

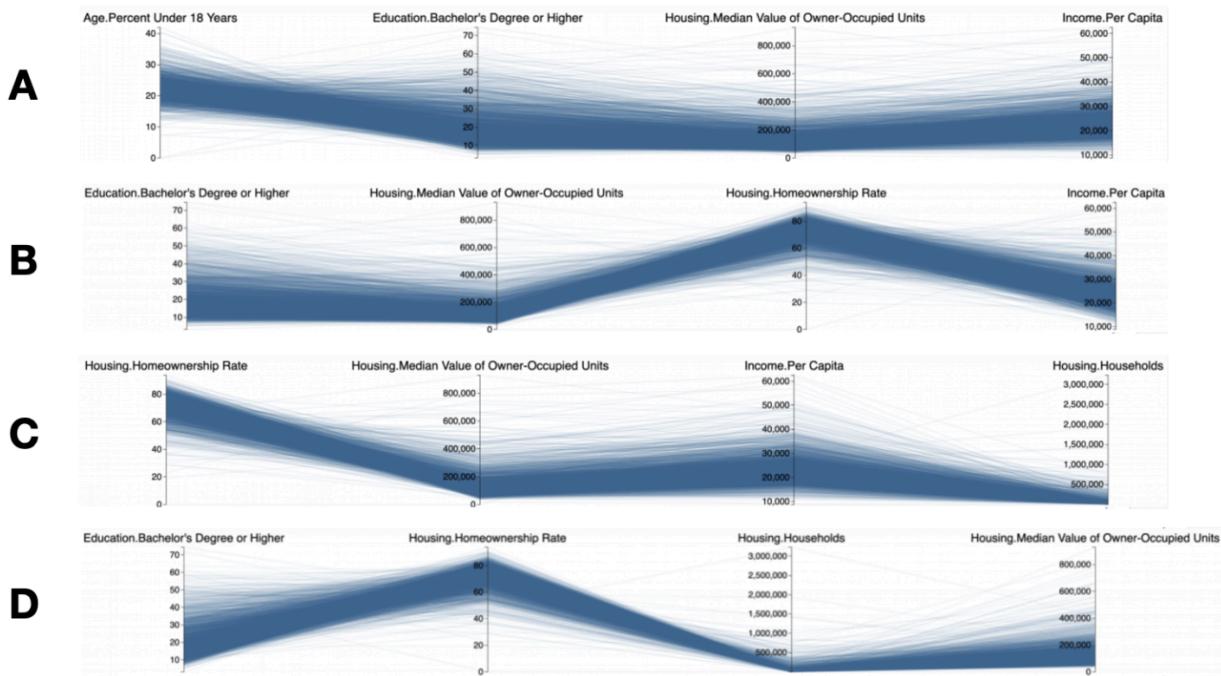
## Analyze - Formative Assessment

Note: You must score above 80% to qualify for the Summative Assessment.

