**Deep Learning**

Ben-Gurion University of the Negev

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Assignment 1

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1. **Introduction**

In this assignment we have implemented a Feed-Forward Neural Network to perform image classification. A feed-forward neural network is a machine learning algorithm in which every layer is connected to the layer that comes after it. Each layer is composed of several perceptrons which perform a linear calculation by multiplying the outcome of each input with weights, combining it with some bias and then performing some non-linear function known as “activation”, such as a Softmax.   
As the network is trained, back-propagation is used with a combination of a loss function, to adjust the weights and biases such to minimize the loss between the network predictions, compared to the actual training labels.

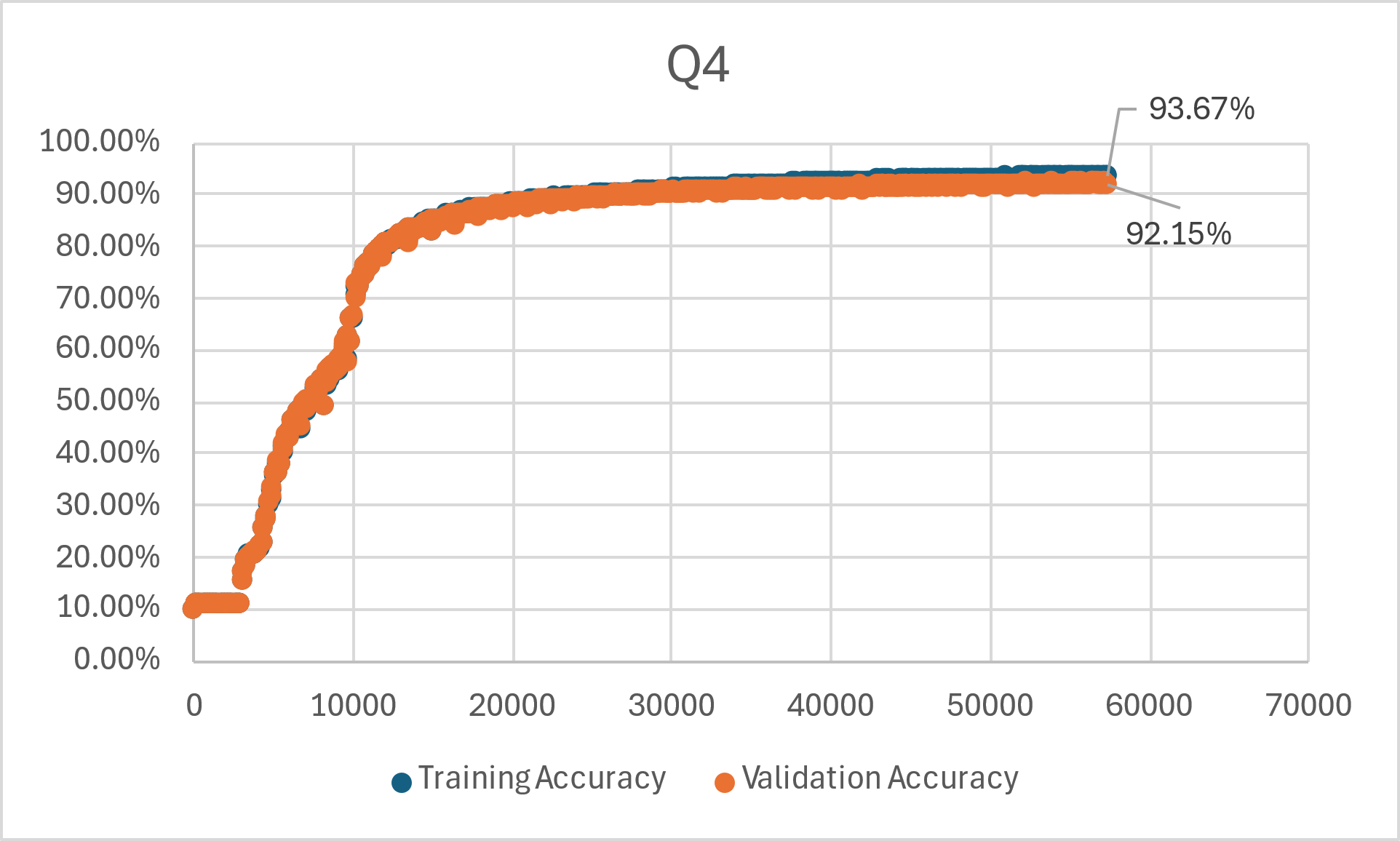
The dataset we used is MNIST, a popular dataset for image classification with 70,000 samples. Each sample is a 28x28 pixels image of hand-written digits belonging to one of ten classes (0-9). The data is pre-divided with 60,000 samples in the train set and 10,000 samples for the test set. We have further divided the training set, leaving 80% for training and 20% to act as our evaluation set.

