

Report

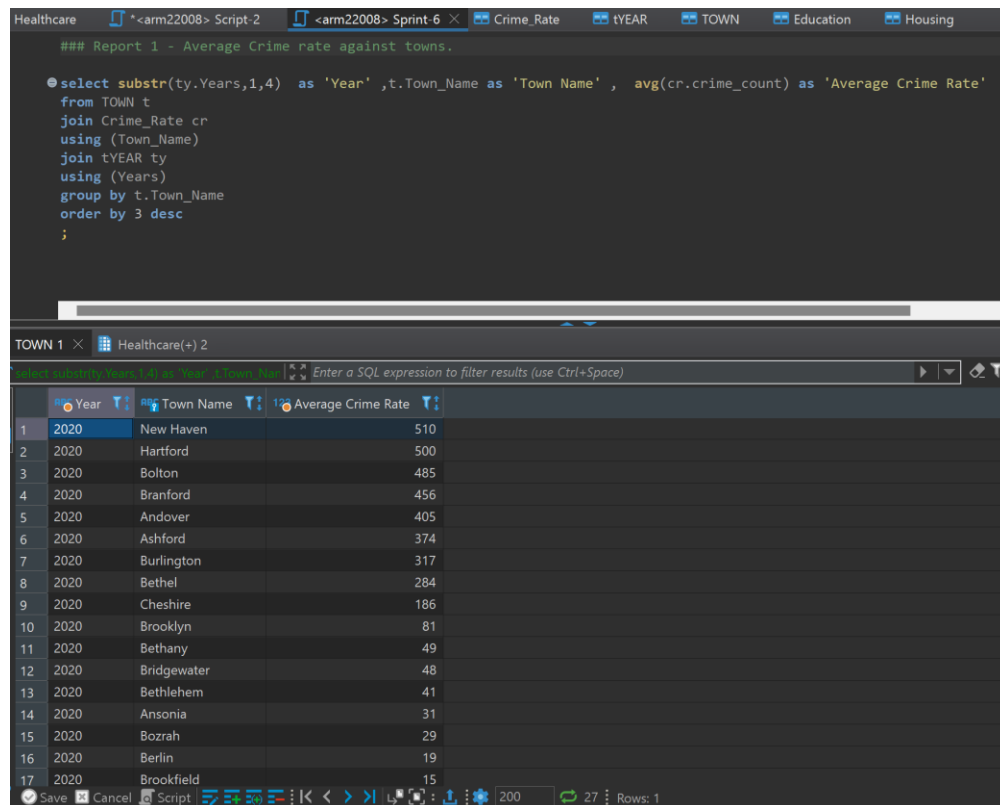
Report-1:

Explanation: We have calculated the average crime rate in town for the year 2020 by joining the tables Crime Rate and the Town. From the results we see that Hartford crime rate stands in 2nd position. This insight can be related to answer our question as to why people are considering leaving Hartford.

Code:

```
select substr(ty.Years,1,4) as 'Year', t.Town_Name as 'Town Name', avg(cr.crime_count) as 'Average Crime Rate'
from TOWN t
join Crime_Rate cr
using (Town_Name)
join tYEAR ty
using (Years)
group by t.Town_Name
order by 3 desc;
```

Output:



The screenshot shows a SQL IDE with a script editor and a results pane. The script editor contains the following SQL query:

```
### Report 1 - Average Crime rate against towns.

select substr(ty.Years,1,4) as 'Year', t.Town_Name as 'Town Name', avg(cr.crime_count) as 'Average Crime Rate'
from TOWN t
join Crime_Rate cr
using (Town_Name)
join tYEAR ty
using (Years)
group by t.Town_Name
order by 3 desc;
```

The results pane displays the output of the query, showing a table with 17 rows and 3 columns: Year, Town Name, and Average Crime Rate. The data is sorted by Average Crime Rate in descending order.

	Year	Town Name	Average Crime Rate
1	2020	New Haven	510
2	2020	Hartford	500
3	2020	Bolton	485
4	2020	Branford	456
5	2020	Andover	405
6	2020	Ashford	374
7	2020	Burlington	317
8	2020	Bethel	284
9	2020	Cheshire	186
10	2020	Brooklyn	81
11	2020	Bethany	49
12	2020	Bridgewater	48
13	2020	Bethlehem	41
14	2020	Ansonia	31
15	2020	Bozrah	29
16	2020	Berlin	19
17	2020	Brookfield	15

