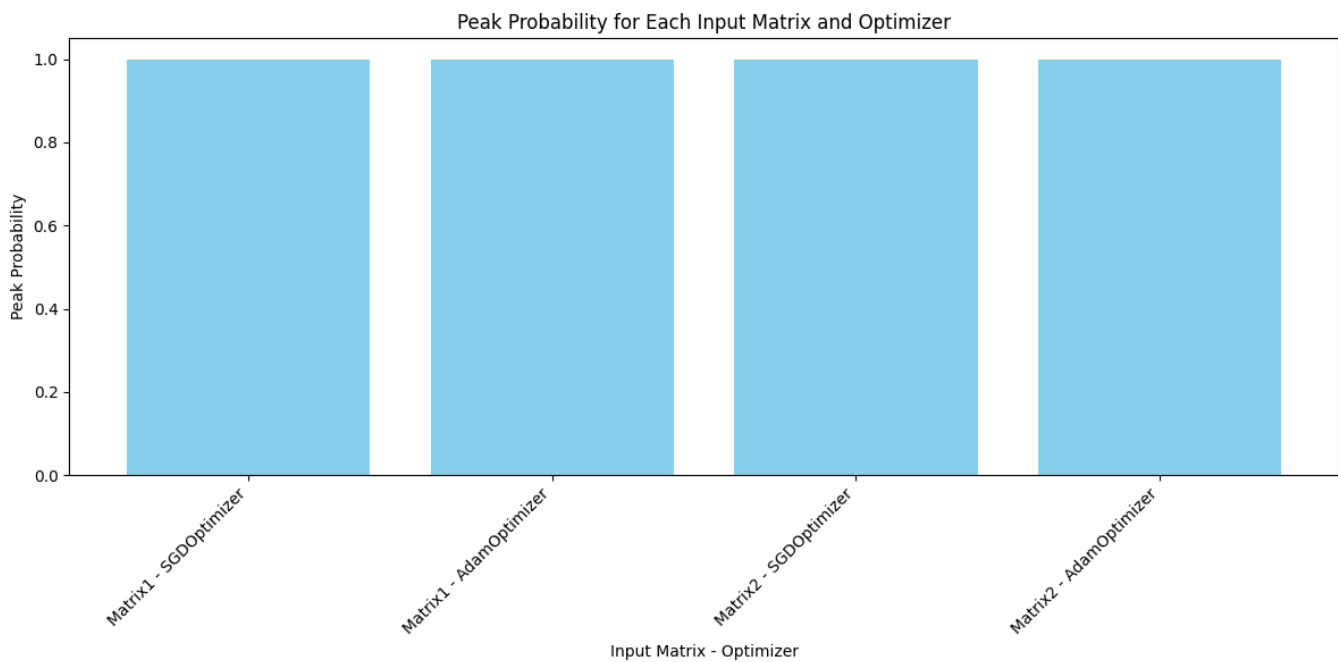
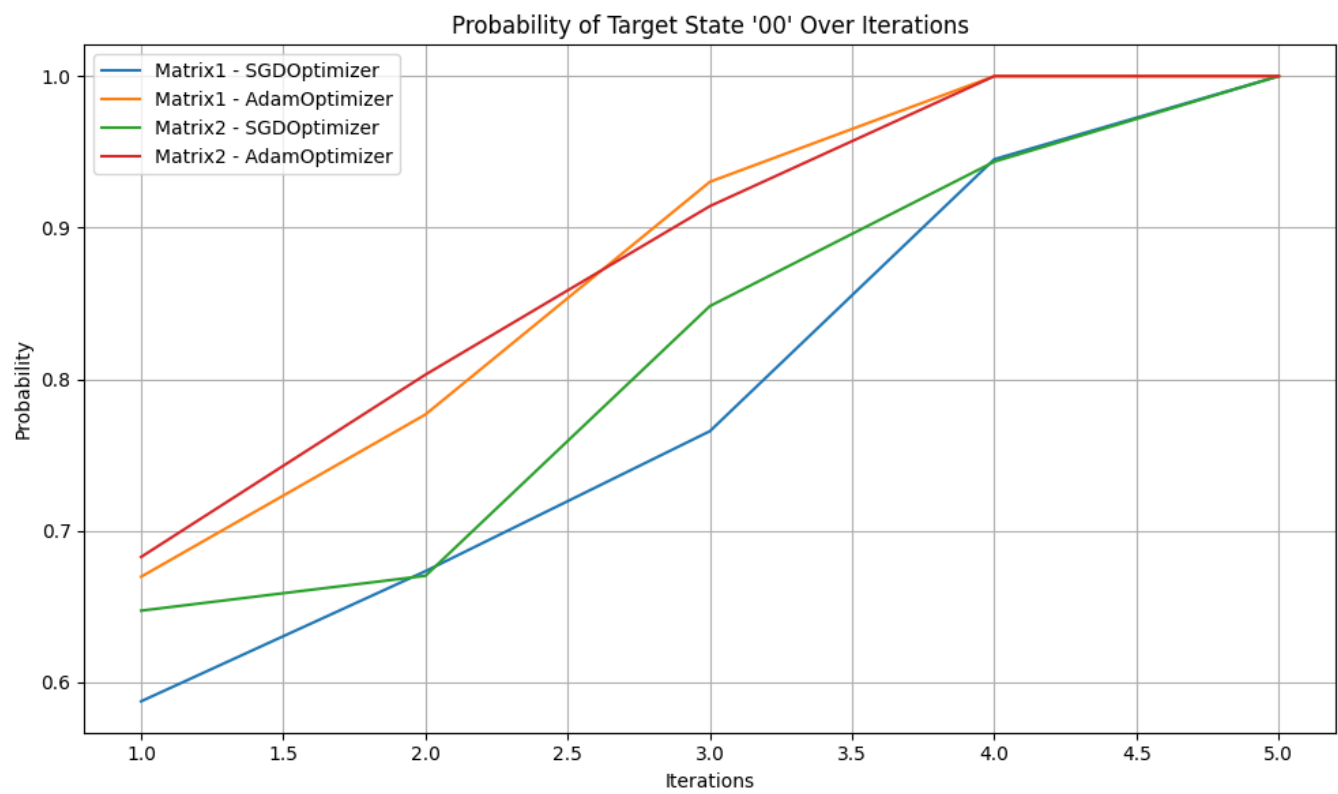