In addition to implementing all the required methods in section 1-3, we have also implemented several auxiliary functions:  
get\_mnist – Gets the MNIST dataset, normalizes values between 0-1 and flatten the shape from (n\_samples, 28, 28) to (n\_samples, 28x28). Additionally, this function applies OneHotEncoder to the MNIST label, matching the shape to the network output side. The function returns two datasets: a combined training and validation set and a test set.

Main – Runs the experiment. There is a different main for each question 4-6. When relevant (Q4, Q6) main also creates the weights distribution graphs.

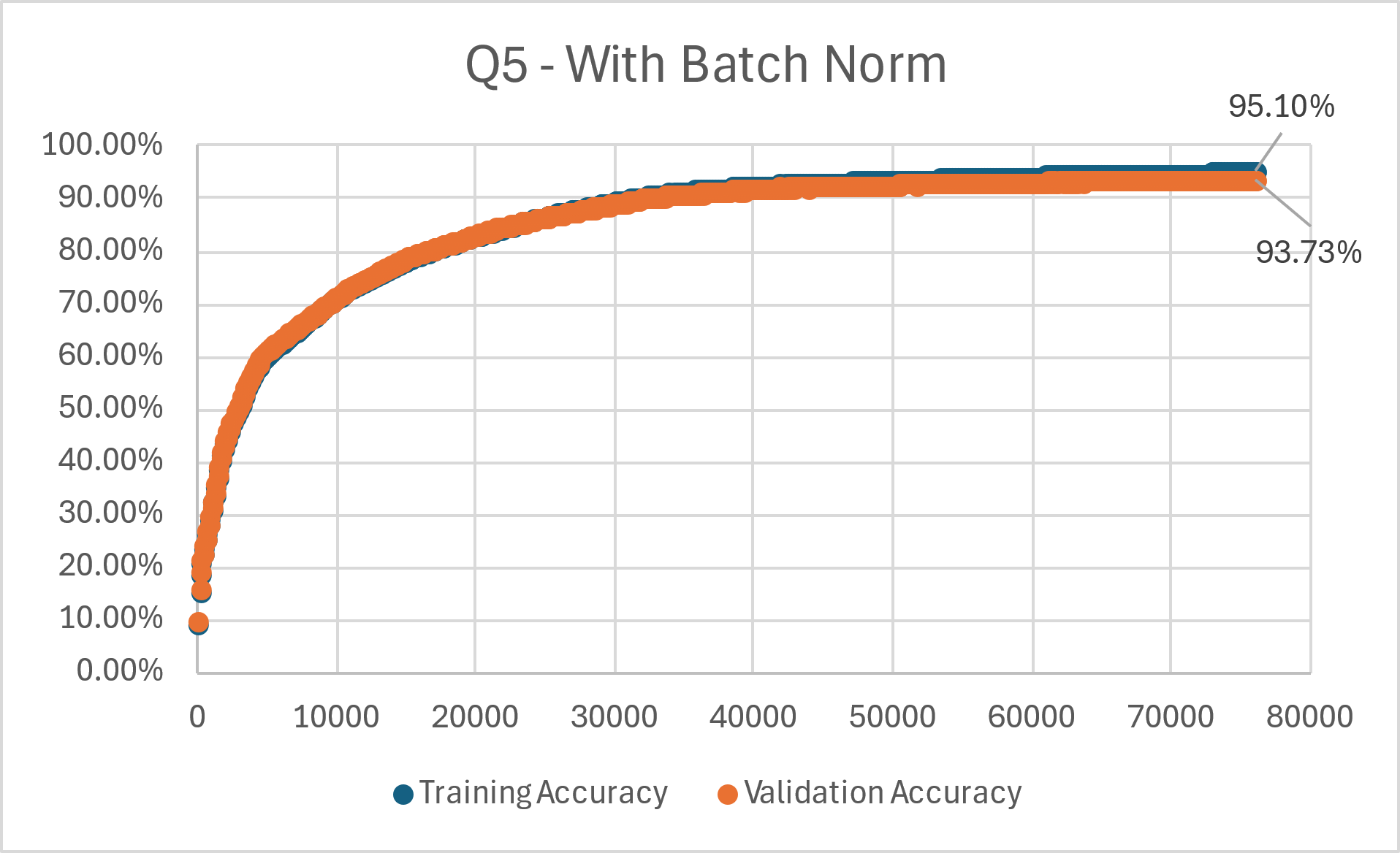
1. **Question 4**

|  |  |  |
| --- | --- | --- |
| Number of Epochs | | 77 |
| Total Number of Iterations | | 57400 |
| Batch Size | | 256 |
| Final Accuracy (%) | Train Set | 93.67 |
| Validation Set | 92.15 |
| Test Set | 91.65 |
| Duration (Seconds) | Training | 63.952 |
| Testing | 0.011 |
| Total | 63.963 |

The cost value for each training step is available in Appendix A.