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### **Question 1:**

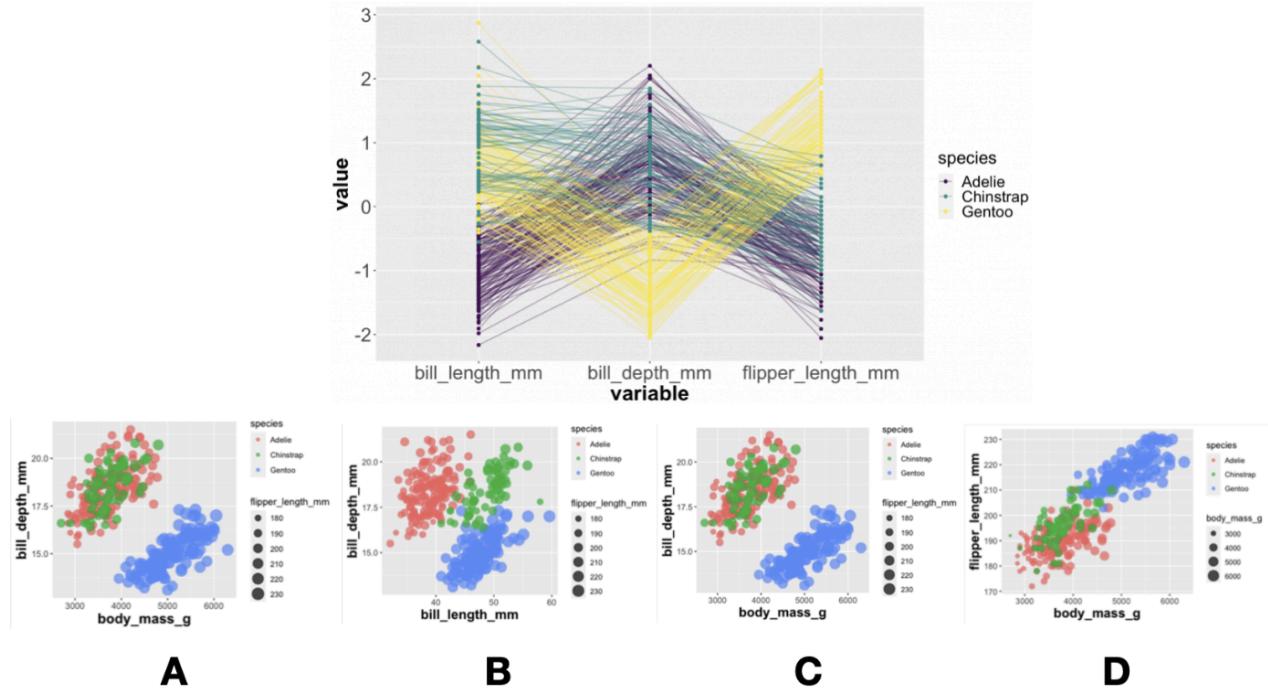
Which of the following charts is the best at answering the question examining the relationship of "Home ownership rate" and the "number of households" in this dataset?



- A
- B
- C
- D

## Question 2:

Which of the scatterplot images is encoded in the following Parallel Coordinates plot?



A

B

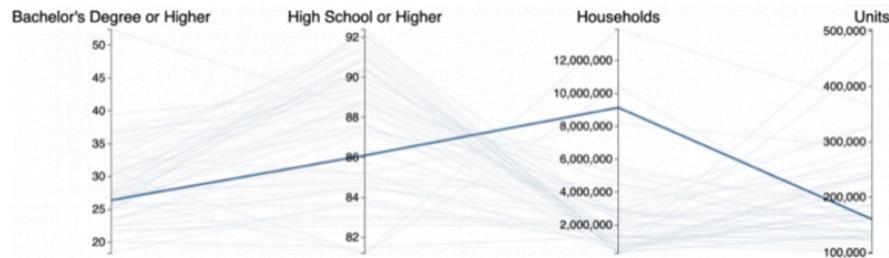
C

D

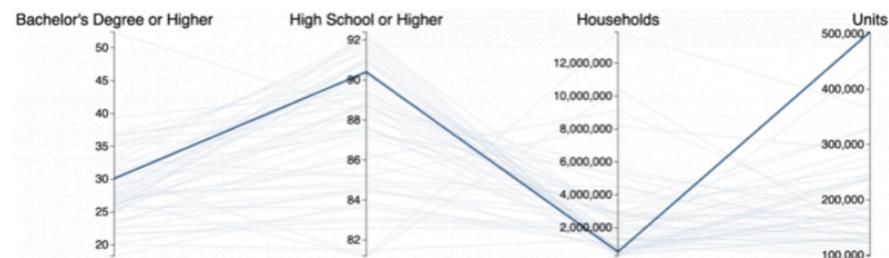
**Question 3:**

Please rank the following charts in descending order according to the Housing "Units."

