Lending Club Visualization

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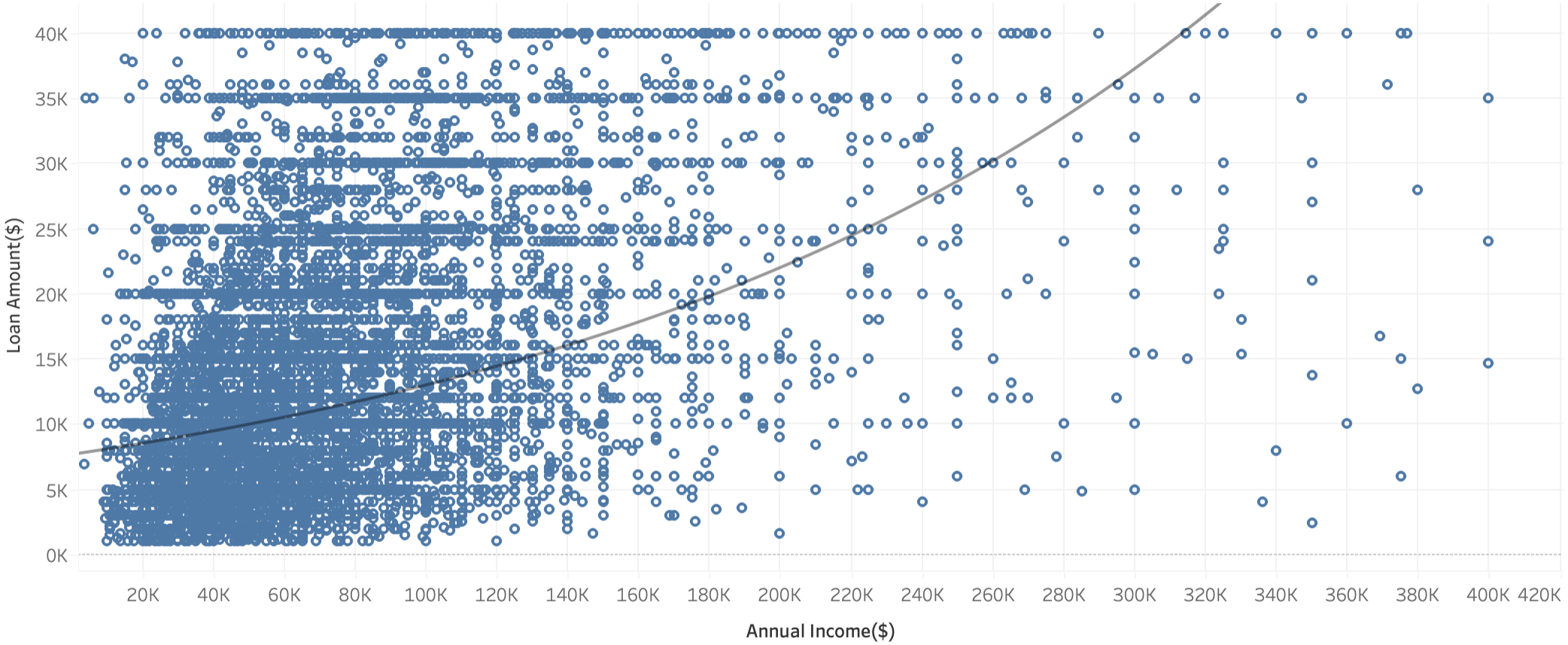
Relationship between annual income and loan amount.

Data Source: Lending Club Loan Data
https://www.kaggle.com/datasets/adarshsng/lending-club-loan-data-csv



This chart focused on borroweres with less than $400,000 and greater than $1,000 in annual income. This graph shows the proportion of loan by home ownership and loan grade. On the x-axis, we can see the annual income amount and on the y-axis we can see the loan amount. Color differentiates each home ownership. Each mark on the stacked bar shows the percentage of the total number of loans in the grade.From this chart, we can conclude that annual income and loan amount is positively correalted, meaning the more annual income a person makes, the more loan amount that person has. In the chart, there is an exponential trendline that shows that relationship.

Relationshp between the total loan amount by borrower's loan purpose and loan term.