1. **Question 5 -** Repeat section 4 when the batchnorm function is “on”. Analyze and compare this experiment to the previous one (performance, running time, number of training steps etc.).

|  |  |  |
| --- | --- | --- |
| Number of Epochs | | 405 |
| Total Number of Iterations | | 76100 |
| Batch Size | | 256 |
| Final Accuracy (%) | Train Set | 95.1 |
| Validation Set | 93.73 |
| Test Set | 93.84 |
| Duration (Seconds) | Training | 181.078 |
| Testing | 0.014 |
| Total | 181.092 |

The cost value for each training steps is available in Appendix A 

Activating Batch Norm has produced a far more stable and consistent improvement throughout the learning iterations, compared to the previous state. When Batch Norm is used, we see a nearly 2% increase in accuracy regardless of dataset. This however comes with a cost, as we needed far more iterations (about 1.3 times) to reach a plateau (76100 vs 57400). Since the network needed more training iterations, the duration of training also increased, this time by almost 3 times (181 vs 64 Seconds).

Another notable matter is that almost half of all training duration is dedicated to the marginal improvement of the model. If we were to stop training at the same top accuracy of the network from question 4 (91.25%), we could have saved 48.8% of iterations.

Another point we have observed is that since Batch Norm accuracy increases in a stable, slower manner, for a small window the "without Batch Norm" curve bypasses its performance before it takes back the lead. This means that there are cases where when we lack available resources, perhaps it will be better to avoid Batch Norm; but otherwise, it can improve our model's overall performance.

1. **Question 6**

To support L2 regularization, we needed to modify key areas related to the training process.

First, we calculate the L2 cost throughout the layers of the network and add it to the cross-entropy loss.

def compute\_cost(AL: np.ndarray, Y: np.ndarray, parameters: Dict, l2\_regularization: bool = False) -> float:  
 *"""  
 Compute cost function categorical cross-entropy loss  
 :param AL: probability vector corresponding to your label predictions, shape (num\_of\_classes, number of examples)  
 :param Y: the labels vector (i.e. the ground truth)  
 :param parameters: the W and b parameters of each layer  
 :param l2\_regularization: boolean - indicates if l2 regularization should be used  
 :return: cost – the cross-entropy cost  
 """* n\_examples = Y.shape[1]  
 cost = -1 / n\_examples \* sum(np.sum(np.multiply(Y, np.log(AL + EPSILON)), axis=0))  
  
 # l2 Norm  
 if l2\_regularization:  
 l2\_cost = sum([np.sum(np.square(layer[0])) for layer in parameters.values()])  
 l2\_cost = (EPSILON / (2 \* n\_examples)) \* l2\_cost  
 cost += l2\_cost  
 return cost

Then we added the updated cost function to the gradients which are used to update the weights.

def linear\_backward(dZ: np.ndarray, cache: Tuple, l2\_regularization: bool = False) -> Tuple:  
 *"""  
 Computes the linear part of the backward propagation process of a single layer  
 :param dZ: The gradient of the cost with respect to the linear output of the current layer  
 :param cache: Tuple of values (A\_prev, W, b) coming from the forward propagation in the current layer  
 :param l2\_regularization: boolean - indicates if l2 regularization should be used  
 :return: dA\_prev - Gradient of the cost with respect to the activation (of the previous layer l-1), same shape as A\_prev  
 :return: dW - Gradient of the cost with respect to W (current layer l), same shape as W  
 :return: db - Gradient of the cost with respect to b (current layer l), same shape as b  
 """* A\_prev, W, b = cache  
 m = A\_prev.shape[1]  
 dW = 1 / m \* np.dot(dZ, A\_prev.T) + ((EPSILON / m) \* W if l2\_regularization else 0)  
   
 db = 1 / m \* np.sum(dZ, axis=1, keepdims=True)  
 dA\_prev = np.dot(W.T, dZ)  
 return dA\_prev, dW, db

Finally, we added the l2\_regularization flag to functions that come prior in the network (L\_layer\_model, linear\_activation\_backward), to allow activation of l2 regulation through the method "main".

