1.A- Least Square Error

2. **A- Linear regression is sensitive to outliers**

3.**B-Negative**

4.**B- Correlation**

5.**C-Low bias and high variance**

6.**B-Predictive model**

7.**D- Regularization**

8.**D- SMOTE**

9.**A-TPR and FPR**

10.**B-False**

11.**B-Apply PCA to project high dimensional data**

12 **B- It becomes slow when number of features is very large.**

This process of explicitly penalizing complex hypotheses is called regularization. *Regularization* strategies is designed to prevent models from overfitting by making changes or defining constraints for the model parameters or the performance function.

Ridge Regression (L2 Regularization)*:*

Lasso Regression (L1 Regularization)*:*

Elastic Net Regression*:*