06-01	2100.00
☐	›	6	2024-08-01	2300.00

Reward ✕

✛ ⇱ Q Search Results ⚙ ✉ ⊗ + + 🗑 ↻ ↺ ↑ ↓ Export ▷ ◎ Cost: 10ms ‹ 1 › Total 5

FETCH ALL PERFORMANCE RECORDS

Day 6 MySql Database > 🍥 TechNova_Assignment.sql > ...

```
217
218    -- Fetch all departments
       ▷ Run | +Tab | JSON | 🖵 Ask AI
219    SELECT * FROM Department;
220
221    -- Fetch all employees
       ▷ Run | +Tab | JSON | 🖵 Ask AI
222    SELECT * FROM Employee;
223
224    -- Fetch all projects
       ▷ Run | +Tab | JSON | 🖵 Ask AI
225    SELECT * FROM Project;
226
227    -- Fetch all performance records
       ▷ Run | +Tab | JSON | 🖵 Ask AI
228    SELECT * FROM Performance;   43ms
229
230    -- Fetch all rewards
       ▷ Run | +Tab | JSON | 🖵 Ask AI
231    SELECT * FROM Reward;
232
233    -- Fetch All Record From Database
       ▷ Run | +Tab | JSON | 🗇 Select | 🖵 Ask AI
234  ∨ SELECT
```

▯ Performance ✕

⊕ 📌 🔍 Search Results   ⚙ ✉ ⊛ + + 🗑 ↻ ↺ ↑ | ↓ Export   ▷ ⊚ Cost: 49ms ‹ 1 › Total 6

EmpID int	ProjectID int	Rating decimal(3,1)	ReviewDate date
1	203	4.5	2023-12-15
2	202	4.0	2023-09-20
3	205	4.8	2024-06-30
4	201	3.9	2021-12-15

FETCH ALL RECORDS


```sql
-- Fetch All Record From Database
SELECT
    e.EmpID,
    e.EmpName,
    e.Gender,
    e.DOB,
    e.HireDate,
    d.DeptName,
    d.Location AS DeptLocation,
    p.ProjectName,
    pr.Rating AS PerformanceRating,
    pr.ReviewDate,
    r.RewardMonth,
    r.RewardAmount
FROM Employee e
LEFT JOIN Department d ON e.DeptID = d.DeptID
LEFT JOIN Performance pr ON e.EmpID = pr.EmpID
LEFT JOIN Project p ON pr.ProjectID = p.ProjectID
LEFT JOIN Reward r ON e.EmpID = r.EmpID
ORDER BY e.EmpID;
```

EmpID	EmpName	Gender	DOB	HireDate	DeptName	DeptLocation	ProjectName	PerformanceRating	ReviewDate	RewardMonth	RewardAmount
1	Asha	F	1990-07-12	2018-06-10	IT	Bangalore	TechNova App	4.5	2023-12-15	2024-03-01	2500.00
2	Raj	M	1988-04-09	2020-03-22	Finance	Mumbai	HR Portal	4.0	2023-09-20	2024-02-01	1800.00
3	Neha	F	1995-01-15	2021-08-05	IT	Bangalore	ERP Integration	4.8	2024-06-30	2024-04-01	3000.00
4	Amit	M	1992-10-20	2019-11-15	Finance	Mumbai	Payroll System	3.9	2021-12-15	(NULL)	(NULL)
5	Karan	M	1993-05-12	2022-01-03	Marketing	Pune	Marketing Dashboard	4.2	2023-09-10	2024-06-01	2100.00
6	Priya	F	1997-12-02	2024-07-01	IT	Bangalore	TechNova App	4.7	2024-07-30	2024-08-01	2300.00


```sql
-- ==========================================
-- Query Optimization Example using EXPLAIN
-- ==========================================
-- Slow Query (without index analysis)
EXPLAIN SELECT e.EmpName, d.DeptName, p.ProjectName, pr.Rating
FROM Employee e
JOIN Department d ON e.DeptID = d.DeptID
JOIN Performance pr ON e.EmpID = pr.EmpID
JOIN Project p ON pr.ProjectID = p.ProjectID;

-- After index creation (already created idx_empname, idx_deptid)
-- Re-run EXPLAIN to compare improvement

-- ==========================================
-- END OF SCRIPT
-- ==========================================
```

id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	p	(NULL)	ALL	PRIMARY	(NULL)	(NULL)	(NULL)	5	100.00	(NULL)
1	SIMPLE	pr	(NULL)	ref	PRIMARY,ProjectID	ProjectID	4	technovadb.p.ProjectID	1	100.00	(NULL)
1	SIMPLE	e	(NULL)	eq_ref	PRIMARY,idx_deptid	PRIMARY	4	technovadb.pr.EmpID	1	100.00	Using where
1	SIMPLE	d	(NULL)	eq_ref	PRIMARY	PRIMARY	4	technovadb.e.DeptID	1	100.00	(NULL)