L2 regulation is used to prevent overfitting, enabling better generalization capabilities to the model. Once weights are trained, there is no need to implement L2 regulation in the inference stage, as weights remain static.

|  |  |  |
| --- | --- | --- |
| 1. Number of Epochs | | 55 |
| Total Number of Iterations | | 40500 |
| Batch Size | | 256 |
| Final Accuracy (%) | Train Set | 95.30 |
| Validation Set | 93.79 |
| Test Set | 93.9% |
| Duration (Seconds) | Training | 44.703 |
| Testing | 0.939 |
| Total | 0.013 |

The cost value for each training step is available in Appendix A.

**Weights** - Compare the values of the weights of your architecture with and without this change.

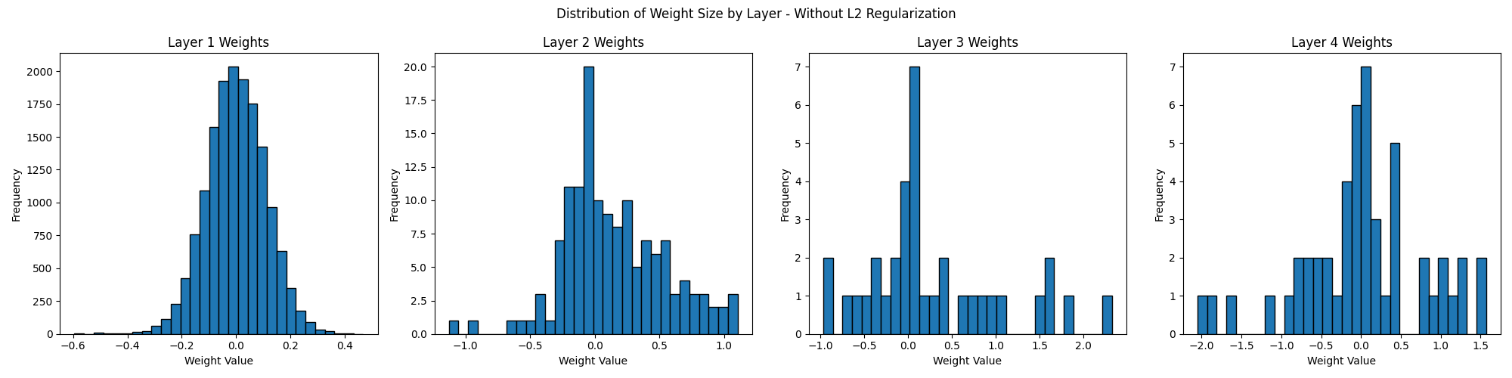
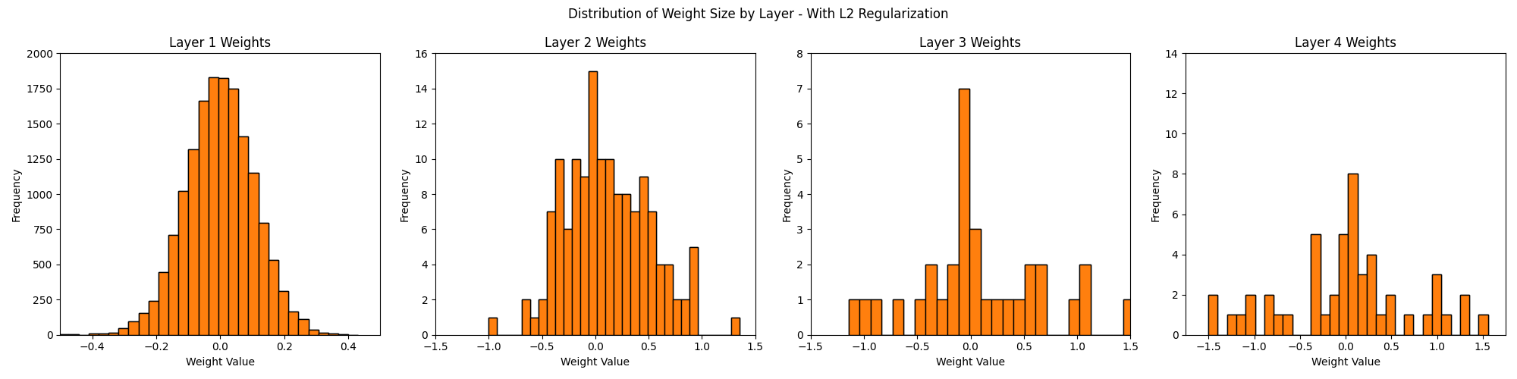
Using Mean Squared Error (MSE), we can measure the average squared deviation from the mean value of the weights:

|  |  |  |  |
| --- | --- | --- | --- |
| Layer | MSE - **Without** L2 Regularization | MSE - **With** L2 Regularization | Percent of Reduction |
| 1 | 0.012051 | 0.011397 | 5.427% |
| 2 | 0.180787 | 0.169158 | 6.432% |
| 3 | 0.671053 | 0.634927 | 5.383% |
| 4 | 0.619301 | 0.496666 | 19.802% |

L2 regularization seems to have a notable effect on the value of weights in the model.

