

MySQL Queries

```
CREATE DATABASE india_job_market;
```

```
USE india_job_market;
```

```
select * from job_market_india
```

Record_Date	Company_Name	Job_Role	Experience_Level	City	Salary_INR	Demand_Index	Remote_Option_Flag	Salary_Tre
2015-11-22 14:50:46.932655	State Bank of India	Product Manager	0-1 years	Noida	1615767	71	0	8.72
2015-11-22 14:50:46.932655	Hindustan Unilever	Frontend Developer	0-1 years	Hyderabad	790163	81	0	5.26
2015-11-22 14:50:46.932655	Bharat Petroleum	Software Engineer	5-8 years	Bangalore	1104756	94	0	0.08
2015-11-22 14:50:46.932655	HDFC Bank	UI/UX Designer	5-8 years	Mumbai	905086	94	1	8.22
2015-11-22 14:50:46.932655	Maruti Suzuki	Data Analyst	1-3 years	Bangalore	578687	35	0	11.54
2015-11-23 14:50:46.932655	Paytm	UI/UX Designer	0-1 years	Pune	578565	58	0	11.5
2015-11-23 14:50:46.932655	Jio Platforms	Cloud Architect	5-8 years	Delhi	1649335	48	1	-4.1
2015-11-23 14:50:46.932655	Capgemini India	UI/UX Designer	3-5 years	Kolkata	568975	96	1	-1.53
2015-11-23 14:50:46.932655	Wipro	Business Analyst	8-12 years	Delhi	1453195	42	1	6.74
2015-11-23 14:50:46.932655	Aditya Birla Group	Data Scientist	12+ years	Noida	936181	85	1	-3.55
2015-11-23 14:50:46.932655	Tech Mahindra	Backend Developer	8-12 years	Bangalore	539877	73	0	6.14

```
SHOW COLUMNS FROM job_market_india
```

Field	Type	Null	Key	Default	Extra
Record_Date	text	YES		NULL	
Company_Name	text	YES		NULL	
Job_Role	text	YES		NULL	
Experience_Level	text	YES		NULL	
City	text	YES		NULL	
Salary_INR	int	YES		NULL	
Demand_Index	int	YES		NULL	
Remote_Option_Flag	int	YES		NULL	
Salary_Trend_Pct	double	YES		NULL	

Add experience_years Column

```
ALTER TABLE job_market_india
```

```
ADD COLUMN experience_years DECIMAL(4,1);
```

Populate experience_years

```
UPDATE job_market_india
```

```
SET experience_years =
```

```

CASE Experience_Level
    WHEN '0-1 years' THEN 0.5
    WHEN '1-3 years' THEN 2
    WHEN '3-5 years' THEN 4
    WHEN '5-8 years' THEN 6.5
    WHEN '8-12 years' THEN 10
    WHEN '12+ years' THEN 15
    ELSE NULL
END;

```

Verify Experience Mapping

```

SELECT Experience_Level, experience_years
FROM job_market_india
GROUP BY Experience_Level, experience_years;

```

Result Grid			Filter Rows:	Export
	Experience_Level	experience_years		
▶	0-1 years	0.5		
	5-8 years	6.5		
	1-3 years	2.0		
	3-5 years	4.0		
	8-12 years	10.0		
	12+ years	15.0		

Add role_seniority Column

```

ALTER TABLE job_market_india
ADD COLUMN role_seniority TINYINT;

```

Populate role_seniority

```

UPDATE job_market_india
SET role_seniority =
CASE

```

```

WHEN Job_Role LIKE '%Manager%'

OR Job_Role LIKE '%Lead%'

OR Job_Role LIKE '%Architect%'

OR Job_Role LIKE '%Principal%'

OR Job_Role LIKE '%Director%'

OR Job_Role LIKE '%Head%'

THEN 1

ELSE 0

END;

```

Verify Role Seniority



```

SELECT Job_Role, role_seniority

FROM job_market_india

LIMIT 15;

