Interview Questions

1. What is the difference between precision and recall?

- **Precision:** The ratio of true positive predictions to the total positive predictions made by the model. It measures the accuracy of positive predictions.
- **Recall:** The ratio of true positive predictions to the total actual positives. It measures the model's ability to find all the relevant cases.

2. What is cross-validation, and why is it important in binary classification?

- **Cross-validation**: A technique to evaluate the predictive performance of a model by dividing the dataset into multiple subsets, training the model on some subsets, and validating it on others.
- **Importance**: It helps ensure that the model is not overfitting and provides a more reliable estimate of model performance across different data splits, enhancing generalization.