

```
create DATABASE soulvibe_internship;
```

```
CREATE TABLE demographics_data (  
    Age INT,  
    Education_Level VARCHAR,  
    Occupation VARCHAR,  
    Number_of_Dependents INT,  
    Location VARCHAR,  
    Work_Experience INT,  
    Marital_Status VARCHAR,  
    Employment_Status VARCHAR,  
    Household_Size INT,  
    Homeownership_Status VARCHAR,  
    Type_of_Housing VARCHAR,  
    Gender VARCHAR,  
    Primary_Mode_of_Transportation VARCHAR,  
    Income NUMERIC  
);
```

```
select * from demographics_data limit 5
```

```
-- 1. Average Income by Education Level (Full-time)
```

```
select education_level,  
round(avg(income),1) as average_income  
from demographics_data  
where employment_status='Full-time'  
group by education_level;
```

```
-- 2. Top 5 Highest Earning Individuals
```

```
-- Retrieve details of top 5 individuals with highest income
```

```
select * from  
demographics_data  
order by income desc  
limit 5;
```

--3. Count People by Occupation with >2 Dependents & Own House

-- Count number of people per occupation who have >2 dependents and own their house

```
select occupation,count(*) As total_people  
from demographics_data  
where number_of_dependents >2 AND homeownership_status='Own'  
group by occupation;
```

--4. Urban Residents Earning Above Average

---- List people in Urban locations earning above overall average income

```
select *  
from demographics_data  
where location='Urban'  
And  
income > (select avg(income) from demographics_data);
```

--5. Count of Males and Females in Each Employment Status

```
select gender, employment_status, count(*) as total  
from demographics_data  
group by gender,employment_status
```

--6. Total and Average Income by Location and Occupation

-- Get total and average income per location and occupation

```
select location, occupation,  
sum(income) as total_income,  
avg(income) as average_income  
from  
demographics_data  
group by location, occupation;
```

-- 7. Average Household Size by Housing Type

-- Calculate average household size per housing type

```
select type_of_housing, avg(household_size) as avg_house_hold  
from  
demographics_data  
group by type_of_housing;
```

--8. Min, Max, Avg Work Experience by Marital Status

--- Summary statistics for work experience by marital status

```
select marital_status,  
min(work_experience) as min_exp,  
max(work_experience) as max_exp,  
avg(work_experience) as avg_exp
```

```
from demographics_data
```

```
group by marital_status;
```

--9 Rank Individuals by Income Within Education Level

-- Rank individuals within their education level based on income

```
select *,  
Rank() over (partition by education_level order by income desc) as income_rank  
from demographics_data;
```

--10. Top 3 Occupations by Highest Average Income

-- Top 3 occupations with highest average income

```
select occupation,avg(income) as avg_income
from demographics_data
group by occupation
order by avg_income desc
limit 3;
```

--11. Cumulative Income by Gender

-- Calculate cumulative income per gender

```
select gender, income,
sum(income) over (partition by gender order by income ) cumulative_income
from demographics_data;
```

--12. People Whose Income Is Above the Median

--- Find individuals earning above median income

```
with median_value as (
select percentile_cont(0.5) within group( order by income ) as median_income
from demographics_data
)
select *
from demographics_data,median_value
where income > median_income;
```