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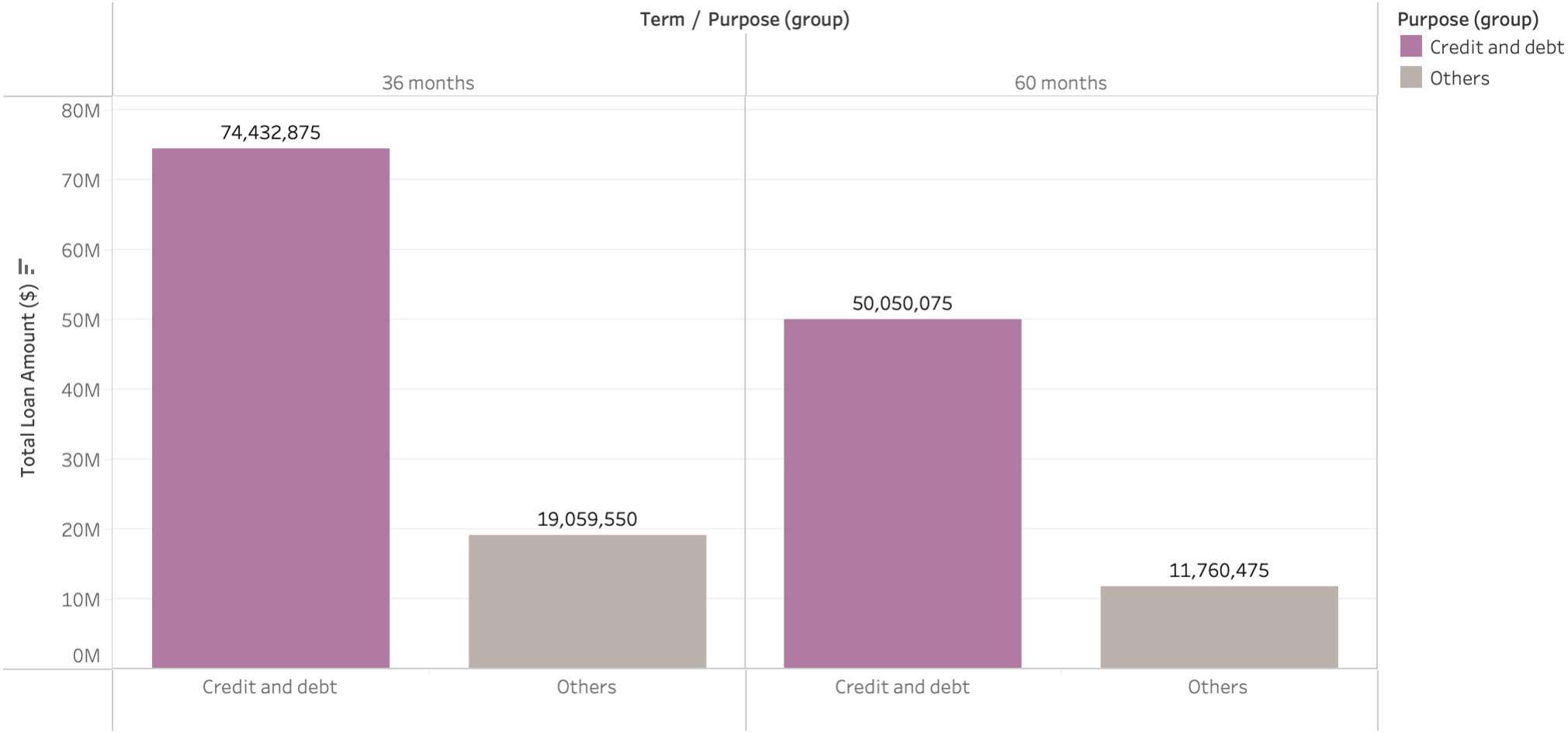

The total loan amount for each purpose was broken down by the loan term. To differentiate the purpose, I used group function. The total loan amount for each term and purpose was labeled.On the x-axis, each represents the term and purpose of the loan and on the y-axis we can see the total loan amount. From the purpose perspective, the purpose for Credit and debt was higher than Others for both 36 months and 60 months. From the Term perspective, 36 months term had higher total loan amount than in 60 months in both purposes.

Proportion of loans by home ownership and loan grade.

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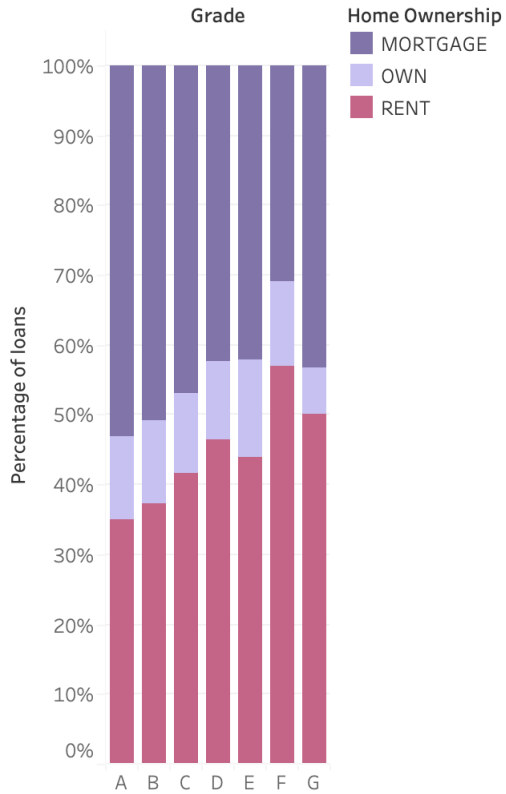