```

Result Grid   Filter Rows: <input type="text"/>		
	Job_Role	role_seniority
▶	Product Manager	1
	Frontend Developer	0
	Software Engineer	0
	UI/UX Designer	0
	Data Analyst	0
	UI/UX Designer	0
	Cloud Architect	1
	UI/UX Designer	0
	Business Analyst	0
	Data Scientist	0
	Backend Developer	0
	Product Manager	1

Result Grid		Filter Rows:	Export:
Job_Role	role_seniority		
Data Analyst	0		
UI/UX Designer	0		
Cloud Architect	1		
UI/UX Designer	0		
Business Analyst	0		
Data Scientist	0		
Backend Developer	0		
Product Manager	1		
DevOps Engineer	0		
Digital Marketing S...	0		
HR Manager	1		

Company-wise Salary Benchmarking

SELECT

company_name,

ROUND(AVG(salary_inr), 0) AS avg_salary,

COUNT(*) AS job_count



FROM job_market_india

GROUP BY company_name

ORDER BY avg_salary DESC

LIMIT 15;

Result Grid		Filter Rows:	Export:
	company_name	avg_salary	job_count
▶	Bharat Petroleum	1356502	969
	Jio Platforms	1343748	910
	HCL Technologies	1336288	905
	Axis Bank	1325678	945
	Amazon India	1316370	879
	State Bank of India	1314763	976
	Aditya Birla Group	1311241	928
	PhonePe	1308899	965
	Larsen & Toubro	1307043	914
	Flipkart	1306978	966
	Deloitte India	1302804	931
	BYJU'S	1300046	954

Result Grid			Filter Rows: <input type="text"/>	Export: 	Wrap Cel
	company_name	avg_salary	job_count		
	Amazon India	1316370	879		
	State Bank of India	1314763	976		
	Aditya Birla Group	1311241	928		
	PhonePe	1308899	965		
	Larsen & Toubro	1307043	914		
	Flipkart	1306978	966		
	Deloitte India	1302804	931		
	BYJU'S	1300046	954		
	Tata Motors	1298800	876		
	Mahindra & Mahindra	1298743	932		
	Kotak Mahindra Bank	1297975	942		

Role × Experience Salary Progression

SELECT

job_role,

experience_level,

ROUND(AVG(salary_inr), 0) AS avg_salary

FROM job_market_india

GROUP BY job_role, experience_level

ORDER BY

job_role,

MIN(experience_years)

LIMIT 1000;

Result Grid			Filter Rows: <input type="text"/>	Export:	Wrap Cell C
	job_role	experience_level	avg_salary		
▶	Backend Developer	0-1 years	1124649		
	Backend Developer	1-3 years	1106937		
	Backend Developer	3-5 years	1136208		
	Backend Developer	5-8 years	1074021		
	Backend Developer	8-12 years	1098725		
	Backend Developer	12+ years	1102984		
	Business Analyst	0-1 years	906806		
	Business Analyst	1-3 years	943128		
	Business Analyst	3-5 years	971312		
	Business Analyst	5-8 years	946167		
	Business Analyst	8-12 years	921691		
	Business Analyst	12+ years	985094		

Result Grid			Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:
	job_role	experience_level	avg_salary		
	Business Analyst	12+ years	985094		
	Cloud Architect	0-1 years	2852496		
	Cloud Architect	1-3 years	2823867		
	Cloud Architect	3-5 years	2827974		
	Cloud Architect	5-8 years	2812688		
	Cloud Architect	8-12 years	2857285		
	Cloud Architect	12+ years	2870668		
	Cybersecurity Ana...	0-1 years	1529205		
	Cybersecurity Ana...	1-3 years	1519555		
	Cybersecurity Ana...	3-5 years	1464266		
	Cybersecurity Ana...	5-8 years	1546893		
	Cybersecurity Ana...	8-12 years	1532479		