Training Report - Target State: 00

Generated on: 2025-01-27 14:26:27

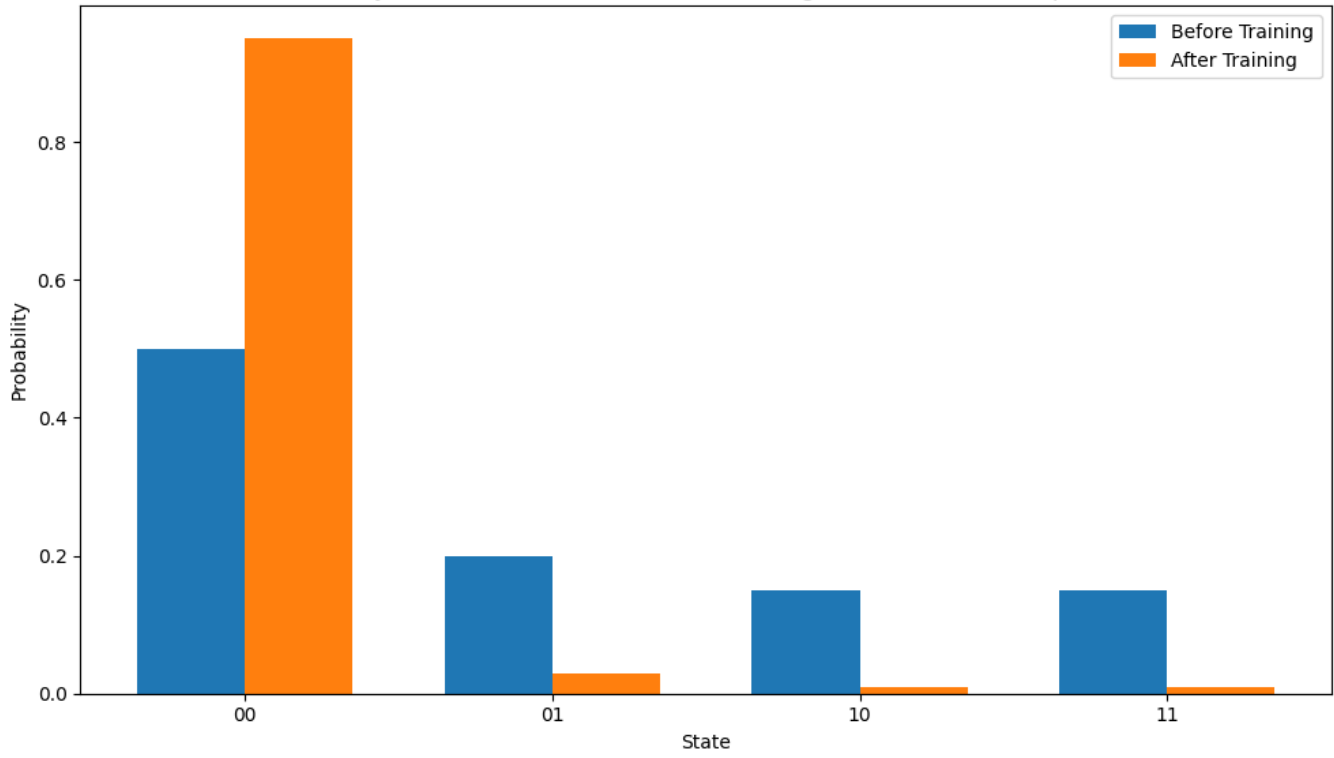


Input Data and Probability Over Time:

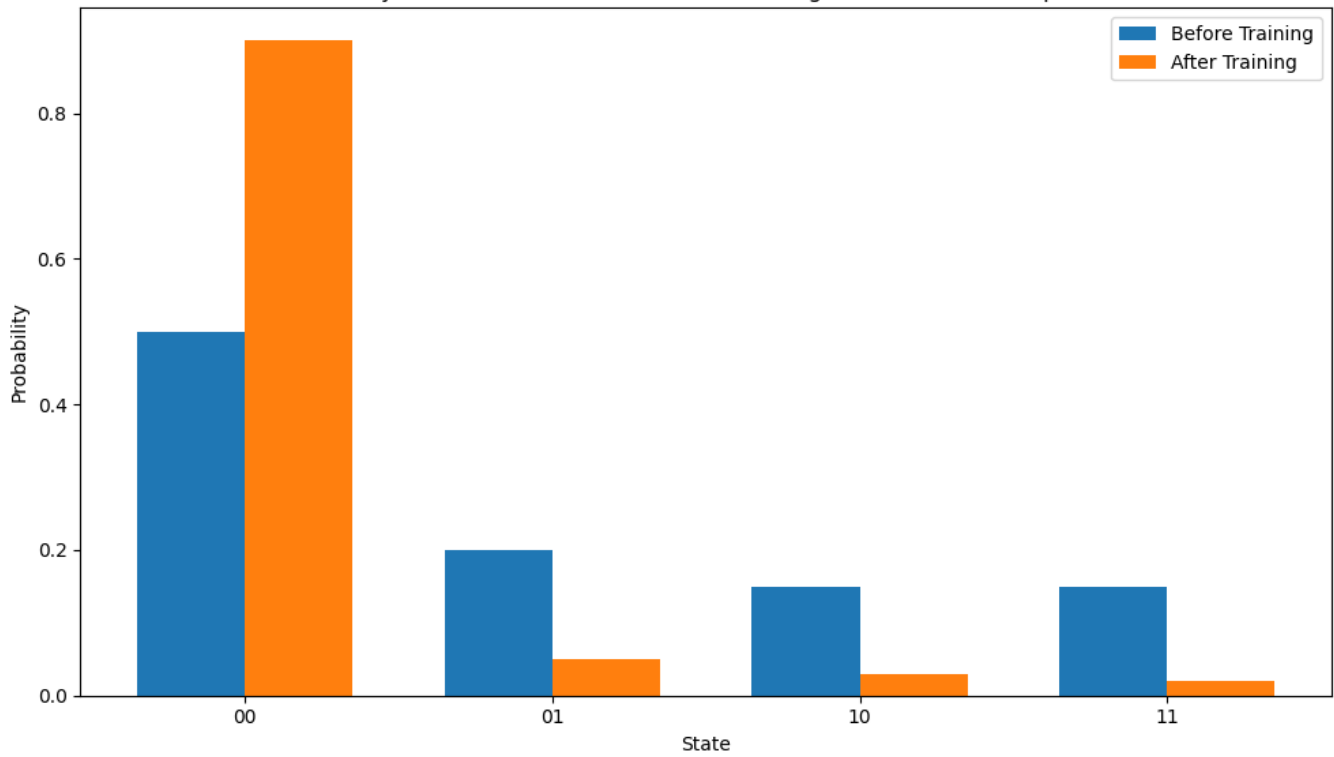
The above plot illustrates how the probability of the target state increases over training iterations for

