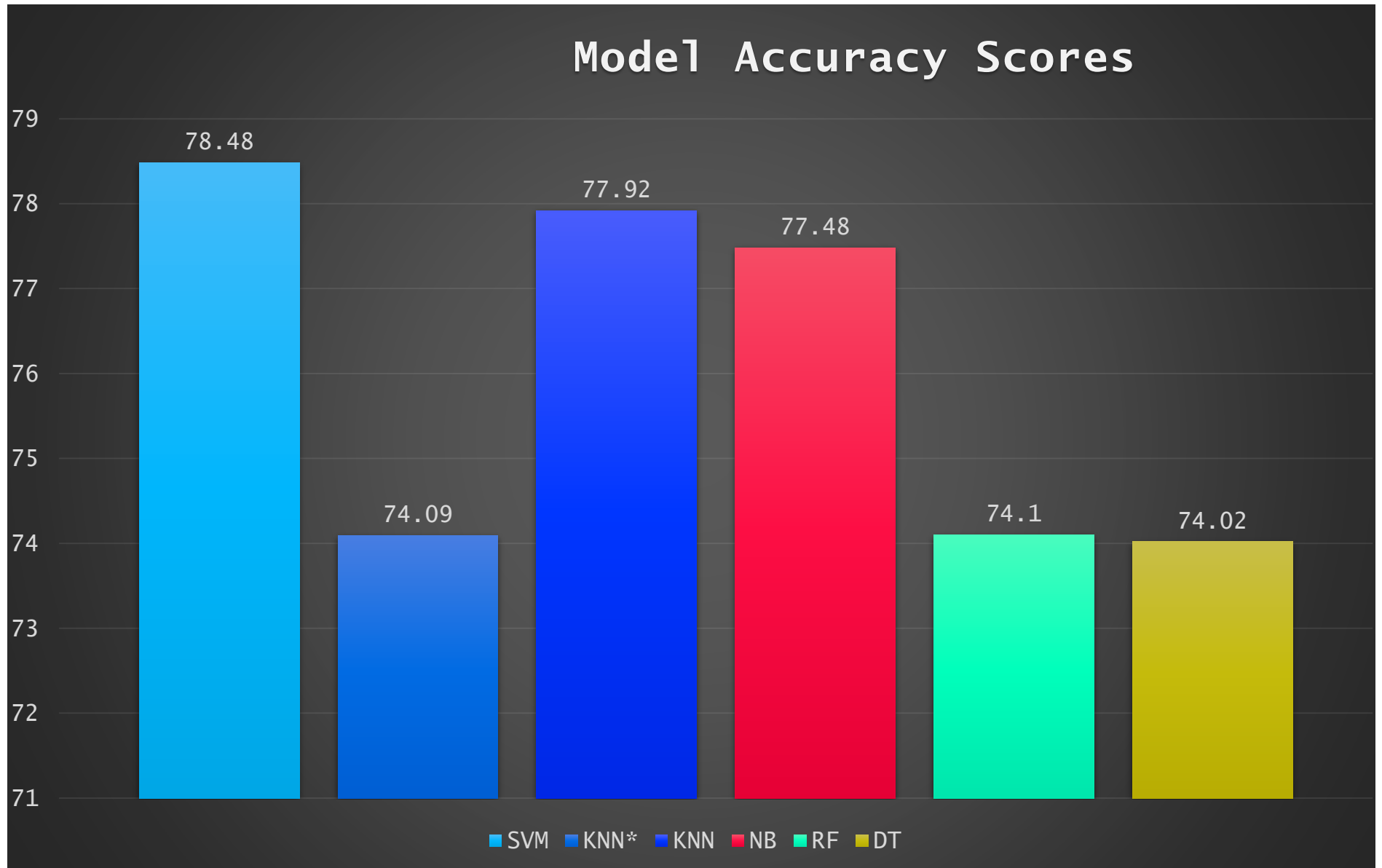


# Diabetes Prediction using Machine Learning

R Rahul Varma

# Charts and Graphs

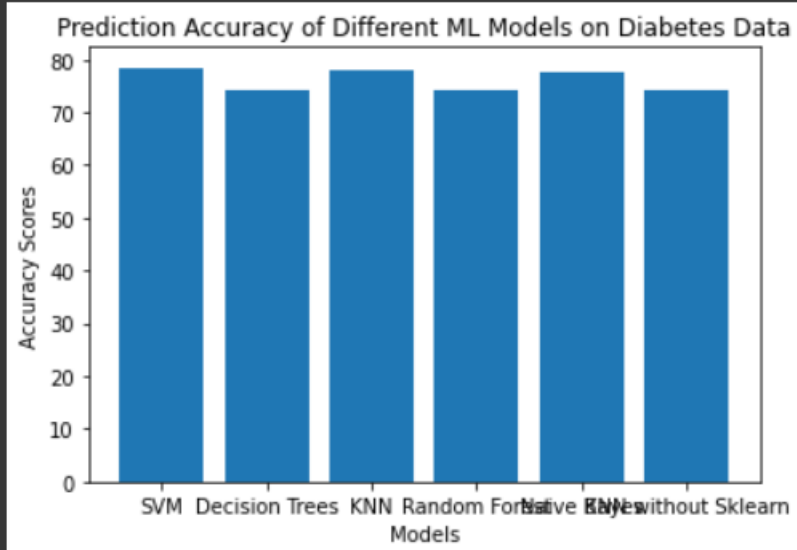


# Graph using matplotlib

```
import matplotlib.pyplot as plt

# Data
models = ["SVM", "Decision Trees", "KNN", "Random Forest", "Naive Bayes", "KNN without Sklearn"]
scores = [78.48, 74.02, 77.92, 74.10, 77.48, 74.09]

# Plot
plt.bar(models, scores)
plt.xlabel("Models")
plt.ylabel("Accuracy Scores")
plt.title("Prediction Accuracy of Different ML Models on Diabetes Data")
plt.show()
```