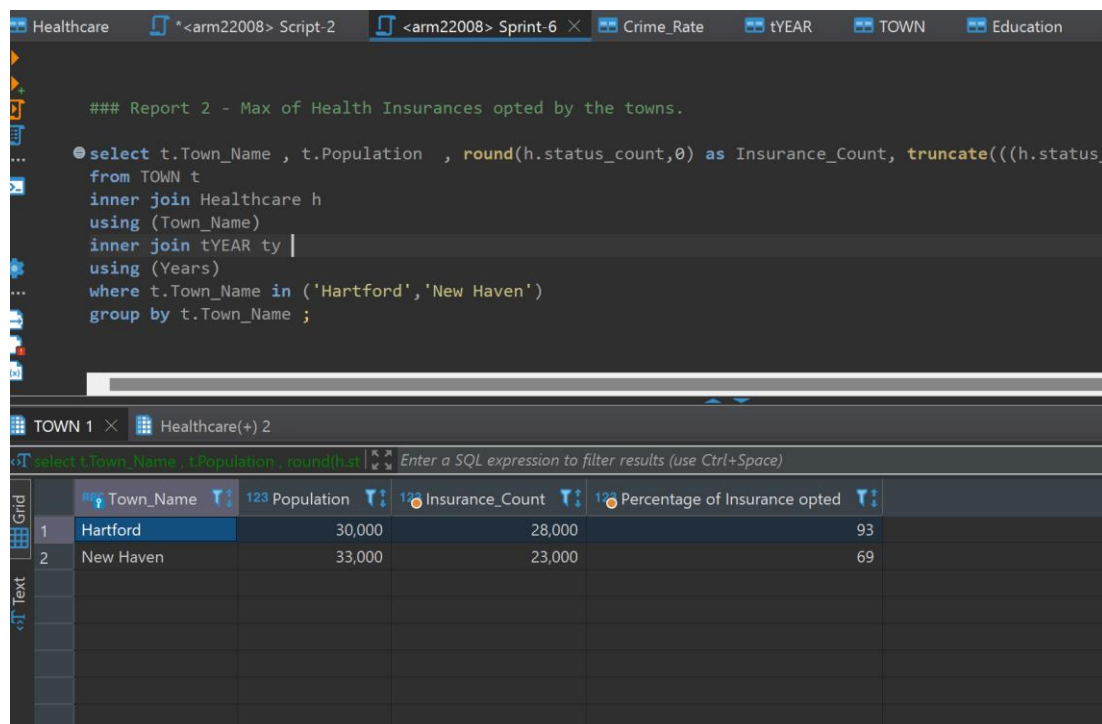
Report-2:

Explanation: We wanted to know the percentage of the population who has opted for the health insurance in Hartford and New Haven. We are choosing these 2 cities as we were trying to find if this is one of the aspects why a lot of people are moving out to Hartford.

Code:

```
select t.Town_Name , t.Population , round(h.status_count,0) as Insurance_Count,  
truncate(((h.status_count / t.Population ) * 100),0) as 'Percentage of Insurance opted'  
from TOWN t  
inner join Healthcare h  
using (Town_Name)  
inner join tYEAR ty  
using (Years)  
where t.Town_Name in ('Hartford','New Haven')  
group by t.Town_Name ;
```

Output:



The screenshot shows a SQL IDE with a query editor and a results grid. The query editor contains the following SQL code:

```
### Report 2 - Max of Health Insurances opted by the towns.  
  
select t.Town_Name , t.Population , round(h.status_count,0) as Insurance_Count, truncate(((h.status_count / t.Population ) * 100),0) as 'Percentage of Insurance opted'  
from TOWN t  
inner join Healthcare h  
using (Town_Name)  
inner join tYEAR ty  
using (Years)  
where t.Town_Name in ('Hartford','New Haven')  
group by t.Town_Name ;
```

The results grid shows the following data:

	Town_Name	Population	Insurance_Count	Percentage of Insurance opted
1	Hartford	30,000	28,000	93
2	New Haven	33,000	23,000	69