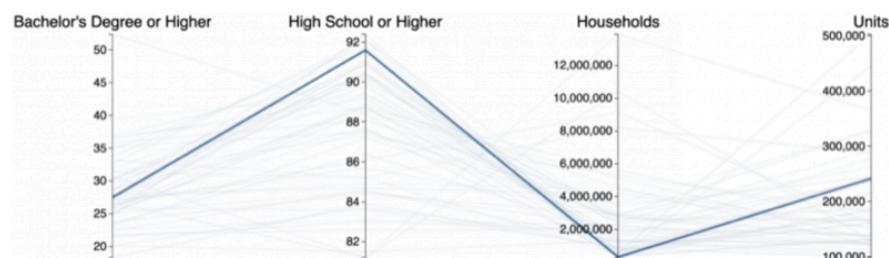
**1**



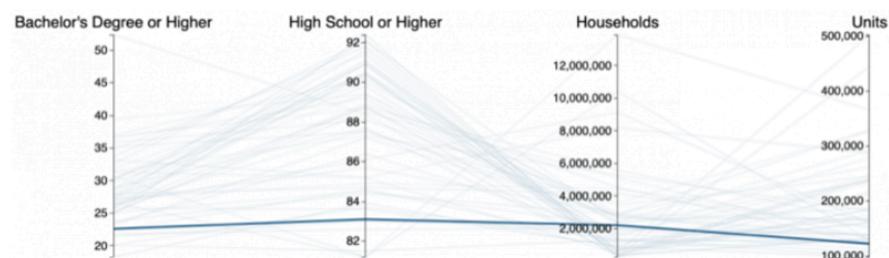
**2**



**3**



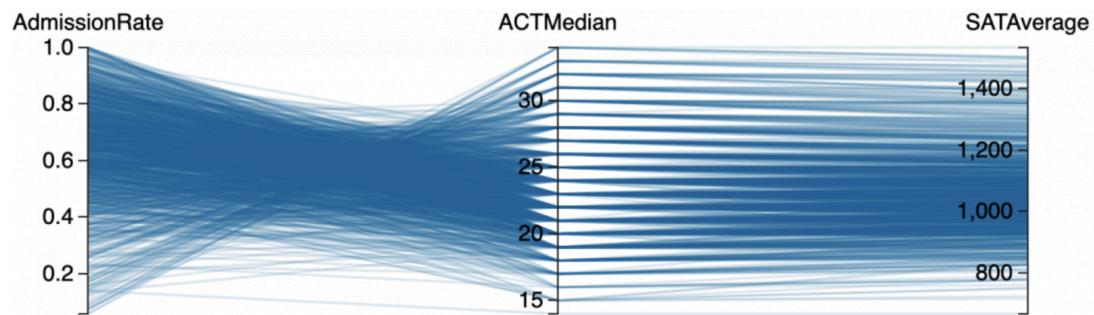
**4**



- 4 > 1 > 3 > 2
- 3 > 1 > 4 > 2
- 2 > 3 > 1 > 4
- 3 > 2 > 1 > 4

#### **Question 4:**

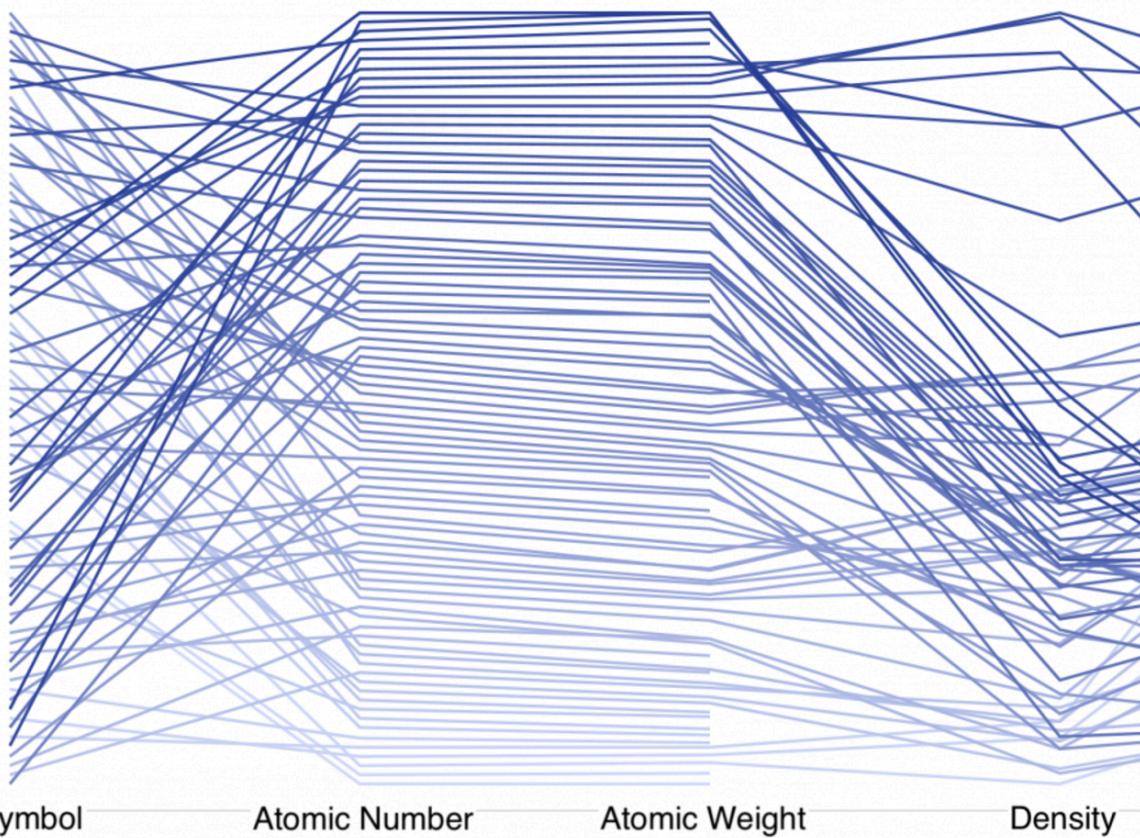
In this parallel coordinates plot, what is the correlation between **ACTMedian** and **SATAverage**?



