|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Expectation** | **Conclusion** | **Graph** |
| MSSubClass | High | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\MSSubClass Count(Id) vs Sum(SalePrice).png |
| MSZoning | High | Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\MSZoning Count(Id) vs Sum(SalePrice).png |
| LotFrontage | Low | Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\LotFrontage.png |
| LotArea | Medium | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\LotArea.png |
| Street | Low | Very low | N/A |
| Alley | Low | Low | N/A |
| LotShape | Low | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\LotShape Count(Id) vs Sum(SalePrice).png |
| LandContour | Low | Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\LandContour !=Lvl Count(Id) vs Sum(SalePrice).png  Where LandContour != Level, Contour *does* affect house price, but is not significant since ~90% of houses are level. |
| Utilities | Medium | Very low | N/A (only 1 house is not AllPub) |
| LotConfig | Low | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\LotConfig Count(Id) vs Sum(SalePrice).png |
| LandSlope | Medium | Very low | N/A (90% have Gentle slope) |
| Neighborhood | High | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\Neighborhood Count(Id) vs Sum(SalePrice) (2).png |
| Condition1 | Medium | Very low | N/A (Almost 90% are Normal) |
| Condition2 | Medium | Very low | N/A (Almost 100% are Normal) |
| BldgType | High | Very low | N/A (Almost 90% are 1Fam) |
| HouseStyle | High | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\HouseStyle Count(Id) vs Sum(SalePrice).png |
| OverallQual | High | High | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\OverallQual Count(Id) vs Sum(SalePrice).png  C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\OverallQual.png |
| OverallCond | High | Medium/Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\OverallCond.png  C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\OverallCond !=5 Count(Id) vs Sum(SalePrice).png    The above graph have houses rated 5 removed.  Houses rated 3 are significantly lower priced than houses rated 9.  Variable is less significant as over 50% of houses are rated 5. |
| YearBuilt | Medium | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\YearBuilt.png |
| YearRemodAdd | Low | Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\YearRemodAdd.png |
| RoofStyle | Low | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\RoofStyle Count(Id) vs Sum(SalePrice).png |
| RoofMatl | Low | Very low | N/A (Almost 100% of houses have CompShg) |
| Exterior1st | Medium | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\Exterior1st Count(Id) vs Sum(SalePrice).png |
| Exterior2nd | Medium | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\Exterior2nd Count(Id) vs Sum(SalePrice).png |
| MasVnrType | Low | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\MasVnrType Count(Id) vs Sum(SalePrice).png |
| MasVnrArea | Low | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\MasVnrArea.png |
| ExterQual | Medium | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\ExterQual Count(Id) vs Sum(SalePrice).png    Graph is not linear, showing moderate correlation. |
| ExterCond | Medium | Very low | N/A (90% of houses are average/typical) |
| Foundation | Medium | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\Foundation Count(Id) vs Sum(SalePrice).png    PConc houses are significantly higher priced. |
| BsmtQual | Low | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BsmtQual Count(Id) vs Sum(SalePrice).png    Houses rated Good are significantly higher priced. |
| BsmtCond | Medium | Very low | N/A (90% of houses are rated average/typical) |
| BsmtExposure | Low | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BsmtExposure Count(Id) vs Sum(SalePrice).png |
| BsmtFinType1 | Low | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BsmtFinType1 Count(Id) vs Sum(SalePrice).png    Houses rated GLQ are significantly higher priced. |
| BsmtFinSF1 | Low | High | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BsmtFinSF1.png |
| BsmtFinType2 | Low |  | N/A (90% of houses are rated Unf) |
| BsmtFinSF2 | Low | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BsmtFinSF2.png |
| BsmtUnfSF | Low | Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BsmtUnfSF.png |
| TotalBsmtSF | Medium | High | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\TotalBsmtSF.png |
| Heating | Medium | Very low | N/A (Almost 100% of houses are rated GasA) |
| HeatingQC | Medium | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\HeatingQC Count(Id) vs Sum(SalePrice).png |
| CentralAir | High | Very low | N/A (90% of houses have air conditioning) |
| Electrical | Low | Very low | N/A (90% of houses are rated SBrkr) |
| 1stFlrSF | High | High | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\1stFlrSF.png |
| 2ndFlrSF | High | High | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\2ndFlrSF.png |
| LowQualFinSF | Low | Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\LowQualFinSF.png  Generally houses with LowQualFinSF are lower priced. |
| GrLivArea | High | Very high | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\GrLivArea.png |
| BsmtFullBath | Low | Very low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BsmtFullBath Count(Id) vs Sum(SalePrice).png |
| BsmtHalfBath | Low | Very low | N/A (Over 90% of houses are rated 0) |
| FullBath | Low | Medium | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\FullBath.png  C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\FullBath Count(Id) vs Sum(SalePrice).png    Houses with more bathrooms tend to be higher priced. |
| HalfBath | Low | Low | N/A |
| BedroomAbvGr | Medium | Medium/Low | C:\Users\Owner\Documents\Uni Year 1\CE101\Sprint 3\BedroomAbvGr Count(Id) vs Sum(SalePrice).png    Houses with more bedrooms tend to be higher priced. |
| KitchenAbvGr | Low | Low |  |
| KitchenQual | Medium |  |  |
| TotRmsAbvGrd | Medium | Medium |  |
| Functional | Low |  |  |
| Fireplaces | Low | Low |  |
| FireplaceQu | Low |  |  |
| GarageType | Medium |  |  |
| GarageYrBlt | Low | Low |  |
| GarageFinish | Low |  |  |
| GarageCars | High | Medium |  |
| GarageArea | High | Medium |  |
| GarageQual | Medium |  |  |
| GarageCond | Medium |  |  |
| PavedDrive | Low |  |  |
| WoodDeckSF | Low | Low |  |
| OpenPorchSF | Low | Low |  |
| EnclosedPorch | Low | Low |  |
| 3SsnPorch | Low | Very low |  |
| ScreenPorch | Low | Very low |  |
| PoolArea | Medium | Low |  |
| PoolQC | Low |  |  |
| Fence | Low |  |  |
| MiscFeature | Low |  |  |
| MiscVal | Medium | Very low |  |
| MoSold | Low | Very low |  |
| YrSold | Low | Very low |  |
| SaleType | Low |  |  |
| SaleCondition | Low |  |  |