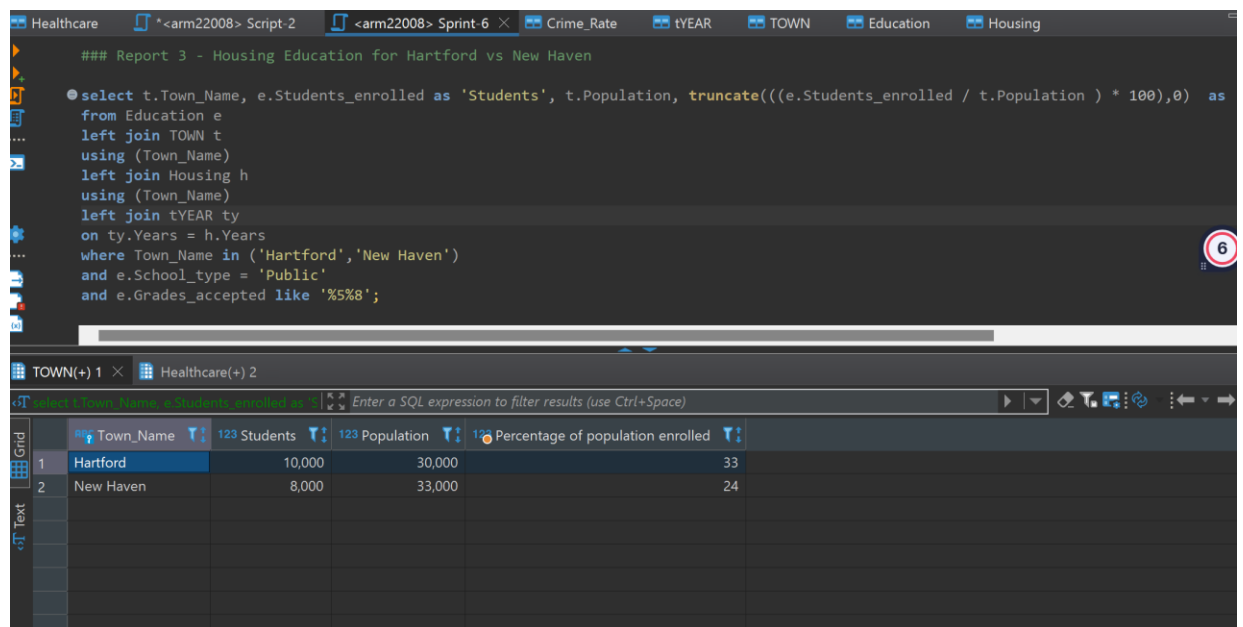
Report-3:

Explanation: Our next focus, was to check the education enrollment in both these cities of Connecticut and to look how the numbers are performing. We found out that a mere 33% and 24% of overall population of students are enrolled in Hartford and New Heaven respectively. This percentage can be evidence that the education is not so good in both these states.

Code:

```
select t.Town_Name, e.Students_enrolled as 'Students', t.Population,
truncate(((e.Students_enrolled / t.Population ) * 100),0) as 'Percentage of population enrolled'
from Education e
left join TOWN t
using (Town_Name)
left join Housing h
using (Town_Name)
left join tYEAR ty
on ty.Years = h.Years
where Town_Name in ('Hartford','New Haven')
and e.School_type = 'Public'
and e.Grades_accepted like '%5%8';
```

Output:



The screenshot shows a SQL IDE with a query editor and a results grid. The query is the same as the one provided in the 'Code' section. The results grid displays the output of the query, showing two rows of data for Hartford and New Haven.

	Town_Name	Students	Population	Percentage of population enrolled
1	Hartford	10,000	30,000	33
2	New Haven	8,000	33,000	24

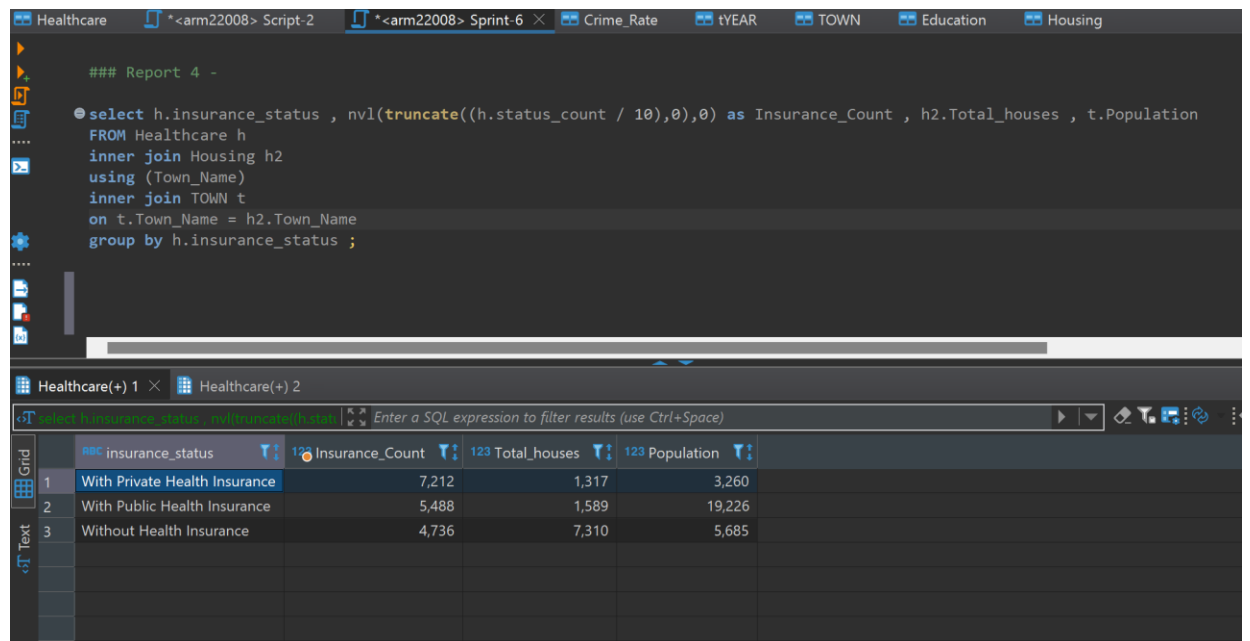
Report-4:

Explanation: In our database, we have data related to the different insurance option available in the state of Connecticut. From the below query we wanted to know what the type of insurance is opted by the population and the number of insurances.

Code:

```
select h.insurance_status , nvl(truncate((h.status_count / 10),0),0) as Insurance_Count ,
h2.Total_houses , t.Population
FROM Healthcare h
inner join Housing h2
using (Town_Name)
inner join TOWN t
on t.Town_Name = h2.Town_Name
group by h.insurance_status ;
```

Output:



The screenshot shows a SQL IDE interface with a query editor and a results grid. The query editor contains the following SQL code:

```
### Report 4 -
select h.insurance_status , nvl(truncate((h.status_count / 10),0),0) as Insurance_Count , h2.Total_houses , t.Population
FROM Healthcare h
inner join Housing h2
using (Town_Name)
inner join TOWN t
on t.Town_Name = h2.Town_Name
group by h.insurance_status ;
```

The results grid displays the following data:

	insurance_status	Insurance_Count	Total_houses	Population
1	With Private Health Insurance	7,212	1,317	3,260
2	With Public Health Insurance	5,488	1,589	19,226
3	Without Health Insurance	4,736	7,310	5,685

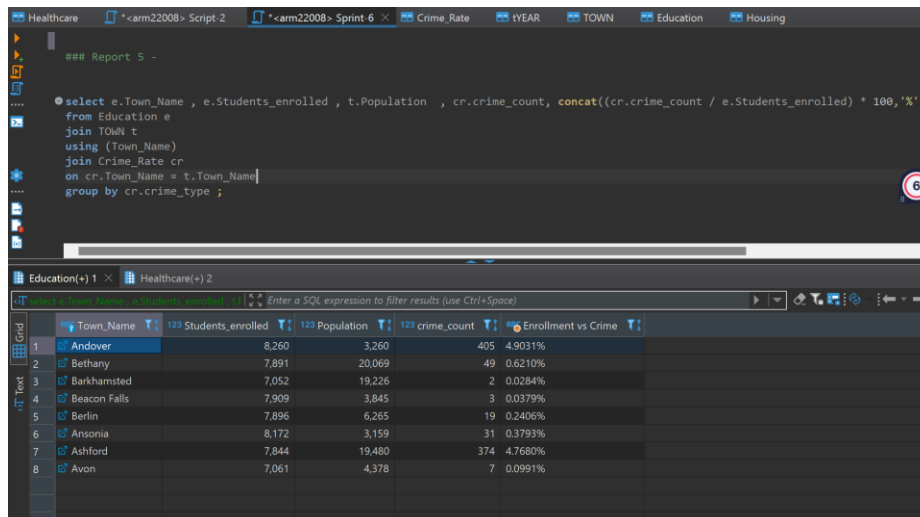
Report-5:

Explanation: The below report talks about the correlation between the education system and the crime count in different towns. With this data, we can provide an insight that the increase in the student enrollment may lead to lesser crime rates.

Code:

```
select e.Town_Name , e.Students_enrolled , t.Population , cr.crime_count,
concat((cr.crime_count / e.Students_enrolled) * 100,'%') as "Enrollment vs Crime"
from Education e
join TOWN t
using (Town_Name)
join Crime_Rate cr
on cr.Town_Name = t.Town_Name
group by cr.crime_type ;
```

Output:



Report 5 -

```
select e.Town_Name , e.Students_enrolled , t.Population , cr.crime_count, concat((cr.crime_count / e.Students_enrolled) * 100,'%')
from Education e
join TOWN t
using (Town_Name)
join Crime_Rate cr
on cr.Town_Name = t.Town_Name
group by cr.crime_type ;
```

Town_Name	Students_enrolled	Population	crime_count	Enrollment vs Crime
Andover	8,260	3,260	405	4.9031%
Bethany	7,891	20,069	49	0.6210%
Barkhamsted	7,052	19,226	2	0.0284%
Beacon Falls	7,909	3,845	3	0.0379%
Berlin	7,896	6,265	19	0.2406%
Ansonia	8,172	3,159	31	0.3793%
Ashford	7,844	19,480	374	4.7680%
Avon	7,061	4,378	7	0.0991%