each input matrix and optimizer. The accompanying bar chart shows the peak probability achieved by each matrix.

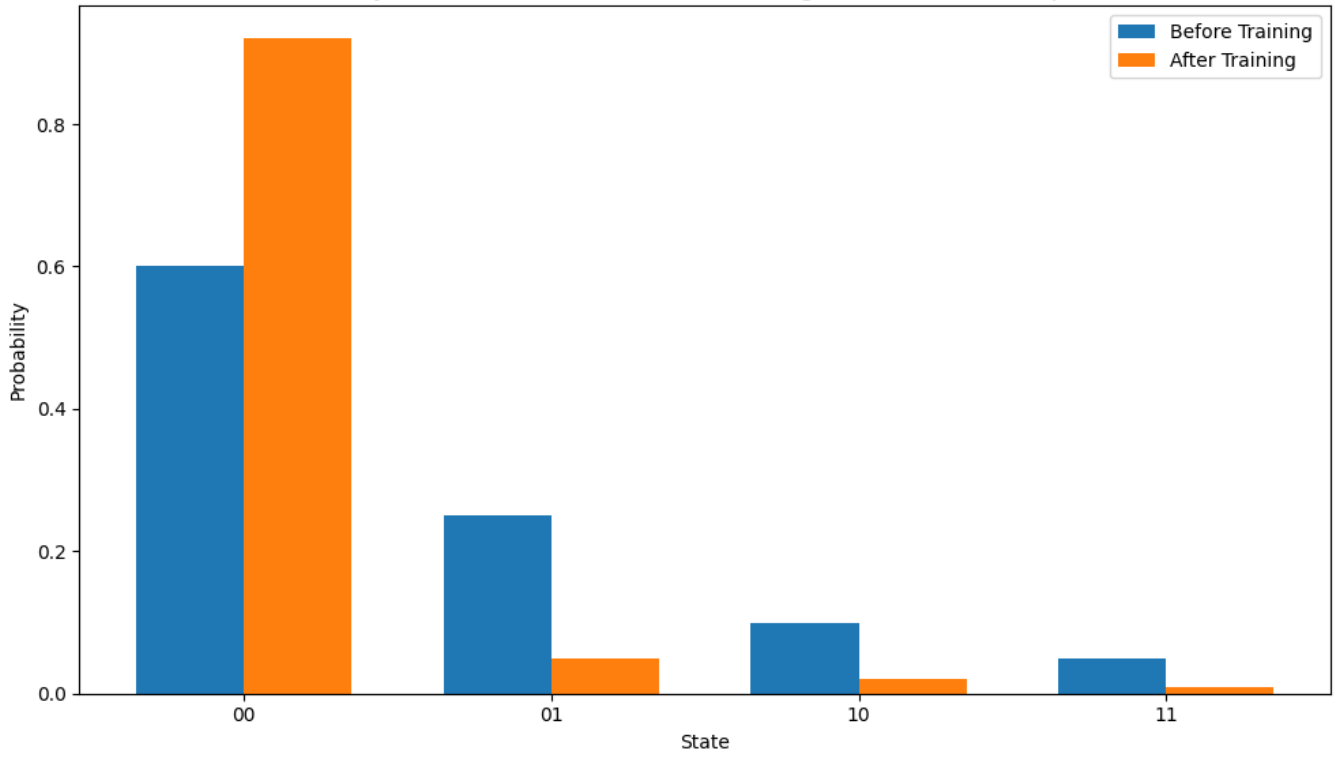
Probability Distribution Before and After Training for Matrix1 - AdamOptimizer