This graph shows the proportion of loan by home ownership and loan grade. On the x-axis, each represents the loan grade and on the y-axis we can see the percentage of loans. Color differentiates each home ownership. Each mark on the stacked bar shows the percentage of the total number of loans in the grade.

The average loan amount by each state (in the U.S. excluding, AK and HI).

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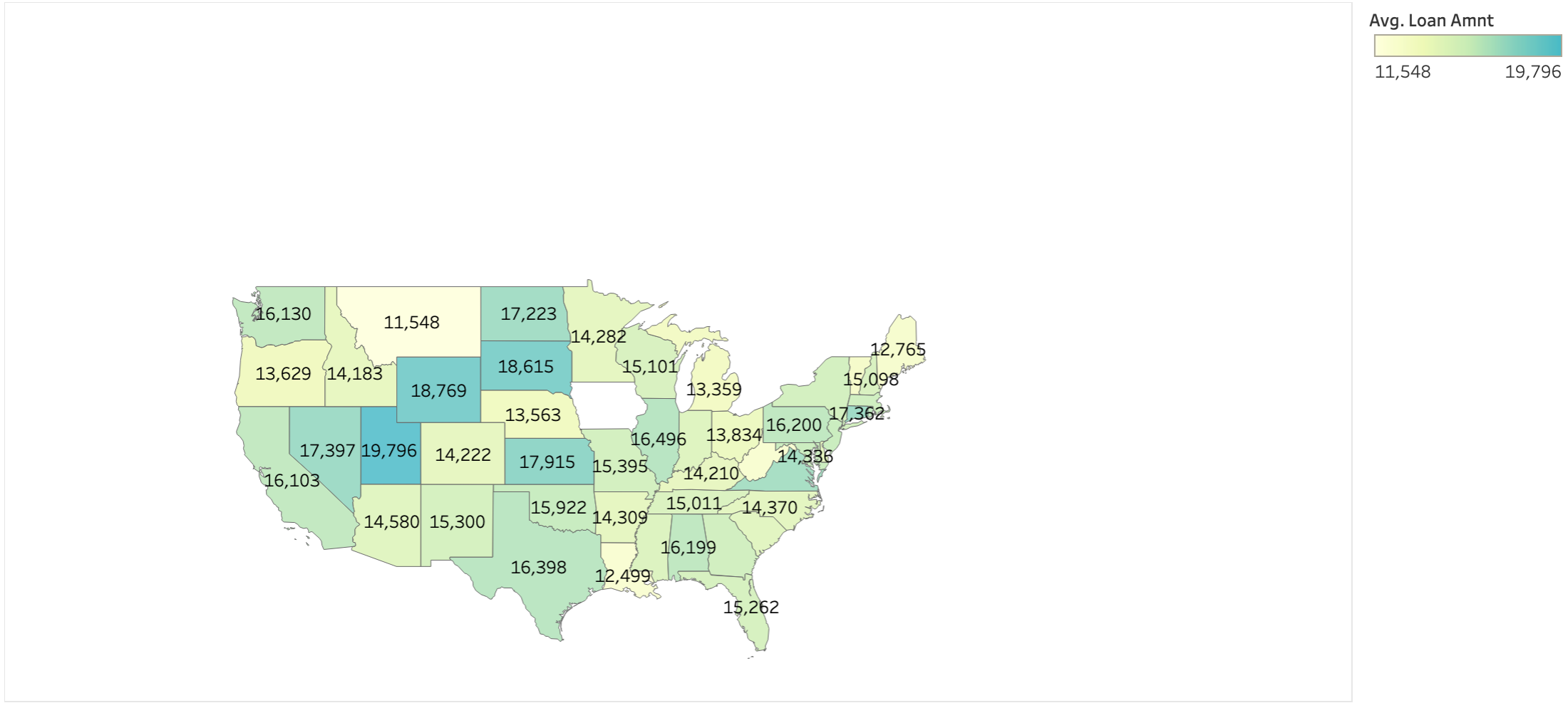

With Longitude and Latitude, I created the map and filtered only in the states in the U.S. (excluding AK and HI). Color shows the average loan amount and the average loan amount was labeled in each state. From this chart, we can see that UT has issued the highest average loan amount, Montana (MT) has issued the lowest amount and and could not find the information about Iowa.