Result Grid			Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:
	job_role	experience_level	avg_salary		
	Cybersecurity Ana...	8-12 years	1532479		
	Cybersecurity Ana...	12+ years	1483147		
	Data Analyst	0-1 years	775934		
	Data Analyst	1-3 years	743575		
	Data Analyst	3-5 years	756613		
	Data Analyst	5-8 years	752918		
	Data Analyst	8-12 years	764979		
	Data Analyst	12+ years	732897		
	Data Scientist	0-1 years	1506446		
	Data Scientist	1-3 years	1521998		
	Data Scientist	3-5 years	1511334		
	Data Scientist	5-8 years	1481008		

	job_role	experience_level	avg_salary
	Data Scientist	5-8 years	1481998
	Data Scientist	8-12 years	1471299
	Data Scientist	12+ years	1498394
	DevOps Engineer	0-1 years	1373933
	DevOps Engineer	1-3 years	1325180
	DevOps Engineer	3-5 years	1354281
	DevOps Engineer	5-8 years	1326110
	DevOps Engineer	8-12 years	1400659
	DevOps Engineer	12+ years	1349015
	Digital Marketing S...	0-1 years	735078
	Digital Marketing S...	1-3 years	738321
	Digital Marketing S...	3-5 years	762371

Result Grid




Filter Rows:

Export:



Wrap Cell Content:



	job_role	experience_level	avg_salary
	Digital Marketing S...	5-8 years	736709
	Digital Marketing S...	8-12 years	793159
	Digital Marketing S...	12+ years	751023
	Finance Analyst	0-1 years	776038
	Finance Analyst	1-3 years	724823
	Finance Analyst	3-5 years	779681
	Finance Analyst	5-8 years	746621
	Finance Analyst	8-12 years	747591
	Finance Analyst	12+ years	748239
	Frontend Developer	0-1 years	964312
	Frontend Developer	1-3 years	900374
	Frontend Developer	3-5 years	907501


Result Grid





Filter Rows:

Export:





Wrap Cell Content:



	job_role	experience_level	avg_salary
	Frontend Developer	3-5 years	907501
	Frontend Developer	5-8 years	941195
	Frontend Developer	8-12 years	935147
	Frontend Developer	12+ years	901367
	HR Manager	0-1 years	1104819
	HR Manager	1-3 years	1157198
	HR Manager	3-5 years	1066741
	HR Manager	5-8 years	1094099
	HR Manager	8-12 years	1093212
	HR Manager	12+ years	1141507
	Machine Learning ...	0-1 years	1827719
	Machine Learning ...	1-3 years	1800089

Result Grid   Filter Rows: <input type="text"/> Export:  Wrap Cell Content:			
job_role	experience_level	avg_salary	
Machine Learning ...	3-5 years	1801079	
Machine Learning ...	5-8 years	1830585	
Machine Learning ...	8-12 years	1800318	
Machine Learning ...	12+ years	1825041	
Operations Manager	0-1 years	1221056	
Operations Manager	1-3 years	1230458	
Operations Manager	3-5 years	1260413	
Operations Manager	5-8 years	1266021	
Operations Manager	8-12 years	1242746	
Operations Manager	12+ years	1236854	
Product Manager	0-1 years	2501404	
Product Manager	1-3 years	2508361	

Result Grid   Filter Rows: <input type="text"/> Export: 			
job_role	experience_level	avg_salary	
Product Manager	3-5 years	2427215	
Product Manager	5-8 years	2513107	
Product Manager	8-12 years	2456606	
Product Manager	12+ years	2579418	
Software Engineer	0-1 years	921401	
Software Engineer	1-3 years	943604	
Software Engineer	3-5 years	920042	
Software Engineer	5-8 years	928945	
Software Engineer	8-12 years	926126	
Software Engineer	12+ years	942157	
UI/UX Designer	0-1 years	747218	
UI/UX Designer	1-3 years	739294	