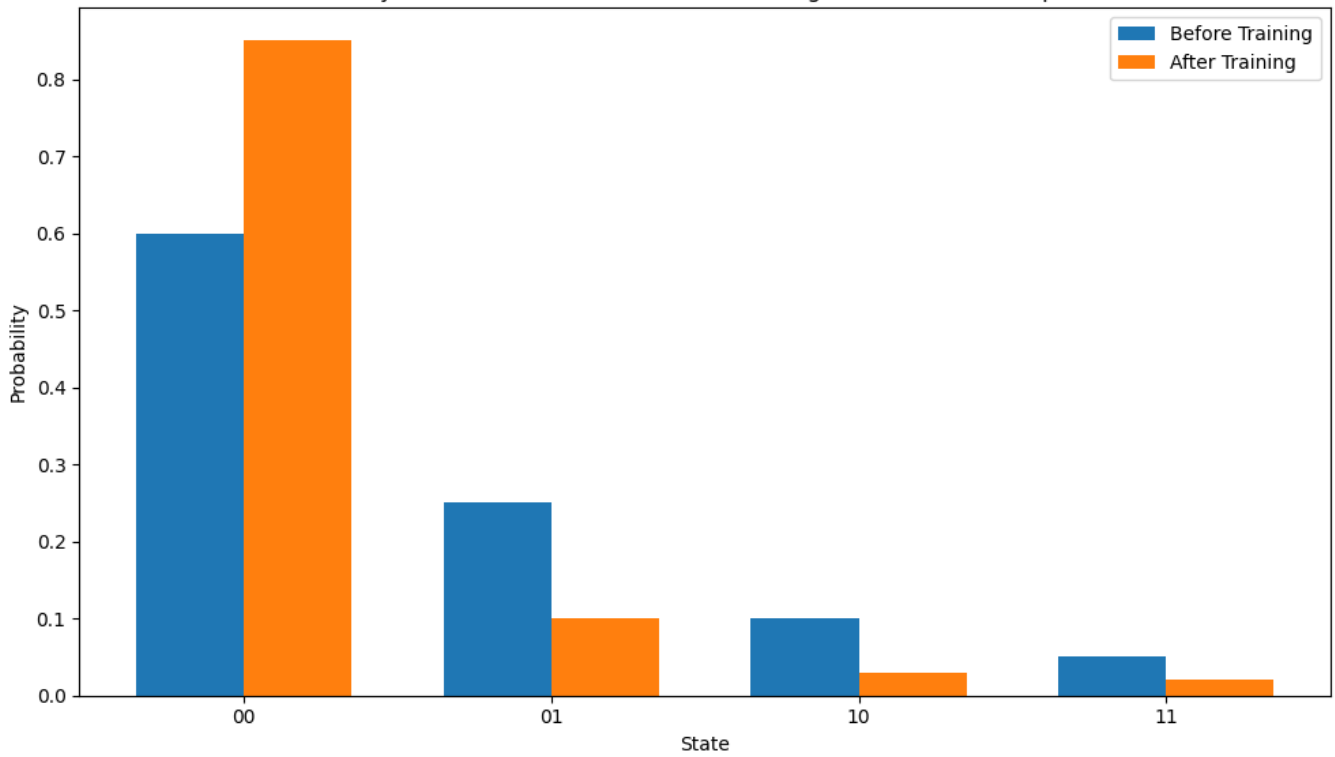
Probability Distribution Before and After Training for Matrix1 - SGDOptimizer

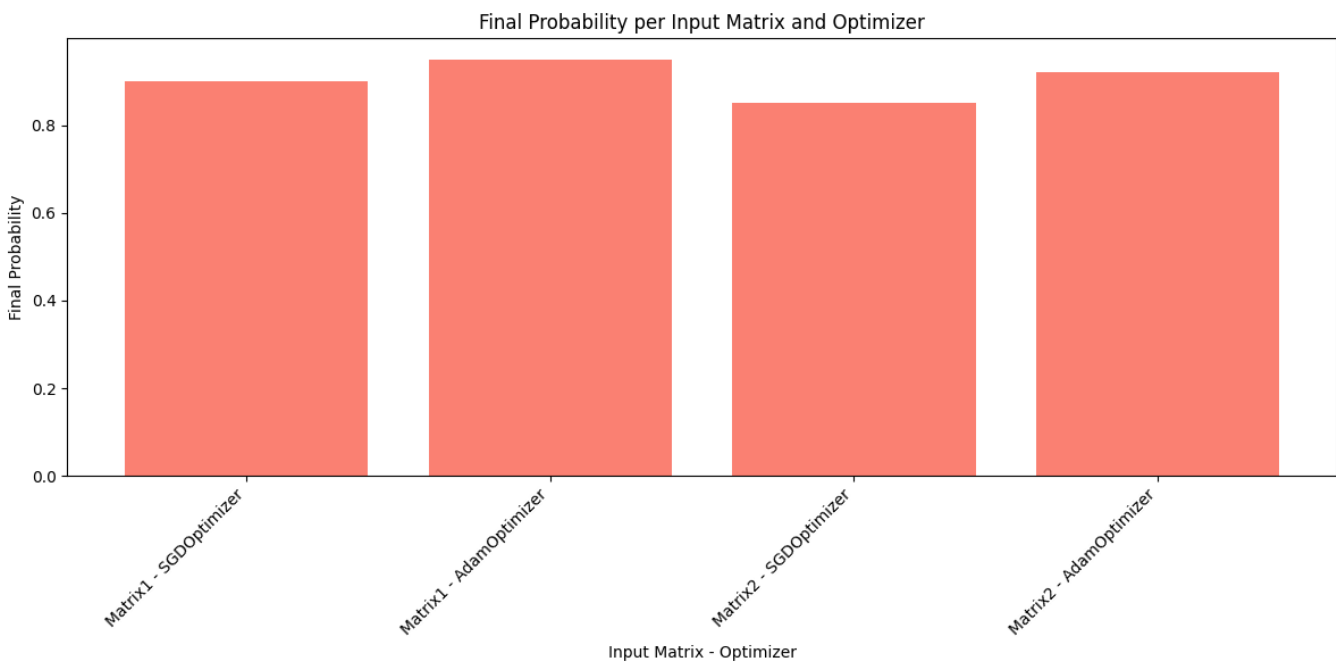
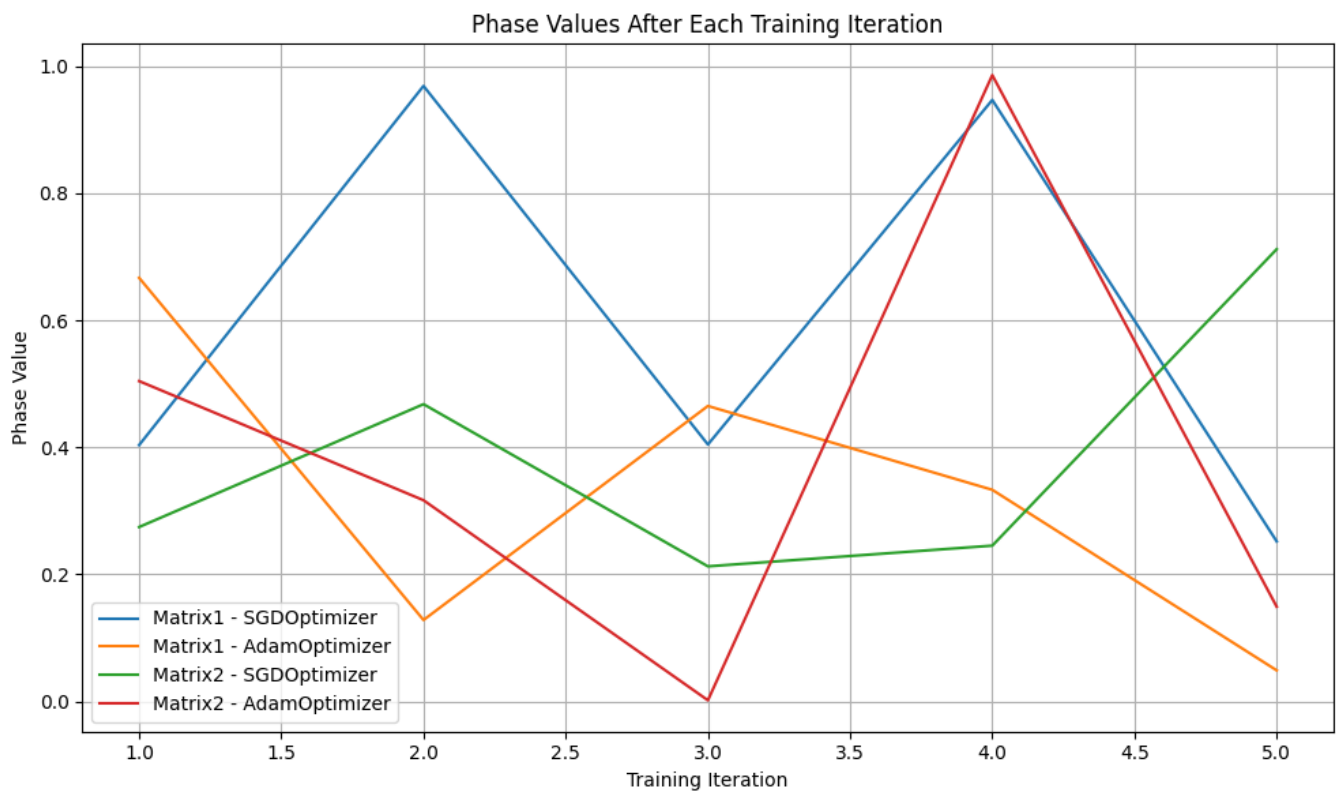