Based on the reduction in average squared deviation, we can see that L2 regularization tends to move the overall distribution of weights towards and around zero. This leads to the distribution of weights to be denser. I.e. there is a higher proportion of weights around zero and less further away from zero, compared to when L2 regularization is not activated.

This is also confirmed when visualizing the distribution of weights in each layer, using a histogram, as can be seen below.



**Appendix A**

Question 4 – Cost per Iteration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Epoch | Iteration | Training Cost | Training Accuracy | Validation Accuracy | Best Validation Accuracy |
| 1 | 0 | 2.301 | 10.20% | 10.12% | 10.12% |
| 1 | 100 | 2.303 | 11.24% | 11.23% | 11.23% |
| 1 | 200 | 2.302 | 11.24% | 11.23% | 11.23% |
| 1 | 300 | 2.299 | 11.24% | 11.23% | 11.23% |
| 1 | 400 | 2.298 | 11.24% | 11.23% | 11.23% |
| 1 | 500 | 2.298 | 11.24% | 11.23% | 11.23% |
| 1 | 600 | 2.304 | 11.24% | 11.23% | 11.23% |
| 1 | 700 | 2.301 | 11.24% | 11.23% | 11.23% |
| 2 | 800 | 2.308 | 11.24% | 11.23% | 11.23% |
| 2 | 900 | 2.306 | 11.24% | 11.23% | 11.23% |
| 2 | 1000 | 2.3 | 11.24% | 11.23% | 11.23% |
| 2 | 1100 | 2.3 | 11.24% | 11.23% | 11.23% |
| 2 | 1200 | 2.295 | 11.24% | 11.23% | 11.23% |
| 2 | 1300 | 2.299 | 11.24% | 11.23% | 11.23% |
| 2 | 1400 | 2.295 | 11.24% | 11.23% | 11.23% |
| 3 | 1500 | 2.298 | 11.24% | 11.23% | 11.23% |
| 3 | 1600 | 2.298 | 11.24% | 11.23% | 11.23% |
| 3 | 1700 | 2.297 | 11.24% | 11.23% | 11.23% |
| 3 | 1800 | 2.291 | 11.24% | 11.23% | 11.23% |
| 3 | 1900 | 2.288 | 11.24% | 11.23% | 11.23% |
| 3 | 2000 | 2.29 | 11.24% | 11.23% | 11.23% |
| 3 | 2100 | 2.298 | 11.24% | 11.23% | 11.23% |
| 3 | 2200 | 2.295 | 11.24% | 11.23% | 11.23% |
| 4 | 2300 | 2.309 | 11.24% | 11.23% | 11.23% |
| 4 | 2400 | 2.3 | 11.24% | 11.23% | 11.23% |
| 4 | 2500 | 2.285 | 11.24% | 11.23% | 11.23% |
| 4 | 2600 | 2.278 | 11.24% | 11.23% | 11.23% |
| 4 | 2700 | 2.264 | 11.24% | 11.23% | 11.23% |
| 4 | 2800 | 2.27 | 11.24% | 11.23% | 11.23% |
| 4 | 2900 | 2.236 | 11.24% | 11.23% | 11.23% |
| 5 | 3000 | 2.228 | 15.69% | 15.73% | 15.73% |
| 5 | 3100 | 2.221 | 17.06% | 17.01% | 17.01% |
| 5 | 3200 | 2.166 | 18.56% | 18.47% | 18.47% |
| 5 | 3300 | 2.061 | 19.48% | 19.49% | 19.49% |
| 5 | 3400 | 2.059 | 19.90% | 19.78% | 19.78% |
| 5 | 3500 | 2.04 | 20.33% | 20.08% | 20.08% |
| 5 | 3600 | 1.984 | 20.53% | 20.49% | 20.49% |
| 5 | 3700 | 2.061 | 20.78% | 20.82% | 20.82% |
| 6 | 3800 | 2.121 | 20.89% | 20.93% | 20.93% |
