1. Techniques:
    a. Plotting: Scatter plot (2D, 3D, Pair plot, PDF, CDF, box-plots, violin plots, Contour plots)
    Refer: https://seaborn.pydata.org/generated/seaborn.violinplot.html
    b. Probability and Stats:
        i. Counts, mean, std-dev, median, percentiles, IQR
        ii. Distributions & skewness
        iii. Correlations
        iv. Hypothesis testing
    c. Visualizing High Dimensional data: PCA, t-SNE
    d. Model based: Rule based, Linear and logistic regression, Feature importance, Feature collinearity.
    e. Cluster analysis.
2. Questions [Sherlock holmes]
    a. Varies widely based on the dataset and problem being solved.
    b. ART vs Science, {Practice, Practice, Practice}
    c. Always look at the raw data and not just the aggregate numbers.
    d. High level stats:
        i. Number of data points & features.
        ii. Imbalance in labels for classification.
        iii. Distribution (skewness) of y_i for regression.
    e. Feature wise analysis:
        i. Categorical feature: distribution of categories
        ii. Real-valued: distribution of the feature.
        iii. Missing values & imputation.
        iv. Outliers in feature values.
    f. Feature vs output
        i. Correlation
        ii. P(y_i=1|f_j=k)
        iii. Build a model with just one feature.
    g. What other features might work well?
        i. Group-by + count on raw data.
        ii. Binning features using Decision Trees
        iii. Interaction variables using Decision Trees.
        iv. Mathematical transforms: log, exp, sqrt, ^2, box-cox
        v. Normalization, Standardization, one-hot encoding
        vi. Matrix factorization based features.
        vii. Autoencoder based features.
        viii. Clustering of features
        ix. Different encodings: Word2Vec, TF-IDF etc
    h. High dimensional viz:
        i. Are there clusters of points in a region where we are performing badly.
        ii. Why I am observing more error while classifying class_i and class_j?

iii. What types of examples are messing up my model?
Refer:
https://www.google.com/search?q=t+SNE+for+model+diagnosis&safe=active&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjDopr0mIjhAhUBPY8KHZIlBdgQ_AUIDygC&biw=1309&bih=725#imgrc=WMgzF6Rp-381yM:

https://cs.stanford.edu/people/karpathy/cnnembed/cnn_embed_1k.jpg

https://lvdmaaten.github.io/tsne/

3. EDA on
    a. Text data: word counts, P(y_i|w_j) like in Naive Bayes, linear models and feature importance.
    b. Time-series data: repetitions, fourier transforms, moving averages.
    Refer:
    https://image.slidesharecdn.com/timeseriesrtalk-160329213057/95/time-series-analysis-fpp-package-2-638.jpg?cb=1459287213
    c. Image data: CNN featurizations + tSNE+ look at the raw images.