**Interview Questions**

**1. What is Normalization & Standardization, and how is it helpful?**

* **Normalization**: Rescaling the values to a range of [0, 1] or [-1, 1]. Useful when features have different units or scales. It ensures that all features contribute equally to the distance calculations.
* **Standardization**: Transforming the data to have a mean of 0 and a standard deviation of 1. This is beneficial when the data follows a Gaussian distribution, making it more interpretable for algorithms assuming normality.

#### 2. What techniques can be used to address multicollinearity in multiple linear regression?

* **Variance Inflation Factor (VIF)**: Calculate VIF to identify highly correlated predictors.
* **Remove variables**: Drop one of the highly correlated features.
* **Regularization**: Use Lasso or Ridge regression, which can help mitigate the impact of multicollinearity.