

HUMAN RESOURCES

SQL Queries

Create Table

create table hrdata

(

emp_no int8 PRIMARY KEY,
gender varchar(50) NOT NULL,
marital_status varchar(50),
age_band varchar(50),
age int8,
department varchar(50),
education varchar(50),
education_field varchar(50),
job_role varchar(50),
business_travel varchar(50),
employee_count int8,
attrition varchar(50),
attrition_label varchar(50),
job_satisfaction int8,
active_employee int8

)

Import Data in Table

Employee Count:

```
select sum(employee_count) as Employee_Count from hrdata;
```

Attrition Count:

```
select count(attrition) from hrdata where attrition='Yes';
```

Attrition Rate:

```
select  
round (((select count(attrition) from hrdata where attrition='Yes')/  
sum(employee_count)) * 100,2)  
from hrdata;
```

Active Employee:

```
select sum(employee_count) - (select count(attrition) from hrdata where  
attrition='Yes') from hrdata;
```

OR

```
select (select sum(employee_count) from hrdata) - count(attrition) as  
active_employee from hrdata  
where attrition='Yes';
```

Average Age:

```
select round(avg(age),0) from hrdata;
```

Attrition by Gender

```
select gender, count(attrition) as attrition_count from hrdata
where attrition='Yes'
group by gender
order by count(attrition) desc;
```

Department wise Attrition:

```
select department, count(attrition), round((cast (count(attrition) as numeric) /
(select count(attrition) from hrdata where attrition= 'Yes')) * 100, 2) as pct from
hrdata
where attrition='Yes'
group by department
order by count(attrition) desc;
```

No of Employee by Age Group

```
SELECT age, sum(employee_count) AS employee_count FROM hrdata
GROUP BY age
order by age;
```

Education Field wise Attrition:

```
select education_field, count(attrition) as attrition_count from hrdata
where attrition='Yes'
group by education_field
order by count(attrition) desc;
```

Attrition Rate by Gender for different Age Group

```
select age_band, gender, count(attrition) as attrition,
round((cast(count(attrition) as numeric) / (select count(attrition) from hrdata
where attrition = 'Yes')) * 100,2) as pct
from hrdata
where attrition = 'Yes'
group by age_band, gender
order by age_band, gender desc;
```

Job Satisfaction Rating

-Run this query first to activate the crosstab() function in postgres

```
CREATE EXTENSION IF NOT EXISTS tablefunc;
```

-Then run this to get o/p-

```
SELECT *  
FROM crosstab(  
    'SELECT job_role, job_satisfaction, sum(employee_count)  
    FROM hrdata  
    GROUP BY job_role, job_satisfaction  
    ORDER BY job_role, job_satisfaction'  
    ) AS ct(job_role varchar(50), one numeric, two numeric, three numeric,  
four numeric)  
ORDER BY job_role;
```