

Write Hive Queries for the Below analysis.

1) To Find the impact of education qualification and occupation on total purchase- for each education qualification under an occupation, find the average totalpurchaseytd

(Sol)

```
select Education, Occupation, avg(totalpurchaseytd) num_of_occurance from individual  
group by 1,2;
```

Bachelors	Professional	7479.308333333334
Bachelors	Management	1854.8718867924529
Partial College	Skilled Manual	3204.7428571428572
High School	Skilled Manual	2829.4961363636367
Partial College	Clerical	5297.515555555556
Partial High School	Clerical	3735.447
Graduate Degree	Management	3504.454
Partial College	Professional	2882.080384615386
High School	Professional	3177.532380952381
Partial High School	Skilled Manual	3430.7933333333335

2) Use grouping sets OR Roll-ups OR Cubes to find avg of totalchildren based on all records, yearly income brackets, and (occupation and qualification). Use grouping IDs to segregate the reports

(Sol)

```
select Occupation, Education, YearlyIncome, avg(TotalChildren) from individual  
group by Occupation, Education, YearlyIncome  
with rollup;
```

Clerical	Partial College	25001-50000	2.1111
Clerical	Partial College		2.1111
Clerical	Partial High School	0-25000	2.0000
Clerical	Partial High School	25001-50000	0.0000
Clerical	Partial High School		1.0000
Clerical			1.5263
Management	Bachelors	25001-50000	2.0000
Management	Bachelors	50001-75000	3.9474
Management	Bachelors	75001-100000	2.4667
Management	Bachelors	greater than 100000	1.6429
Management	Bachelors		2.7358
Management	Graduate Degree	25001-50000	2.0000
Management	Graduate Degree	50001-75000	3.3846
Management	Graduate Degree	75001-100000	2.2500
Management	Graduate Degree	greater than 100000	0.9375
Management	Graduate Degree		2.0571
Management			2.4659
Professional	Bachelors	50001-75000	1.1053
Professional	Bachelors	75001-100000	3.0000

Professional	Bachelors		1.5000
Professional	High School	25001-50000	2.0000
Professional	High School	50001-75000	2.1250
Professional	High School	75001-100000	2.0000
Professional	High School	greater than 100000	3.0000
Professional	High School		2.1905
Professional	Partial College	50001-75000	2.7308
Professional	Partial College	75001-100000	2.8125
Professional	Partial College	greater than 100000	2.3000
Professional	Partial College		2.6731
Professional			2.2784
Skilled Manual	High School	0-25000	3.8571
Skilled Manual	High School	25001-50000	0.6000
Skilled Manual	High School	50001-75000	2.0000
Skilled Manual	High School	75001-100000	2.0000
Skilled Manual	High School		1.3409
Skilled Manual	Partial College	25001-50000	0.4118
Skilled Manual	Partial College	50001-75000	1.6923
Skilled Manual	Partial College	75001-100000	1.6667
Skilled Manual	Partial College		1.2449
Skilled Manual	Partial High School	25001-50000	2.0000
Skilled Manual	Partial High School	75001-100000	2.0000
Skilled Manual	Partial High School		2.0000
Skilled Manual			1.3125
			1.9767

3) Sort the number of cars owned after grouping the records by yearly income brackets

(Sol)

```
select YearlyIncome, sum(NumberCarsOwned) cars_owned from individual
group by YearlyIncome
order by 2;
```

0-25000	24
75001-100000	100
greater than 100000	127
25001-50000	135
50001-75000	190

4) use row_number() to rank the commuteDistance in demographics data partitioned by yearly income

(Sol)

```
select * from (select CustomerID, gender, row_number() over (partition by YearlyIncome
order by CommuteDistance) as rn from individual) j where j.rnk < 3;
```

NOTE

-> For each question mentioned above, provide the Query and the output screenshots as Solutions.

-> The queries can be created based on personal understanding and in any method within the boundaries of the question, but the output must include the desired results.