Result Grid   Filter Rows: <input type="text"/> Export			
job_role	experience_level	avg_salary	
Software Engineer	1-3 years	943604	
Software Engineer	3-5 years	920042	
Software Engineer	5-8 years	928945	
Software Engineer	8-12 years	926126	
Software Engineer	12+ years	942157	
UI/UX Designer	0-1 years	747218	
UI/UX Designer	1-3 years	739294	
UI/UX Designer	3-5 years	761370	
UI/UX Designer	5-8 years	738655	
UI/UX Designer	8-12 years	760020	
UI/UX Designer	12+ years	734429	

Demand Index vs Hiring Saturation

SELECT

job_role,


```

city,

ROUND(AVG(demand_index), 2) AS avg_demand,

COUNT(*) AS job_count

FROM job_market_india

GROUP BY job_role, city

ORDER BY job_count DESC

LIMIT 15;

```

job_role	city	avg_demand	job_count
DevOps Engineer	Hyderabad	56.85	221
Software Engineer	Pune	52.76	220
Digital Marketing Specialist	Kolkata	55.59	220
Machine Learning Engineer	Ahmedabad	51.81	217
Cybersecurity Analyst	Bangalore	51.71	216
HR Manager	Delhi	53.73	213
Cybersecurity Analyst	Gurugram	52.78	212
Machine Learning Engineer	Bangalore	55.68	211
Software Engineer	Bangalore	53.78	210
Data Analyst	Delhi	54.98	209
Cybersecurity Analyst	Noida	57.34	209
HR Manager	Chennai	56.16	208

job_role	city	avg_demand	job_count
Cybersecurity Analyst	Bangalore	51.71	216
HR Manager	Delhi	53.73	213
Cybersecurity Analyst	Gurugram	52.78	212
Machine Learning Engineer	Bangalore	55.68	211
Software Engineer	Bangalore	53.78	210
Data Analyst	Delhi	54.98	209
Cybersecurity Analyst	Noida	57.34	209
HR Manager	Chennai	56.16	208
Finance Analyst	Chennai	50.27	207
Product Manager	Bangalore	56.00	207
Operations Manager	Ahmedabad	55.20	205

Remote vs On-site Salary Comparison

```

SELECT

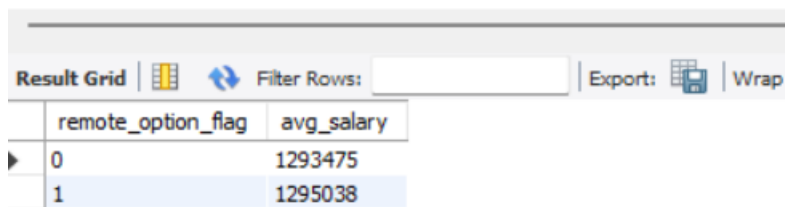
remote_option_flag,

ROUND(AVG(salary_inr), 0) AS avg_salary

FROM job_market_india

```

GROUP BY remote_option_flag;



remote_option_flag	avg_salary
0	1293475
1	1295038

Time-Series Salary Trend

SELECT

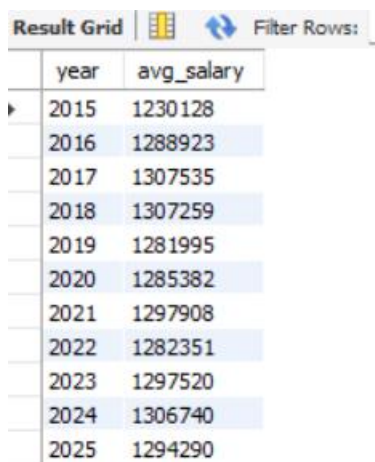
YEAR(record_date) AS year,

ROUND(AVG(salary_inr), 0) AS avg_salary

FROM job_market_india

GROUP BY year

ORDER BY year;



year	avg_salary
2015	1230128
2016	1288923
2017	1307535
2018	1307259
2019	1281995
2020	1285382
2021	1297908
2022	1282351
2023	1297520
2024	1306740
2025	1294290