# Observations

**Gaussian Naive Bayes**

* **Good performance** in terms of accuracy (0.93) and F1-score (0.92).
* Very strong at identifying **non-purchasing customers** (recall = 0.97) and maintaining high precision for both classes.

**K-Nearest Neighbors (k=3)**

* Performed well with **accuracy of 0.91** .
* **Best at detecting purchasers** (recall = 0.89) while maintaining good precision for non-purchasers (0.94).

**Decision Tree**

* **Lowest accuracy (0.84)** among the three.
* Performance dropped especially for predicting **purchasers** (recall = 0.76, precision = 0.80).

**Conclusion**

* **Best/Recommended Model:** **Gaussian Naive Bayes** ,it achieves the highest accuracy and F1-scores.
* **KNN (k=3)** is the second-best model with slightly better recall for purchasers.
* **Least effective:** **Decision Tree** showed comparatively lower performance and may require further tuning to improve its accuracy.