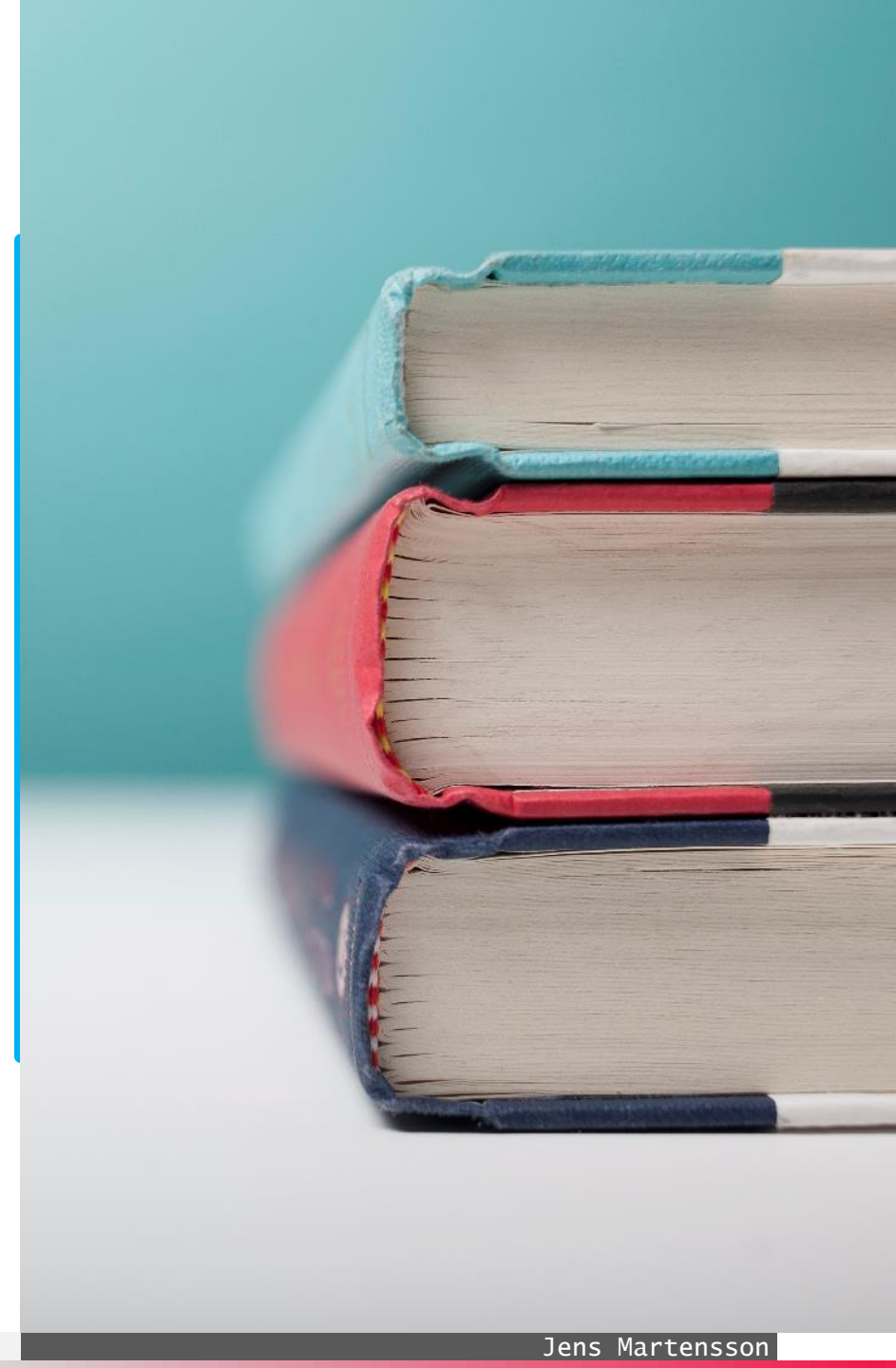


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# Summary

- The prediction accuracy of different machine learning models on a diabetes dataset was tested and the results were as follows: Support Vector Machine (SVM) had an accuracy score of 78.48%, Decision Trees had 74.02%, K-Nearest Neighbors (KNN) had 77.92%, Random Forest had 74.10%, Naive Bayes had 77.48% and K-Nearest Neighbors without Sklearn had 74.09%. The SVM model had the highest accuracy score among the models tested, followed by KNN and Naive Bayes. Decision Trees, Random Forest, and KNN without Sklearn had relatively lower accuracy scores. These results suggest that the SVM model may be the best choice for making predictions on this diabetes dataset.







# Thank You

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