

Unit 2 Project: Cities and Rents

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Problem

Rents across the U.S. are on the rise while incomes stagnate. It's important for real estate development professionals and government service providers to understand where the biggest need is for housing so they can develop more units and services. With urban areas growing due to service sector jobs, larger cities across the U.S. likely are experiencing the highest rents on average.

Proposed Test

Compare the top 50 cities by U.S. Census data population and compare to Zillow rents in recent quarters, showing cities experiencing the highest rents.

Measurable Outcome

Show how larger cities compare to smaller cities when it comes to average rents. Order by population size.

The analysis found that by grouping all larger than average cities by population (grouped as 1) and comparing to all cities smaller than average (grouped as 0), rents were over \$300 higher for larger sized cities on average.

```
popgroup    avg(rent.rent)
0 1586.8857  1 1899.2000
```

Columns

Rent table: city; rent

Pop table: city; population

CODE

```
SELECT rent.city, rent.rent, pop.population
FROM rent
LEFT JOIN pop ON rent.city = pop.city
ORDER BY pop.population;
```

```
SELECT AVG(population), STDDEV(population), MIN(population), MAX(population)
FROM pop;
```

```
alter table pop
add column popgroup varchar(30);
```

```
UPDATE pop
SET popgroup = case
when population >= 1000000 then 1
when population < 1000000 then 0
End;
```

```
SELECT AVG(rent)
GROUP BY popgroup
FROM pop
```

```
select pop.popgroup, avg(rent.rent) FROM pop
left join rent on rent.city = pop.city
group by pop.popgroup;
```