| 6 | 3900 | 2.033 | 21.24% | 21.09% | 21.09% |
| 6 | 4000 | 1.918 | 21.35% | 21.30% | 21.30% |
| 6 | 4100 | 1.905 | 21.98% | 22.07% | 22.07% |
| 6 | 4200 | 1.805 | 22.20% | 22.12% | 22.12% |
| 6 | 4300 | 1.87 | 22.80% | 22.88% | 22.88% |
| 6 | 4400 | 1.829 | 25.84% | 25.88% | 25.88% |
| 7 | 4500 | 1.859 | 27.23% | 27.48% | 27.48% |
| 7 | 4600 | 1.842 | 27.68% | 28.12% | 28.12% |
| 7 | 4700 | 1.745 | 30.02% | 30.63% | 30.63% |
| 7 | 4800 | 1.517 | 31.21% | 31.58% | 31.58% |
| 7 | 4900 | 1.511 | 33.07% | 33.28% | 33.28% |
| 7 | 5000 | 1.626 | 36.03% | 36.45% | 36.45% |
| 7 | 5100 | 1.615 | 36.09% | 36.39% | 36.45% |
| 7 | 5200 | 1.812 | 37.95% | 38.38% | 38.38% |
| 8 | 5300 | 1.696 | 36.15% | 36.23% | 38.38% |
| 8 | 5400 | 1.517 | 38.15% | 38.28% | 38.38% |
| 8 | 5500 | 1.427 | 38.08% | 38.23% | 38.38% |
| 8 | 5600 | 1.442 | 40.14% | 40.68% | 40.68% |
| 8 | 5700 | 1.39 | 41.57% | 41.91% | 41.91% |
| 8 | 5800 | 1.487 | 43.02% | 43.38% | 43.38% |
| 8 | 5900 | 1.539 | 44.03% | 43.85% | 43.85% |
| 9 | 6000 | 1.551 | 43.31% | 43.26% | 43.85% |
| 9 | 6100 | 1.606 | 44.54% | 45.07% | 45.07% |
| 9 | 6200 | 1.468 | 46.31% | 46.53% | 46.53% |
| 9 | 6300 | 1.225 | 46.24% | 46.30% | 46.53% |
| 9 | 6400 | 1.27 | 46.35% | 46.74% | 46.74% |
| 9 | 6500 | 1.434 | 47.89% | 48.12% | 48.12% |
| 9 | 6600 | 1.469 | 46.03% | 45.95% | 48.12% |
| 9 | 6700 | 1.656 | 48.42% | 48.38% | 48.38% |
| 10 | 6800 | 1.537 | 45.03% | 45.24% | 48.38% |
| 10 | 6900 | 1.34 | 49.12% | 49.62% | 49.62% |
| 10 | 7000 | 1.259 | 47.92% | 48.69% | 49.62% |
| 10 | 7100 | 1.259 | 50.06% | 50.48% | 50.48% |
| 10 | 7200 | 1.185 | 50.16% | 50.63% | 50.63% |
| 10 | 7300 | 1.314 | 49.83% | 50.03% | 50.63% |
| 10 | 7400 | 1.358 | 49.86% | 50.17% | 50.63% |
| 11 | 7500 | 1.349 | 50.74% | 50.74% | 50.74% |
| 11 | 7600 | 1.397 | 52.49% | 52.93% | 52.93% |
| 11 | 7700 | 1.291 | 52.79% | 53.03% | 53.03% |
| 11 | 7800 | 1.097 | 52.09% | 52.25% | 53.03% |
| 11 | 7900 | 1.13 | 53.48% | 53.58% | 53.58% |
| 11 | 8000 | 1.292 | 54.28% | 54.49% | 54.49% |
| 11 | 8100 | 1.346 | 49.37% | 49.47% | 54.49% |
| 11 | 8200 | 1.575 | 53.88% | 53.88% | 54.49% |
| 12 | 8300 | 1.386 | 53.35% | 53.53% | 54.49% |
| 12 | 8400 | 1.195 | 55.57% | 56.15% | 56.15% |
| 12 | 8500 | 1.098 | 54.09% | 54.63% | 56.15% |
| 12 | 8600 | 1.135 | 56.33% | 56.48% | 56.48% |
| 12 | 8700 | 0.975 | 56.57% | 56.83% | 56.83% |
| 12 | 8800 | 1.188 | 56.26% | 56.51% | 56.83% |
| 12 | 8900 | 1.252 | 56.36% | 55.99% | 56.83% |
| 13 | 9000 | 1.196 | 56.22% | 56.29% | 56.83% |
| 13 | 9100 | 1.261 | 57.89% | 58.46% | 58.46% |