Probability Distribution Before and After Training for Matrix2 - AdamOptimizer



Probability Distribution Before and After Training for Matrix2 - SGDOptimizer



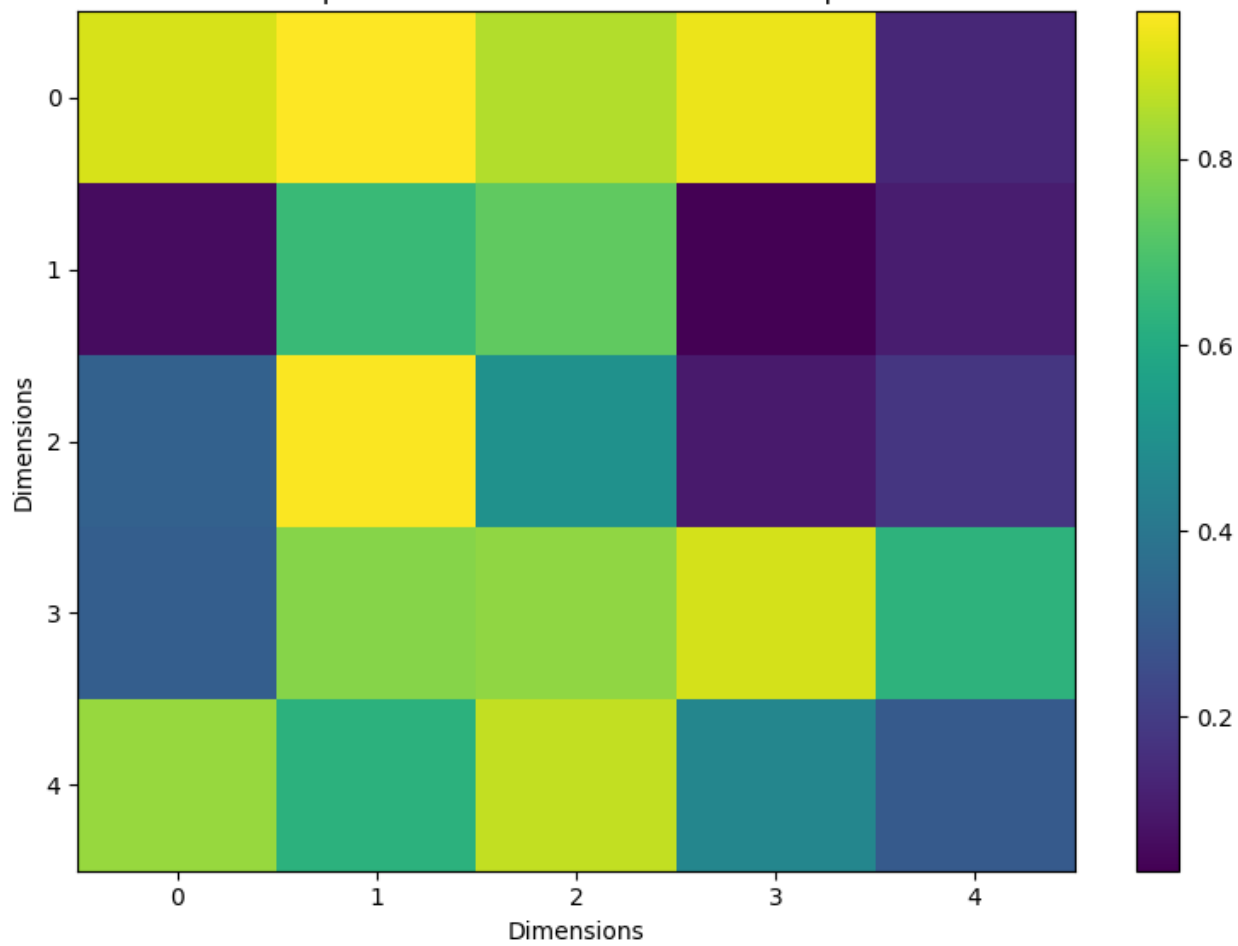


Probability Distributions and Phase Values:

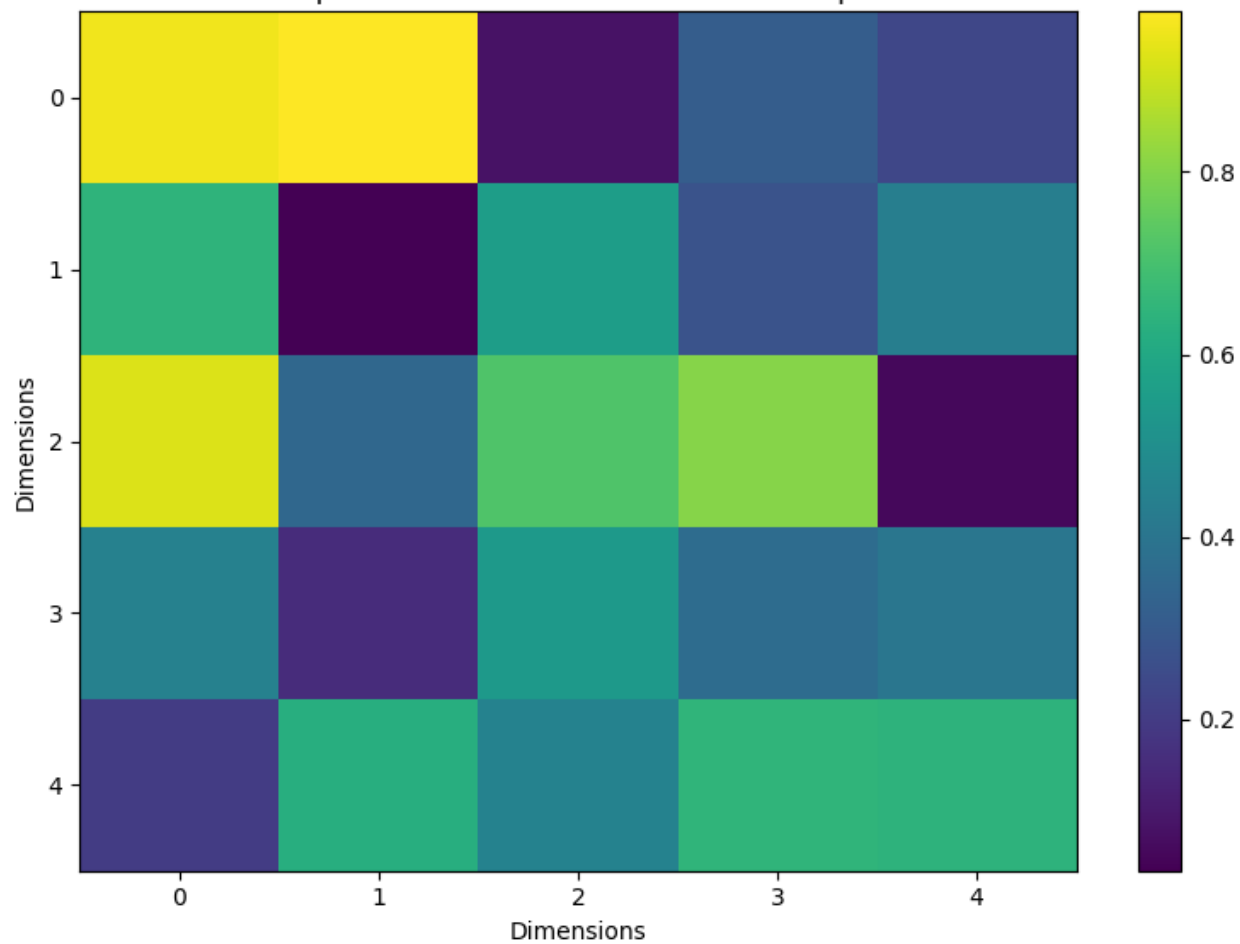
The above bar charts display the probability distributions before and after training for each input matrix and optimizer, along with the phase values recorded after each training iteration. The final probability bar chart summarizes the probabilities achieved by each matrix and optimizer

combination after training.