- They are positively correlated
- They are negatively correlated
- Not sure

#### **Question 5:**

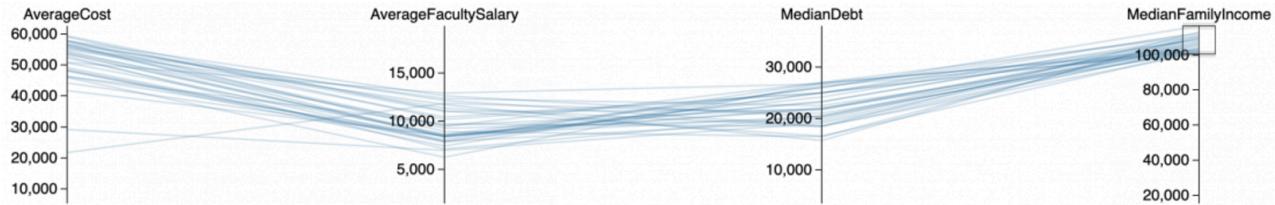
In this parallel coordinates plot, what is the correlation between **Atomic Number** and **Atomic Weight**?



- They are positively correlated
- They are negatively correlated
- Not sure

### Question 6:

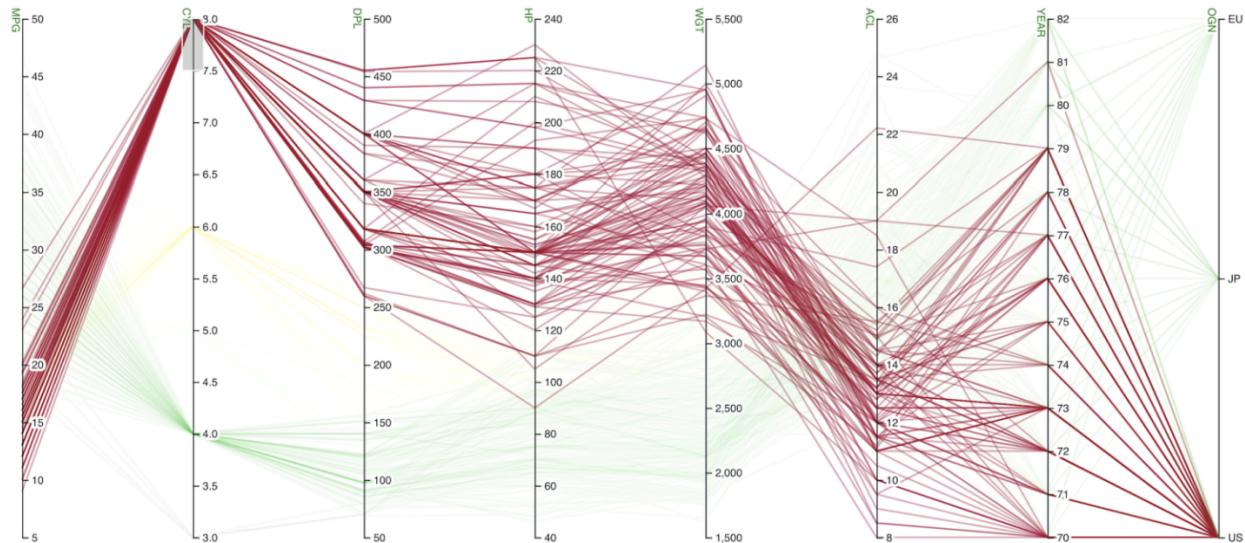
We get the following chart on using filtering to remove rows with Median Family Income less than 100,000. What can we say about the Average Cost of the colleges that the students from those households go to?