| 13 | 9200 | 1.096 | 58.56% | 58.51% | 58.51% |
| 13 | 9300 | 0.978 | 58.50% | 58.94% | 58.94% |
| 13 | 9400 | 1.037 | 60.62% | 60.70% | 60.70% |
| 13 | 9500 | 1.142 | 61.31% | 61.39% | 61.39% |
| 13 | 9600 | 1.208 | 57.97% | 57.71% | 61.39% |
| 13 | 9700 | 1.44 | 62.59% | 62.83% | 62.83% |
| 14 | 9800 | 1.158 | 61.50% | 61.37% | 62.83% |
| 14 | 9900 | 0.997 | 65.94% | 66.23% | 66.23% |
| 14 | 10000 | 0.94 | 65.91% | 66.58% | 66.58% |
| 14 | 10100 | 0.988 | 70.52% | 70.28% | 70.28% |
| 14 | 10200 | 0.673 | 72.34% | 72.58% | 72.58% |
| 14 | 10300 | 0.966 | 72.76% | 72.74% | 72.74% |
| 14 | 10400 | 0.971 | 72.27% | 72.37% | 72.74% |
| 15 | 10500 | 0.869 | 73.93% | 74.13% | 74.13% |
| 15 | 10600 | 0.881 | 74.53% | 74.73% | 74.73% |
| 15 | 10700 | 0.752 | 74.32% | 74.48% | 74.73% |
| 15 | 10800 | 0.661 | 76.38% | 76.43% | 76.43% |
| 15 | 10900 | 0.772 | 75.77% | 75.75% | 76.43% |
| 15 | 11000 | 0.844 | 76.58% | 76.54% | 76.54% |
| 15 | 11100 | 0.879 | 76.13% | 76.11% | 76.54% |
| 15 | 11200 | 1.094 | 78.03% | 78.11% | 78.11% |
| 16 | 11300 | 0.718 | 78.46% | 78.51% | 78.51% |
| 16 | 11400 | 0.57 | 79.04% | 79.28% | 79.28% |
| 16 | 11500 | 0.622 | 78.88% | 79.10% | 79.28% |
| 16 | 11600 | 0.81 | 79.56% | 79.72% | 79.72% |
| 16 | 11700 | 0.467 | 79.66% | 79.73% | 79.73% |
| 16 | 11800 | 0.792 | 80.15% | 80.19% | 80.19% |
| 16 | 11900 | 0.835 | 78.40% | 78.13% | 80.19% |
| 17 | 12000 | 0.727 | 80.55% | 80.80% | 80.80% |
| 17 | 12100 | 0.765 | 80.56% | 80.54% | 80.80% |
| 17 | 12200 | 0.756 | 80.24% | 80.45% | 80.80% |
| 17 | 12300 | 0.539 | 81.10% | 80.88% | 80.88% |
| 17 | 12400 | 0.66 | 80.65% | 80.71% | 80.88% |
| 17 | 12500 | 0.781 | 81.14% | 81.18% | 81.18% |
| 17 | 12600 | 0.77 | 81.08% | 81.04% | 81.18% |
| 17 | 12700 | 0.981 | 81.47% | 81.58% | 81.58% |
| 18 | 12800 | 0.588 | 81.98% | 81.95% | 81.95% |
| 18 | 12900 | 0.469 | 82.50% | 82.57% | 82.57% |
| 18 | 13000 | 0.518 | 82.37% | 82.48% | 82.57% |
| 18 | 13100 | 0.745 | 82.59% | 82.63% | 82.63% |
| 18 | 13200 | 0.389 | 82.73% | 82.63% | 82.63% |
| 18 | 13300 | 0.727 | 83.00% | 82.71% | 82.71% |
| 18 | 13400 | 0.787 | 81.14% | 80.81% | 82.71% |
| 19 | 13500 | 0.619 | 83.35% | 83.27% | 83.27% |
| 19 | 13600 | 0.707 | 83.26% | 83.16% | 83.27% |
| 19 | 13700 | 0.762 | 83.10% | 82.87% | 83.27% |
| 19 | 13800 | 0.481 | 83.44% | 83.26% | 83.27% |
| 19 | 13900 | 0.621 | 83.40% | 83.19% | 83.27% |
| 19 | 14000 | 0.713 | 83.54% | 83.49% | 83.49% |
| 19 | 14100 | 0.705 | 83.44% | 83.28% | 83.49% |
| 19 | 14200 | 0.877 | 83.75% | 83.67% | 83.67% |
| 20 | 14300 | 0.502 | 83.90% | 83.92% | 83.92% |