FETCH RESULTS WITH JOINS AND SUBQUERIES

```sql
-- USER STORY 4 — ADVANCED QUERIES (JOINS & SUBQUERIES)
-- ========================================================

-- 1. Display Employee Name, Department Name, Project Name, and Rating
  ▷ Run | + Tab | JSON | ⎘ Select | ⊡ Ask AI
SELECT e.EmpName, d.DeptName, p.ProjectName, pr.Rating
FROM Employee e
JOIN Department d ON e.DeptID = d.DeptID
JOIN Performance pr ON e.EmpID = pr.EmpID
JOIN Project p ON pr.ProjectID = p.ProjectID;  5ms

-- 2. Highest-rated employee in each department
  ▷ Run | + Tab | JSON | ⎘ Select | ⊡ Ask AI
SELECT e.EmpName, d.DeptName, pr.Rating
FROM Performance pr
JOIN Employee e ON pr.EmpID = e.EmpID
JOIN Department d ON e.DeptID = d.DeptID
WHERE pr.Rating = (
    SELECT MAX(p2.Rating)
    FROM Performance p2
    JOIN Employee e2 ON p2.EmpID = e2.EmpID
    WHERE e2.DeptID = d.DeptID
);
```

Result(RO) ✕

🔍 Search Results   ⚙ ✉ ⊗ + + 🗑 ↻ ↻ ↑ ↓ Export ▷ 👁 Cost: 5ms ‹ 1 › Total 6

EmpName varchar	DeptName varchar	ProjectName varchar	Rating decimal
Amit	Finance	Payroll System	3.9
Raj	Finance	HR Portal	4.0
Asha	IT	TechNova App	4.5
Priya	IT	TechNova App	4.7

```sql
159   -- USER STORY 4 — ADVANCED QUERIES (JOINS & SUBQUERIES)
160   -- ================================================================
161
162   -- 1. Display Employee Name, Department Name, Project Name, and Rating
      ▷ Run | +Tab | JSON | ⌷Select | ⊠Ask AI
163   SELECT e.EmpName, d.DeptName, p.ProjectName, pr.Rating
164   FROM Employee e
165   JOIN Department d ON e.DeptID = d.DeptID
166   JOIN Performance pr ON e.EmpID = pr.EmpID
167   JOIN Project p ON pr.ProjectID = p.ProjectID;
168
169   -- 2. Highest-rated employee in each department
      ▷ Run | +Tab | JSON | ⌷Select | ⊠Ask AI
✔170   SELECT e.EmpName, d.DeptName, pr.Rating
171   FROM Performance pr
172   JOIN Employee e ON pr.EmpID = e.EmpID
173   JOIN Department d ON e.DeptID = d.DeptID
174   WHERE pr.Rating = (
175       SELECT MAX(p2.Rating)
176       FROM Performance p2
177       JOIN Employee e2 ON p2.EmpID = e2.EmpID
178       WHERE e2.DeptID = d.DeptID
179   );  12ms
```

Result(RO) ✕

Search Results ⚙ ⊠ ⊗ + + 🗑 ↻ ↺ ↑ ↓ Export ▷ 👁 Cost: 12ms < 1 > Total 3

EmpName varchar	DeptName varchar	Rating decimal
> Raj	Finance	4.0
> Neha	IT	4.8
> Karan	Marketing	4.2

```sql
164   FROM Employee e
165   JOIN Department d ON e.DeptID = d.DeptID
166   JOIN Performance pr ON e.EmpID = pr.EmpID
167   JOIN Project p ON pr.ProjectID = p.ProjectID;
168
169   -- 2. Highest-rated employee in each department
      ▷ Run | +Tab | JSON | ⌷Select | ⊠Ask AI
170   SELECT e.EmpName, d.DeptName, pr.Rating
171   FROM Performance pr
172   JOIN Employee e ON pr.EmpID = e.EmpID
173   JOIN Department d ON e.DeptID = d.DeptID
174   WHERE pr.Rating = (
175       SELECT MAX(p2.Rating)
176       FROM Performance p2
177       JOIN Employee e2 ON p2.EmpID = e2.EmpID
178       WHERE e2.DeptID = d.DeptID
179   );
180
181   -- 3. Employees with no rewards
      ▷ Run | +Tab | JSON | ⊠Ask AI
✔182   SELECT EmpName
183   FROM Employee
184   WHERE EmpID NOT IN (SELECT EmpID FROM Reward);  35ms
185
```

Result(RO) ✕

Search Results ⚙ ⊠ ⊗ + + 🗑 ↻ ↺ ↑ ↓ Export ▷ 👁 Cost: 35ms < 1 > Total 1

EmpName varchar
> Amit