Report ML Offline-4

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Running the code :

1. Run the cell under the "PCA" markdown to run the code for Principal Component Analysis part
2. Similarly, run the code under the "EM Algorithm" to run the code for Expectation Maximization part.
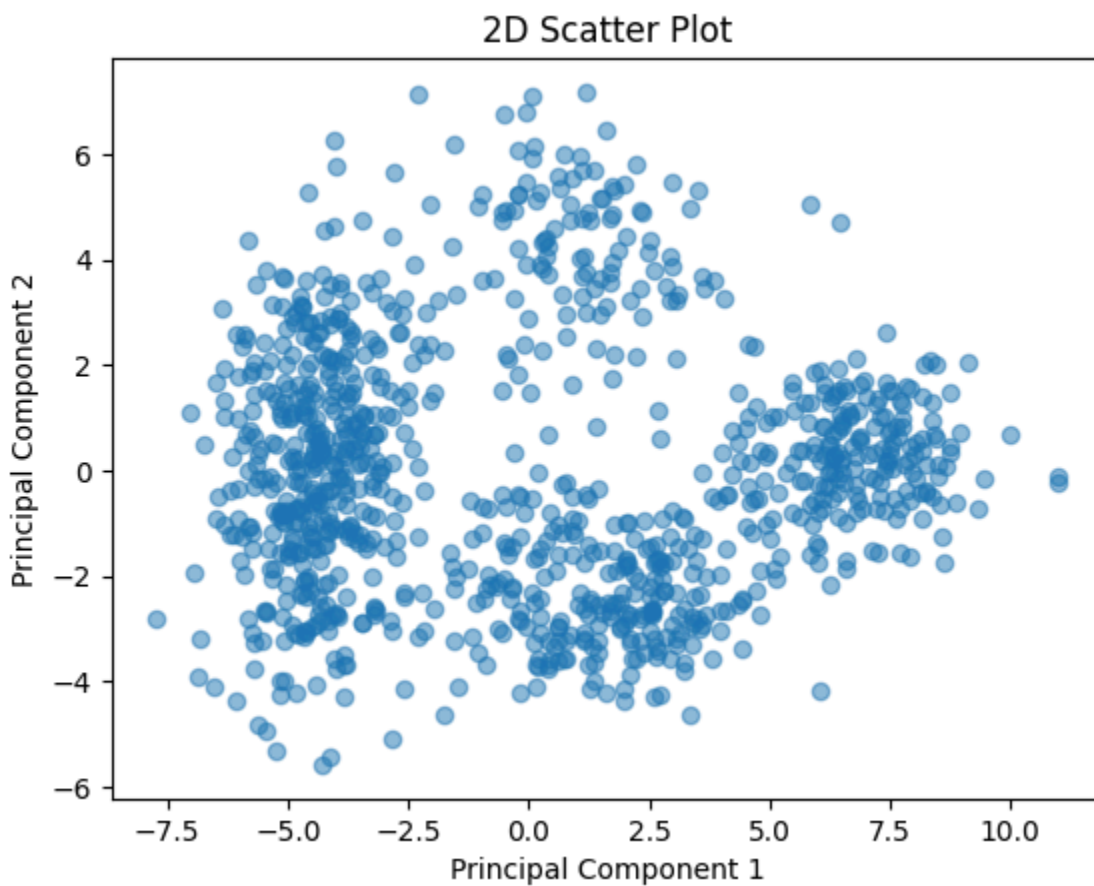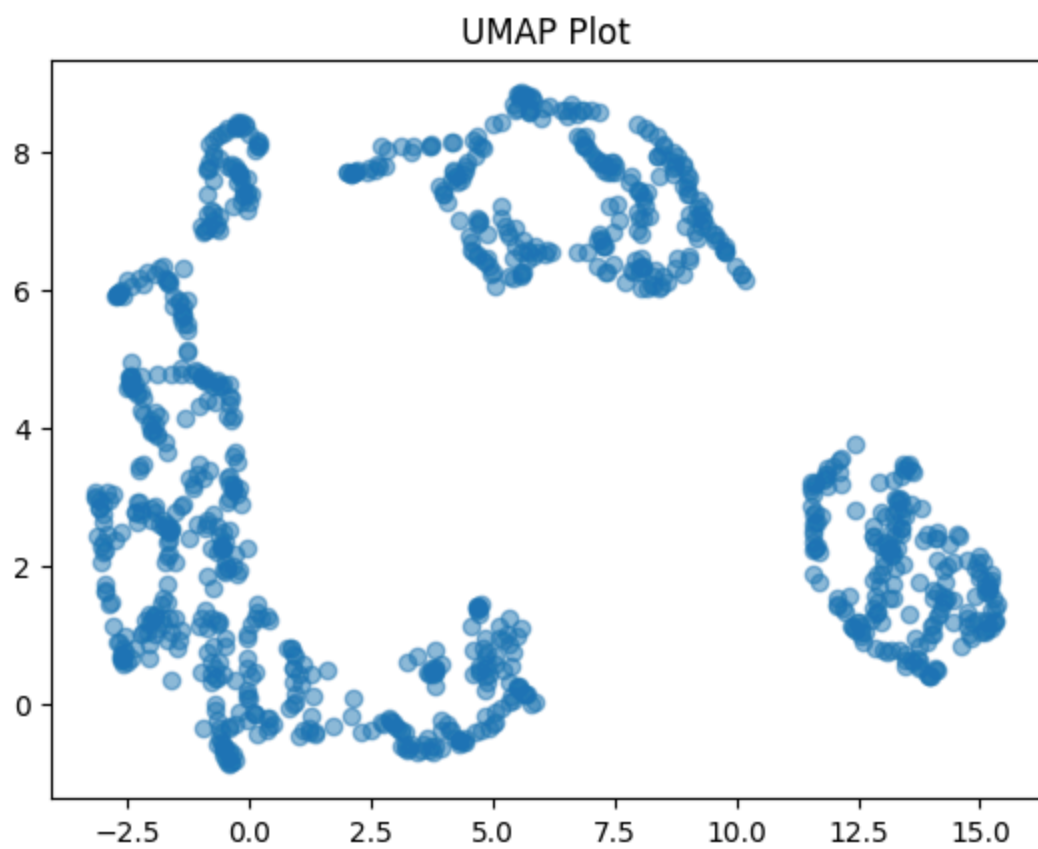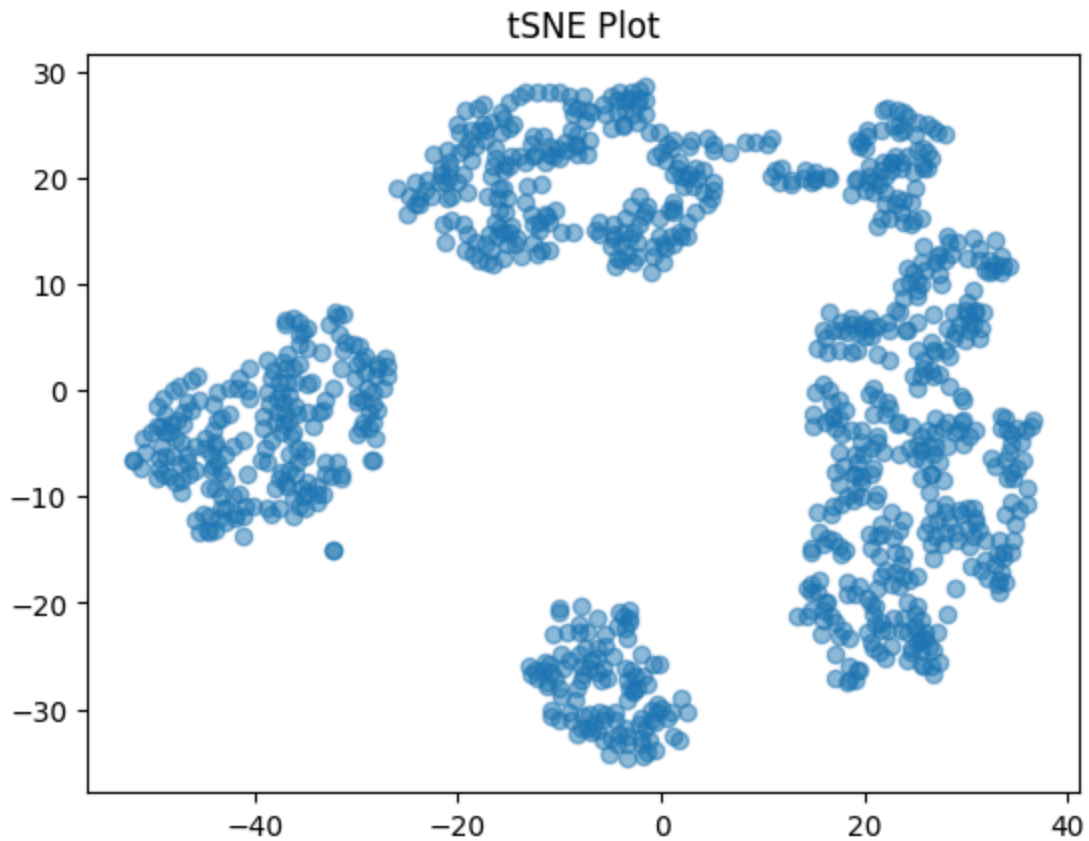
Plots :

Fig : 2D PCA Plot

Fig : UMAP Plot

Fig : tSNE Plot

Report for EM Part :

Converged in 187 iterations
Mean number of children (with family planning): 1.7824
Mean number of children (without family planning): 4.9107
Proportion of families (with family planning): 0.3560
Proportion of families (without family planning): 0.6440