**SQL Analysis Project**

**Task 1:- Basic Analysis (Queries)**

1. **What is the average salary for all the jobs in the dataset?**

* SELECT AVG(salary) AS avg\_salary FROM jobs;

1. **What is the highest salary in the dataset and Which job role does it correspond to?**

* SELECT MAX(salary) AS highest\_salary, job\_title FROM jobs;

1. **What is the average salary for Data Scientist in US?**

* SELECT AVG(salary) AS avg\_salary FROM jobs

WHERE job\_title = "Data Scientist" AND company\_location = "US";

1. **What is the number of jobs available for each job title?**

* SELECT job\_title, COUNT(\*) AS num\_jobs FROM jobs GROUP BY job\_title;

1. **What is the total salary paid for all Data Analyst jobs in DE(Location)?**

* SELECT SUM(salary) AS total\_salary\_paid FROM jobs

WHERE job\_title = "Data Analyst" AND company\_location = "DE";

1. **What are the TOP 5 highest paying job titles and their corresponding average salaries?**

* SELECT job\_title, AVG(salary) AS avg\_salary FROM jobs

GROUP BY job\_title

ORDER BY avg\_salary DESC LIMIT 5;

1. **What is the Number of jobs available in each location?**

* SELECT company\_location, COUNT(\*) as no\_of\_jobs FROM jobs GROUP BY company\_location;

1. **What are the TOP 3 job titles that have the most jobs available in dataset?**

* SELECT job\_title, COUNT(\*) as no\_of\_jobs FROM jobs

GROUP BY job\_title

ORDER BY no\_of\_jobs DESC

LIMIT 3;

1. **What is the average salary for Data Engineers in US?**

* SELECT AVG(salary) AS avg\_salary, job\_title FROM jobs

WHERE job\_title = "Data Engineer" AND company\_location = "US";

1. **What are the TOP 5 cities with the highest average salaries?**

* SELECT company\_location, AVG(salary) AS avg\_salary FROM jobs

GROUP BY company\_location

ORDER BY avg\_salary DESC

LIMIT 5;

**Task 2:- Moderate Analysis (Queries)**

1. **What is the average salary for each job title, and What is the total number of jobs available for each job title?**

* SELECT job\_title, AVG(salary) AS avg\_salary, COUNT(\*) AS no\_of\_jobs FROM jobs GROUP BY job\_title;

1. **What are the TOP 5 job titles with the highest total salaries, and What is the total number of jobs available for each job title?**

* SELECT job\_title, SUM(salary) AS total\_salary, COUNT(\*) AS no\_of\_jobs FROM jobs

GROUP BY job\_title

ORDER BY total\_salary DESC

LIMIT 5;

1. **What are the TOP 5 locations with the highest total salaries, and What is the total number of jobs available for each location?**

* SELECT company\_location, SUM(salary) AS total\_salary,

COUNT(\*) AS no\_of\_jobs FROM jobs

GROUP BY company\_location

ORDER BY total\_salary DESC

LIMIT 5;

1. **What is the average salary for each job title in each location, and What is the total number of jobs available for each job title in each location?**

* SELECT job\_title, company\_location, AVG(salary) AS avg\_salary,

COUNT(\*) AS no\_of\_jobs FROM jobs

GROUP BY job\_title, company\_location;

1. **What is the average salary for each job title in each location, and What is the percentage of jobs available for each job title in each location?**

* SELECT job\_title, company\_location, AVG(salary) AS average\_salary,

(COUNT(\*) \* 100 / (SELECT COUNT(\*) FROM jobs WHERE company\_location = j.company\_location)) AS job\_percentage

FROM jobs j

GROUP BY job\_title, company\_location;

1. **What are the TOP 5 job titles with the highest average salaries, and What is the total number of jobs available for each job title?**