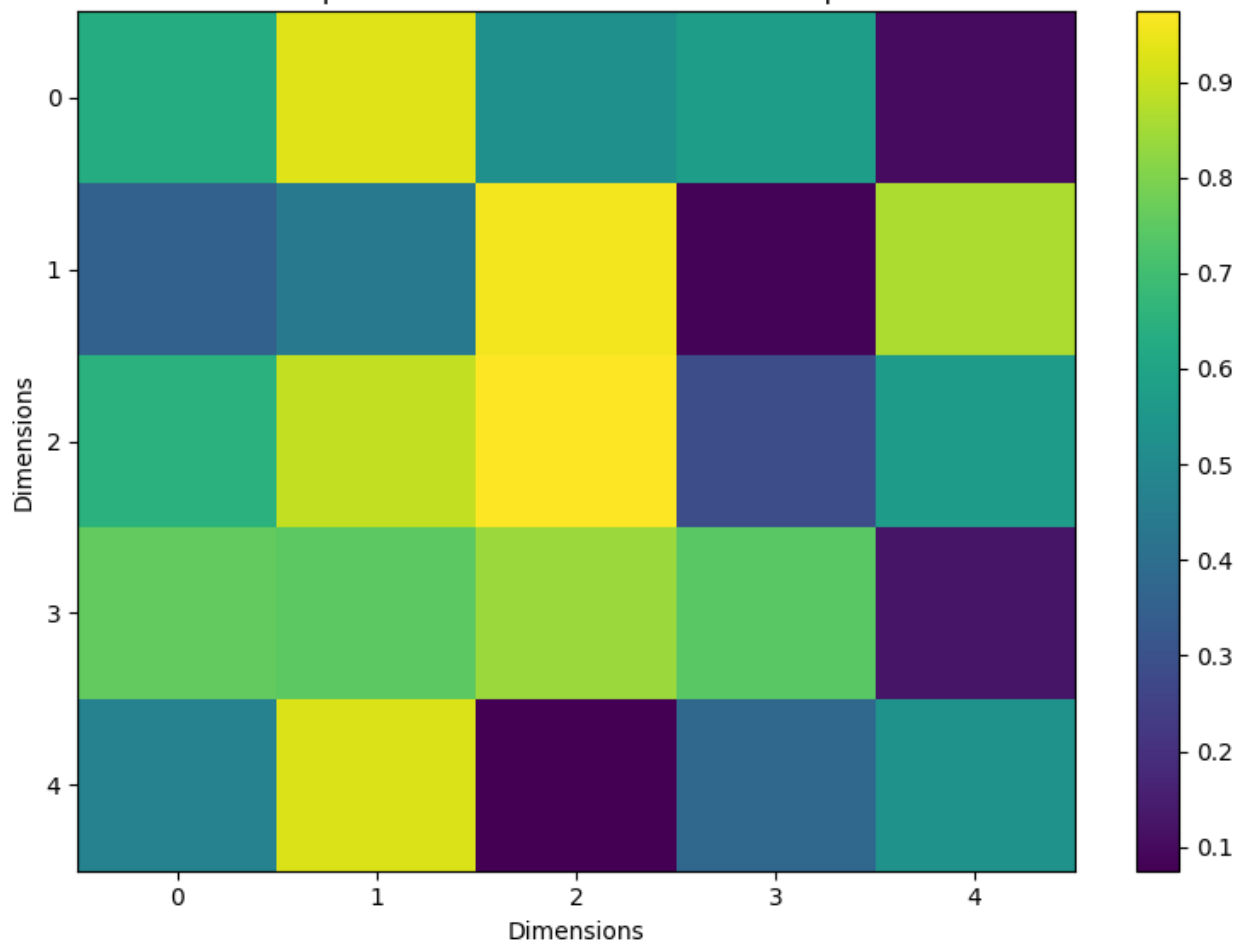
Heatmap of Final Matrix for Matrix2 - SGDOptimizer

