# Lasso-Ridge-House-Prediction

> This programming assignment wherein you have build a Lasso-Ridge regression model for the prediction of house pricing.

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<!-- You can include any other section that is pertinent to your problem -->

## General Information

A US-based housing company named Surprise Housing has decided to enter the Australian market. The company uses data analytics to purchase houses at a price below their actual values and flip them on at a higher price.

The company wants to know: i) Which variables are significant in predicting the price of a house. ii) How well those variables describe the price of a house

<!-- You don't have to answer all the questions - just the ones relevant to your project. -->

## Conclusions

Though the model performance by Ridge Regression was better in terms of R2 values of Train and Test but we use Lasso, since it brings and assigns a zero value to insignificant features, enabling us to choose the predictive variables.

Always uses the simple and robust model for better performance on real world data.

#### Higher values of +ive co efficients suggest a increase in sale value.

#### Few features for positive co efficient are:-

| Feature | Description |

| --- | --- |

| GrLivArea | Above grade (ground) living area square feet |

| OverallQual | Rates the overall material and finish of the house |

| OverallCond | Rates the overall condition of the house |

| TotalBsmtSF | Total square feet of basement area |

| GarageArea |Size of garage in square feet |

#### Higher values of -ive co efficients suggest a decrease in sale value.

#### Few features for negative co efficient are:-

| Feature | Description |

| --- | --- |

| BuiltOrRemodelAge | Age of the property at the time of seeling |

| MSSubClass | Identifies the type of dwelling involved in the sale |

### Whenever the predicted sale price is lower than the market value, you can plan your purchase of property.

<!-- You don't have to answer all the questions - just the ones relevant to your project. -->

## Technologies Used

- Pandas

- NumPy

- Matplotlib

- Seaborn

- statsmodels

- sklearn

- etc

<!-- As the libraries versions keep on changing, it is recommended to mention the version of library used in this project -->

## Contact

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Please feel free to contact me! Happy Coding !!