* SELECT job\_title, AVG(salary) as avg\_salary,

COUNT(\*) AS no\_of\_jobs FROM jobs

GROUP BY job\_title

ORDER BY avg\_salary DESC

LIMIT 5;

1. **What is the average salary for each job title, and What is the percentage of jobs available for each job title in the dataset?**

* SELECT job\_title, AVG(salary) as avg\_salary,

(COUNT(\*) \*100 / (SELECT COUNT(\*) FROM jobs)) AS job\_percentage

FROM jobs

GROUP BY job\_title;

1. **What is the total number of jobs available for each year of experience, and What is the average salary for each year of experience?**

* SELECT experience\_level, COUNT(\*) as no\_of\_jobs,

AVG(salary) AS avg\_salary FROM jobs

GROUP BY experience\_level;

1. **What are the job titles with the highest average salaries in each location?**

* SELECT job\_title, company\_location, AVG(salary) as avg\_salary

FROM jobs WHERE job\_title IN

(SELECT job\_title FROM jobs GROUP BY job\_title

ORDER BY AVG(salary) DESC)

GROUP BY job\_title, company\_location;

**Task 3:- Advance Analysis (Queries)**

1. **What are the TOP 5 job titles with the highest salaries, and What is the name of the company that offers the highest salary for each job title?**

* SELECT job\_title, MAX(salary) as highest\_salary, company\_name

FROM jobs

INNER JOIN companies

ON jobs.id = companies.id

GROUP BY job\_title ORDER BY highest\_salary DESC

LIMIT 5;

1. **What is the total number of jobs available for each job title, and What is the name of the company that offers the highest salary for each job title?**

* SELECT job\_title, COUNT(\*) as no\_of\_jobs , company\_name

FROM jobs

INNER JOIN companies

ON jobs.id = companies.id

WHERE salary = (SELECT MAX(salary) FROM jobs)

GROUP BY job\_title, company\_name;

1. **What are the TOP 5 cities with the highest average salaries, and What is the name of the company that offers the highest salary for each city?**

* SELECT company\_location, AVG(salary) AS avg\_salary, company\_name

FROM jobs

INNER JOIN companies

ON jobs.id = companies.id

GROUP BY company\_location

ORDER BY avg\_salary DESC

LIMIT 5;

1. **What is the average salary for each job title in each company, and What is the rank of the each job title within each company based on the average salary?**

* SELECT job\_title, AVG(salary) AS avg\_salary, company\_name,

RANK() OVER (PARTITION BY company\_name ORDER BY AVG(salary) DESC) AS salary\_rank

FROM jobs

INNER JOIN companies

ON jobs.id = companies.id

GROUP BY job\_title, company\_name;

1. **What is the total number of jobs available for each job title in each location,and What is the rank of each job title within each location based on the total number of jobs?**

* SELECT job\_title, company\_location, COUNT(\*) AS no\_of\_jobs,

RANK() OVER (PARTITION BY company\_location ORDER BY COUNT(\*) DESC) AS job\_rank

FROM jobs

GROUP BY job\_title, company\_location;

1. **What are the TOP 5 companies with highest average salaries for Data Scientist positions, and What is the rank of each company based on the average salary?**

* SELECT company\_name, AVG(salary) AS avg\_salary,

RANK() OVER (ORDER BY AVG(salary) DESC) AS salary\_rank

FROM jobs

INNER JOIN companies

ON jobs.id = companies.id

WHERE job\_title = 'Data Scientist'

GROUP BY company\_name

ORDER BY avg\_salary DESC

LIMIT 5;

1. **What is the total number of jobs available for each year of experience in each location, and What is the rank of each year of experience within each location based on the total number of jobs?**

* SELECT experience\_level, company\_location, COUNT(\*) as no\_of\_jobs,

RANK() OVER (PARTITION BY company\_location ORDER BY COUNT(\*) DESC) AS experience\_rank

FROM jobs

GROUP BY experience\_level, company\_location;

**THANK YOU**