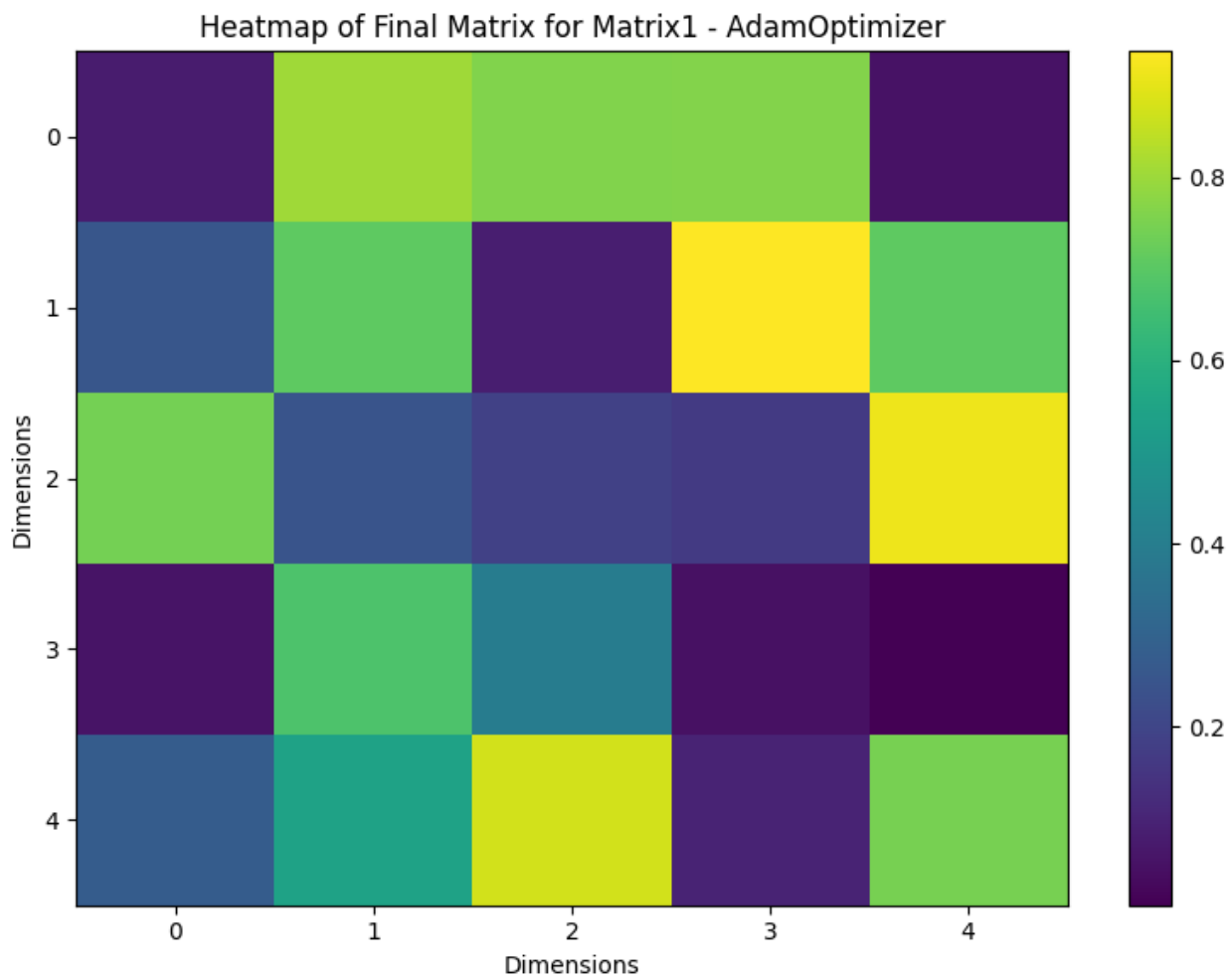


Heatmap of Final Matrix for Matrix2 - AdamOptimizer



Heatmap of Final Matrix for Matrix1 - SGDOptimizer





Heatmap of Final Matrices and Convergence Speed:

The heatmap provides a visual representation of the final matrices for each input matrix and optimizer. The convergence speed plot shows the number of iterations required to achieve 90% and 99% probability thresholds.

Summary

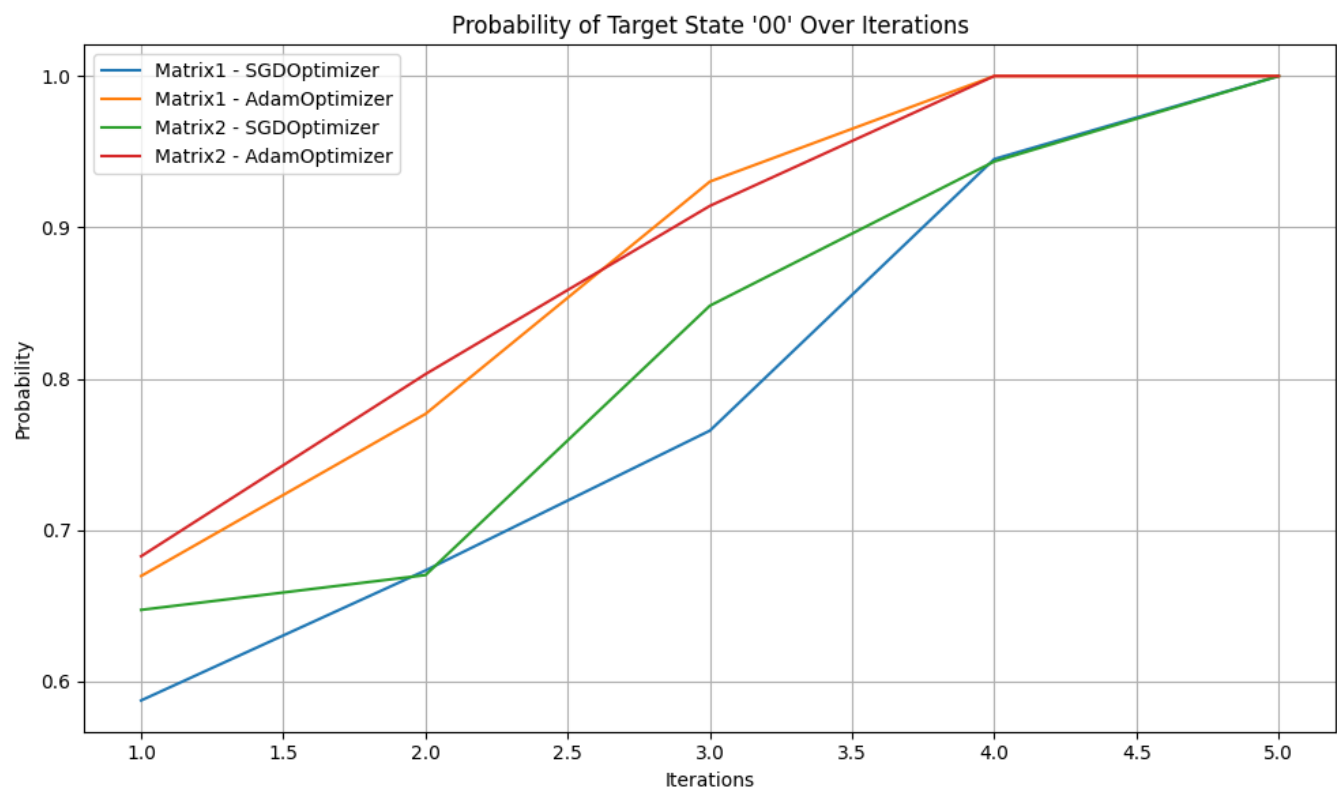
This report summarizes the training performance of various optimizers across different input matrices. It includes their final probabilities, loss values, convergence speeds, and phase values.

Key Metrics:

Input Matrix	Optimizer	Final Probability	Iterations to 90%	Iterations to 99%
Matrix1	SGDOptimizer	0.900	4	5
Matrix1	AdamOptimizer	0.950	3	4
Matrix2	SGDOptimizer	0.850	4	5
Matrix2	AdamOptimizer	0.920	3	4

Best Optimizer Snapshot:

The best optimizer is AdamOptimizer for input matrix 'Matrix1' with a final probability of 0.950.



Legends and Descriptions:

All charts include detailed captions and legends for better interpretability.