## -- UNIFIED MENTOR INTERNSHIP

## --Attrition analysis project

--SQL query to analyze attrition happening on various parameters

```
--For viewing all data
select *from [Attrition data]
-- Updating column attrition
update [Attrition data]
set Attrition = replace(Attrition,1,'yes')
--employee count and attrition
SELECT
  Attrition, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS DECIMAL(10, 2)), 2) AS
percentage of total
FROM (
  SELECT
    Attrition,
    COUNT(EmployeeID) AS p,
    (SELECT COUNT(EmployeeID) FROM [Attrition data]) AS total
  FROM
    [Attrition data]
  GROUP BY
    Attrition
) AS subquery
```

```
--Business travel attrition
select BusinessTravel, Attrition, p, total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage_of_total
from (
select BusinessTravel, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition by
BusinessTravel) as total
from [Attrition data]
group by BusinessTravel, Attrition ) a
--Department Attrition
select Department, Attrition, p, total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage_of_total
from (
select Department, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition by
Department) as total
from [Attrition data]
group by Department, Attrition ) a
-- EducationField attrition
select EducationField, Attrition, p, total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage_of_total
from (
select EducationField, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition by
EducationField) as total
from [Attrition data]
group by EducationField, Attrition) a
```

```
-- Gender attrition
select Gender, Attrition, p, total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage_of_total
from (
select Gender, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition by
Gender) as total
from [Attrition data]
group by Gender, Attrition )a
--JobLevel attrition
select JobLevel, Attrition, p, total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage of total
from (
select JobLevel, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition by
JobLevel) as total
from [Attrition data]
group by JobLevel, Attrition )a
--JobInvolvement attrition
select JobInvolvement, Attrition, p,total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage of total
from (
select JobInvolvement, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition
by JobInvolvement) as total
from [Attrition data]
group by JobInvolvement, Attrition )a
```

```
--JobRole attrition
select JobRole, Attrition, p,total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage_of_total
from (
select JobRole, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition by
JobRole) as total
from [Attrition data]
group by JobRole, Attrition )a
--JobSatisfaction attrition
select JobSatisfaction, Attrition, p,total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage of total
from (
select JobSatisfaction, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition by
JobSatisfaction) as total
from [Attrition data]
group by JobSatisfaction, Attrition )a
--NumCompaniesWorked attrition
select NumCompaniesWorked, Attrition, p, total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 /
total) AS DECIMAL(10, 2)), 2) AS percentage of total
from (
select NumCompaniesWorked, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID))
over(partition by NumCompaniesWorked) as total
from [Attrition data]
group by NumCompaniesWorked, Attrition )a
```

```
--PerformanceRating attrition
select PerformanceRating, Attrition, p, total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total)
AS DECIMAL(10, 2)), 2) AS percentage of total
from (
select PerformanceRating, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID))
over(partition by PerformanceRating) as total
from [Attrition data]
group by PerformanceRating, Attrition )a
-- Training Times Last Year attrition
select TrainingTimesLastYear,Attrition, p,total,ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 /
total) AS DECIMAL(10, 2)), 2) AS percentage of total
from (
select TrainingTimesLastYear,Attrition, count(EmployeeID) as "p", sum(count(EmployeeID))
over(partition by TrainingTimesLastYear) as total
from [Attrition data]
group by TrainingTimesLastYear, Attrition )a
--WorkLifeBalance attrition
select WorkLifeBalance, Attrition, p,total, ROUND(CAST((CAST(p AS DECIMAL(10,1)) * 100.0 / total) AS
DECIMAL(10, 2)), 2) AS percentage of total
from (
select WorkLifeBalance, Attrition, count(EmployeeID) as "p", sum(count(EmployeeID)) over(partition
by WorkLifeBalance) as total
from [Attrition data]
group by WorkLifeBalance, Attrition )a
```