**HEMOSCEDASTICITY**

Hemoscedasticity known as homogeneity of variance it means that the variance of the errors in a regression model is constant across all levels of the independent variables. It implies that the spread of the residuals should be roughly the same throughout the range of predicted values.

* The scatter of residuals should be roughly uniform and should not exhibit any clear pattern or trend when plotted against the predicted values
* When you create a scatterplot of the residuals against the predicted values from your regression model you should not
* see any shape or any other pattern.
* The points should be randomly scattered around zero. The variance of the error is consisting across different levels of the independent variables.

**HETEROSCEDASTICITY**

Heteroscedasticity is identified by examining plots of residuals or through formal statistical tests. Its some general guidelines and observations that can help you detect heteroscedasticity.

**Residual plot pattern:**

When you create a scatterplot of the residuals against the predicted values or against an independent variable look for a clear pattern.

Heteroscedasticity observe a shape and where the spread of residuals widens or narrows systematically as you move along the X-axis.

**Variance test:**

It can use statistical test or white test to formally test for heteroscedasticity. These tests examine whether there is a significant relationship between the residuals and one or more independent variables. A significant result suggests the presence of heteroscedasticity.

**Eyeballing data:**

Variable of the dependent variable increases or decreases systematically across the range of an independent variable this could be an indication of heteroscedasticity.

**Weighted residuals:**

Heteroscedasticity is an ordinary least square may not be the best method. If the weights show a systematic pattern, it can indicate heteroscedasticity.

**Subject matter knowledge:**

Domain knowledge or a deep understanding of the data can also help identify heteroscedasticity. If that the spread of the residuals should be consist but see clear patterns in the data it could suggest heteroscedasticity.