Iowa House Price

- **train.csv - the training set**: The train dataset contains 80 variables & over 1000 observations.

- **test.csv - the test set**: test data contains 79 variables & over 1000 observations on Iowa clty real estate

Attributes description:

- MSSubClass: The building class
- MSZoning: The general zoning classification
- LotFrontage: Linear feet of street connected to property
- LotArea: Lot size in square feet
- Street: Type of road access
- Alley: Type of alley access
- LotShape: General shape of property
- LandContour: Flatness of the property
- Utilities: Type of utilities available
- LotConfig: Lot configuration
- LandSlope: Slope of property
- Neighborhood: Physical locations within Ames city limits
- Condition1: Proximity to main road or railroad
- Condition2: Proximity to main road or railroad (if a second is present)
- BldgType: Type of dwelling
- HouseStyle: Style of dwelling
- OverallQual: Overall material and finish quality
- OverallCond: Overall condition rating
- YearBuilt: Original construction date
- YearRemodAdd: Remodel date
- RoofStyle: Type of roof
- RoofMatl: Roof material
- Exterior1st: Exterior covering on house
- Exterior2nd: Exterior covering on house (if more than one material)

- MasVnrType: Masonry veneer type
- MasVnrArea: Masonry veneer area in square feet
- ExterQual: Exterior material quality
- ExterCond: Present condition of the material on the exterior
- Foundation: Type of foundation
- BsmtQual: Height of the basement
- BsmtCond: General condition of the basement
- BsmtExposure: Walkout or garden level basement walls
- BsmtFinType1: Quality of basement finished area
- BsmtFinSF1: Type 1 finished square feet
- BsmtFinType2: Quality of second finished area (if present)
- BsmtFinSF2: Type 2 finished square feet
- BsmtUnfSF: Unfinished square feet of basement area
- TotalBsmtSF: Total square feet of basement area
- Heating: Type of heating
- HeatingQC: Heating quality and condition
- CentralAir: Central air conditioning
- Electrical: Electrical system
- 1stFlrSF: First Floor square feet
- 2ndFlrSF: Second floor square feet
- LowQualFinSF: Low quality finished square feet (all floors)
- GrLivArea: Above grade (ground) living area square feet
- BsmtFullBath: Basement full bathrooms
- BsmtHalfBath: Basement half bathrooms
- FullBath: Full bathrooms above grade
- HalfBath: Half baths above grade
- Bedroom: Number of bedrooms above basement level
- Kitchen: Number of kitchens
- KitchenQual: Kitchen quality
- TotRmsAbvGrd: Total rooms above grade (does not include bathrooms)
- Functional: Home functionality rating
- Fireplaces: Number of fireplaces
- FireplaceQu: Fireplace quality
- GarageType: Garage location
- GarageYrBlt: Year garage was built

- GarageFinish: Interior finish of the garage

- GarageCars: Size of garage in car capacity

- GarageArea: Size of garage in square feet

- GarageQual: Garage quality

- GarageCond: Garage condition

- PavedDrive: Paved driveway

- WoodDeckSF: Wood deck area in square feet

- OpenPorchSF: Open porch area in square feet

- EnclosedPorch: Enclosed porch area in square feet

- 3SsnPorch: Three season porch area in square feet

- ScreenPorch: Screen porch area in square feet

- PoolArea: Pool area in square feet

- PoolQC: Pool quality

- Fence: Fence quality

- MiscFeature: Miscellaneous feature not covered in other categories

- MiscVal: $Value of miscellaneous feature

- MoSold: Month Sold

- YrSold: Year Sold

- SaleType: Type of sale

- SaleCondition: Condition of sale

- SalePrice - the property's sale price in dollars. This is the target variable that you're trying to predict.

Problem:

Given the attributes of the data sets (train, test), you've to predict the sale price of house in Iowa state of the USA. You can apply any dimensionality reduction method & dummify categorical variables to build a robust model.