The change of Interest Rate by issued time, Grade (except for F and G) and Term length.

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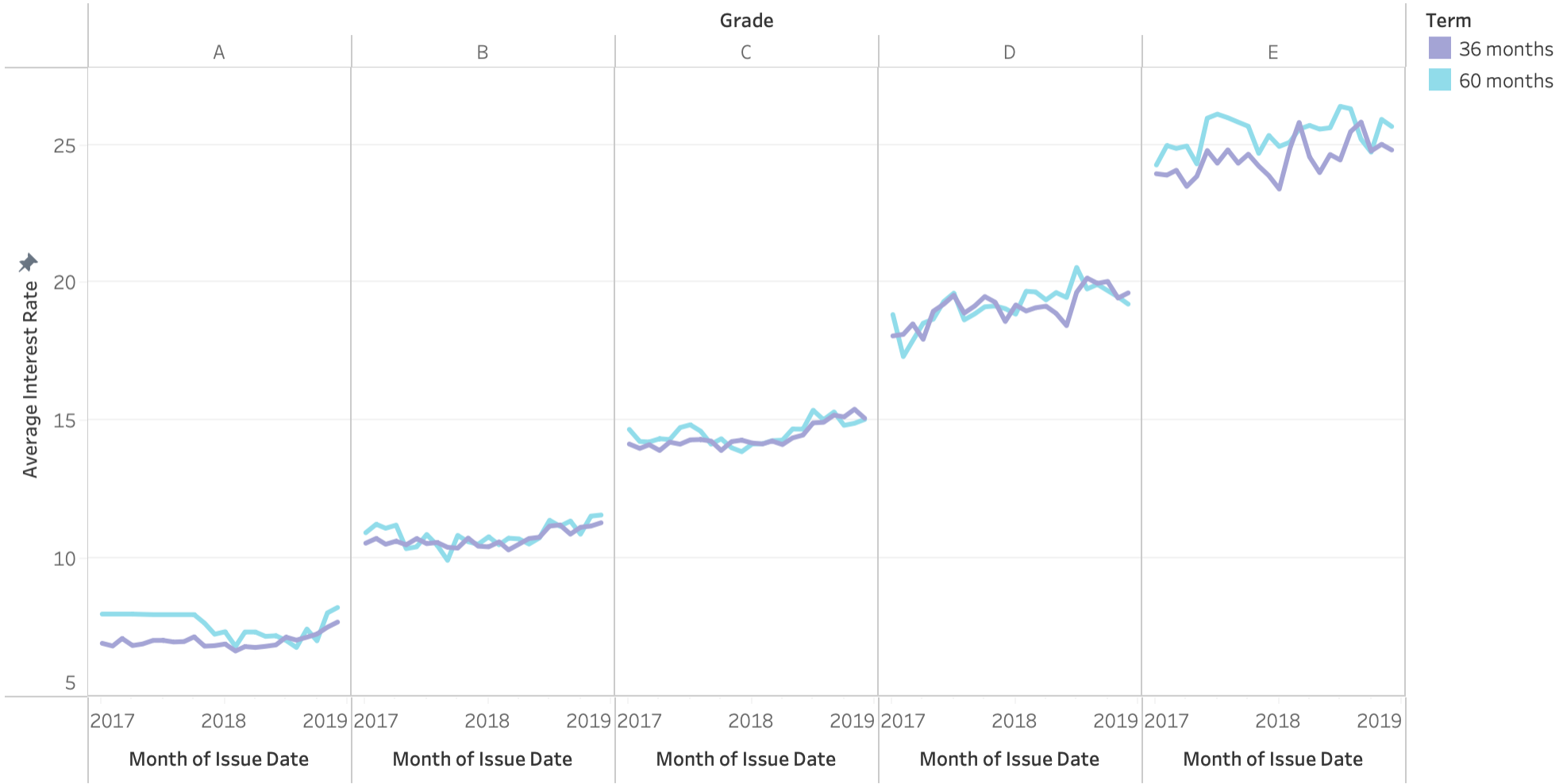

This graph shows the trend of the avergae interest rate for month of issue date. The color differentiates the term 36months and 60 months. From the filter on Grade, we can keep the data A,B,C,D, and E. On the x-axis, we can see the Grade (above) and Month of Issue Date (below). The average interest rate is shown on the y-axis.