**Conclusion**

Our project successfully developed a machine learning model to predict the most suitable city for individuals based on their preferences and their conditions such as family size, weather preference, city population, and income. We utilized diverse datasets and refined and tested various models, including Logistic Regression, Support Vector Machine, Naïve Bayes, and Custom Neural Network. Based on results, the Custom Neural Network emerged as the most effective, showing high accuracy (0.93), precision (0.93), recall (0.93), and F1 score (0.93). In contrast, other models like Logistic Regression, SVM (Support Vector Machines), and Naive Bayes displayed varying degrees of effectiveness, indicating the complexity and multidimensional nature of our data.

The confusion matrices further demonstrate the robustness of the Custom Neural Network, with its clean diagonal lines suggesting a strong true positive rate, whereas the other models' matrices indicated a more substantial number of misclassifications. This comparative analysis of confusion matrices proves the Custom Neural Network's capability in handling the intricacies of the predictive task at hand.

The superior performance of the Custom Neural Network underscores its potential in urban and social planning applications, highlighting the benefits of using AI (Artificial Intelligence) for personalized city recommendations. This project not only demonstrates the feasibility of such an approach but also opens possibilities for future enhancements and applications in the field of data-driven urban decision-making.