Assignment3 (Manami Oyama 100812125)

1)

<Query>

```
-----------------------------------------
CREATE TABLE attrition
(
Attrition string,
JobRole string
);
-----------------------------------------
INSERT OVERWRITE TABLE attrition
SELECT COUNT(Attrition) AS Count, JobRole
FROM employee
WHERE Attrition = "Yes" AND JobRole LIKE "%Sales%"
GROUP BY JobRole;
-----------------------------------------
```

_c0	jobrole
57	Sales Executive
33	Sales Representative

```
-----------------------------------------
CREATE TABLE Non_Attrition
(
Attrition string,
JobRole string
);
-----------------------------------------
INSERT OVERWRITE TABLE non_attrition
SELECT COUNT(Attrition) AS Attrition_count, JobRole
FROM employee
WHERE Attrition = "No" AND JobRole LIKE "%Sales%"
GROUP BY JobRole;
-----------------------------------------
```

non_attrition.attrition	non_attrition.jobrole
269	Sales Executive
50	Sales Representative

2)

<Query>

>>Average

```
CREATE TABLE average_monthly_income
(
Attrition string,
MonthlyIncome int,
JobRole string
);
```

```
INSERT OVERWRITE TABLE average_monthly_income
SELECT Attrition, MonthlyIncome, JobRole
FROM employee;
```

```
SELECT    JobRole, Attrition, AVG(MonthlyIncome) AS MonthlyIncome
FROM average_monthly_income
WHERE JobRole LIKE "%Sales%"
GROUP BY JobRole, Attrition;
```

---

jobrole	attrition	monthlyincome
Sales Executive	No	6804.617100371747
Sales Executive	Yes	7489.0
Sales Representative	No	2798.44
Sales Representative	Yes	2364.7272727272725

>>min

```
CREATE TABLE min_monthly_income
(
Attrition string,
MonthlyIncome int,
JobRole string
);
```

```
INSERT OVERWRITE TABLE min_monthly_income
SELECT Attrition, MonthlyIncome, JobRole
FROM employee;
```

```
SELECT JobRole, Attrition, MIN(MonthlyIncome) AS MonthlyIncome
FROM min_monthly_income
WHERE JobRole LIKE "%Sales%"
GROUP BY JobRole, Attrition;
```

---

jobrole	attrition	monthlyincome
Sales Executive	No	4001
Sales Executive	Yes	4233
Sales Representative	No	1052
Sales Representative	Yes	1081

>>Max

```
CREATE TABLE max_monthly_income
(
Attrition string,
MonthlyIncome int,
JobRole string
);
```

```
INSERT OVERWRITE TABLE max_monthly_income
SELECT Attrition, MonthlyIncome, JobRole
```

FROM employee;

SELECT JobRole, Attrition, MAX(MonthlyIncome) AS MonthlyIncome
FROM max_monthly_income
WHERE JobRole LIKE "%Sales%"
GROUP BY JobRole, Attrition;

---

jobrole	attrition	monthlyincome
Sales Executive	No	13872
Sales Executive	Yes	13756
Sales Representative	No	6632
Sales Representative	Yes	4400

3)
<With Attrition>

CREATE TABLE withattrition
(
Attrition string,
MonthlyIncome int,
JobRole string
);

INSERT OVERWRITE TABLE withattrition
SELECT Attrition, MonthlyIncome, JobRole
FROM employee;

SELECT JobRole, AVG(MonthlyIncome) AS monthlyincome, COUNT(JobRole) AS count
FROM withattrition
WHERE JobRole LIKE "%Sales%" AND Attrition = 'No'
GROUP BY JobRole;

---

jobrole	monthlyincome	count
Sales Executive	7489.0	57
Sales Representative	2364.7272727272725	33

<Without Attrition>

```
CREATE TABLE withoutattrition
(
Attrition string
MonthlyIncome int
JobRole string,
);
```

```
INSERT OVERWRITE TABLE withoutattrition
SELECT Attrition, MonthlyIncome, JobRole
FROM employee;
```

```
SELECT JobRole, AVG(MonthlyIncome) AS monthlyincome, COUNT(JobRole) AS count
FROM withoutattrition
WHERE JobRole LIKE "%Sales%" AND Attrition = 'No'
GROUP BY JobRole;
```

---

jobrole	monthlyincome	count
Sales Executive	6804.617100371747	269
Sales Representative	2798.44	50