- Students from high Median Family Income families go to colleges that have a high Average Cost
- Students from high Median Family Income families go to colleges that have a low Average Cost
- Students from high Median Family Income families have a high Median Debt (greater than 30,000)

### Question 7:

In this parallel coordinates plot of a cars dataset, the user has selected only the cars that have 8 cylinders. Based on reading this chart, what would you say is the range for the HP (Horsepower) of 8-cylinder cars?

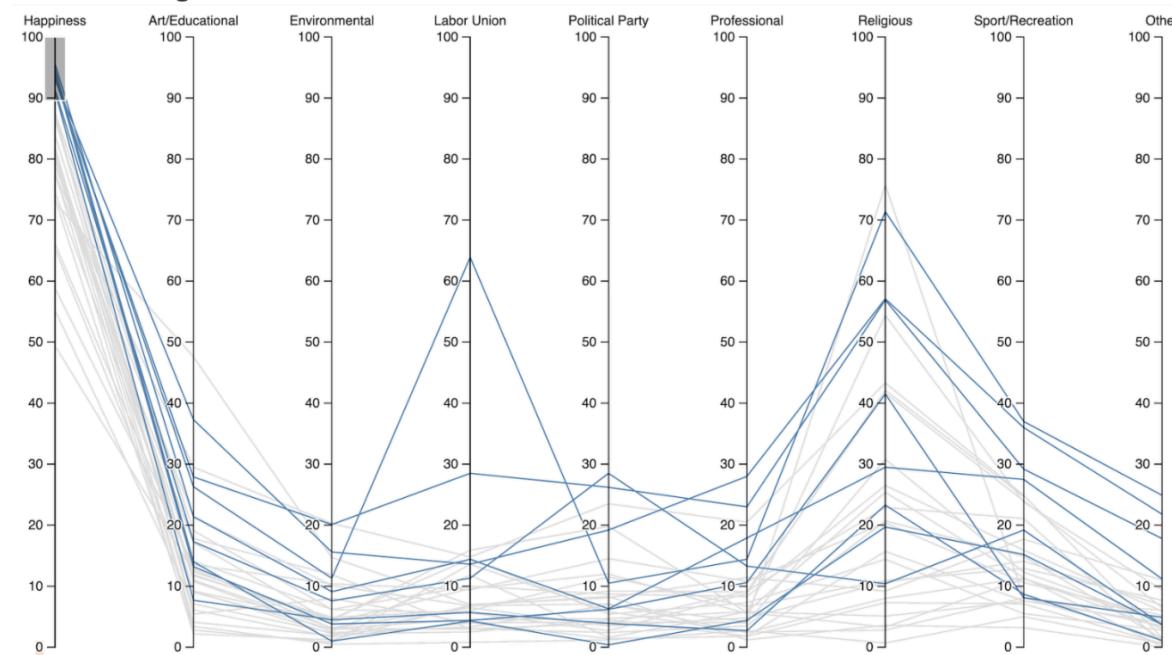


- (0, 240)
- (150, 300)
- (90, 220)
- (50, 500)

### **Question 8:**

In this parallel coordinates plot of happiness metrics in various countries, the user has selected countries shown using the blue polylines.

What is the range of values for the Labor Union variable for the select countries?



- (0, 100)
- (4, 64)
- (0, 28)
- (10, 30)