

1. Read Availability.csv. This is the data corresponding to AWS (Amazon Web Services) spot instance (<https://aws.amazon.com/ec2/spot/>). Your chance for retaining a spot (availability) generally increases when you bid with a higher price
2. Visualize the relationship between Bid Price and Availability using scatter plot
3. Check the correlation between Bid Price and Availability
4. Do a Training-Test Split
5. Build a linear model for predicting Availability using Bid price
6. Check the R^2 and p values for goodness of fit
7. Predict the availability for test data and compare with actual availability
8. Repeat from Step 2 till Step 7 using Spot price as independent variable (IDV)
9. Develop multiple linear regression model with 2 IDVs and check the model performance
10. Do you see any improvement in performance when you build a non-linear model? Justify with a business reasoning