| 20 | 14400 | 0.409 | 84.56% | 84.33% | 84.33% |
| 20 | 14500 | 0.496 | 84.42% | 84.53% | 84.53% |
| 20 | 14600 | 0.703 | 84.53% | 84.48% | 84.53% |
| 20 | 14700 | 0.349 | 84.72% | 84.51% | 84.53% |
| 20 | 14800 | 0.653 | 84.99% | 84.77% | 84.77% |
| 20 | 14900 | 0.743 | 82.90% | 82.74% | 84.77% |
| 21 | 15000 | 0.525 | 85.09% | 84.93% | 84.93% |
| 21 | 15100 | 0.636 | 85.09% | 84.89% | 84.93% |
| 21 | 15200 | 0.747 | 85.04% | 84.77% | 84.93% |
| 21 | 15300 | 0.422 | 85.22% | 84.98% | 84.98% |
| 21 | 15400 | 0.602 | 85.16% | 84.86% | 84.98% |
| 21 | 15500 | 0.662 | 85.37% | 85.09% | 85.09% |
| 21 | 15600 | 0.661 | 85.17% | 84.93% | 85.09% |
| 21 | 15700 | 0.796 | 85.45% | 85.32% | 85.32% |
| 22 | 15800 | 0.447 | 85.22% | 85.36% | 85.36% |
| 22 | 15900 | 0.358 | 86.08% | 85.93% | 85.93% |
| 22 | 16000 | 0.47 | 85.79% | 85.96% | 85.96% |
| 22 | 16100 | 0.687 | 85.80% | 85.79% | 85.96% |
| 22 | 16200 | 0.315 | 86.08% | 85.92% | 85.96% |
| 22 | 16300 | 0.604 | 86.29% | 86.11% | 86.11% |
| 22 | 16400 | 0.703 | 84.62% | 84.10% | 86.11% |
| 23 | 16500 | 0.465 | 86.38% | 86.43% | 86.43% |
| 23 | 16600 | 0.577 | 86.36% | 86.33% | 86.43% |
| 23 | 16700 | 0.72 | 86.49% | 86.23% | 86.43% |
| 23 | 16800 | 0.369 | 86.63% | 86.40% | 86.43% |
| 23 | 16900 | 0.6 | 86.40% | 86.22% | 86.43% |
| 23 | 17000 | 0.633 | 86.44% | 86.50% | 86.50% |
| 23 | 17100 | 0.62 | 86.42% | 86.13% | 86.50% |
| 23 | 17200 | 0.737 | 86.81% | 86.58% | 86.58% |
| 24 | 17300 | 0.403 | 86.37% | 86.47% | 86.58% |
| 24 | 17400 | 0.315 | 87.22% | 87.14% | 87.14% |
| 24 | 17500 | 0.445 | 86.93% | 86.92% | 87.14% |
| 24 | 17600 | 0.656 | 86.99% | 86.89% | 87.14% |
| 24 | 17700 | 0.282 | 87.23% | 86.93% | 87.14% |
| 24 | 17800 | 0.564 | 87.41% | 87.16% | 87.16% |
| 24 | 17900 | 0.668 | 86.06% | 85.63% | 87.16% |
| 25 | 18000 | 0.413 | 87.35% | 87.15% | 87.16% |
| 25 | 18100 | 0.536 | 87.40% | 87.18% | 87.18% |
| 25 | 18200 | 0.687 | 87.50% | 87.15% | 87.18% |
| 25 | 18300 | 0.342 | 87.58% | 87.29% | 87.29% |
| 25 | 18400 | 0.577 | 87.35% | 87.17% | 87.29% |
| 25 | 18500 | 0.597 | 87.30% | 87.22% | 87.29% |
| 25 | 18600 | 0.587 | 87.26% | 87.08% | 87.29% |
| 25 | 18700 | 0.711 | 87.61% | 87.61% | 87.61% |
| 26 | 18800 | 0.367 | 87.29% | 87.35% | 87.61% |
| 26 | 18900 | 0.285 | 88.04% | 87.89% | 87.89% |
| 26 | 19000 | 0.423 | 87.84% | 87.74% | 87.89% |
| 26 | 19100 | 0.625 | 87.92% | 87.63% | 87.89% |
| 26 | 19200 | 0.264 | 87.82% | 87.75% | 87.89% |
| 26 | 19300 | 0.539 | 88.08% | 87.88% | 87.89% |
| 26 | 19400 | 0.649 | 87.23% | 86.78% | 87.89% |
| 27 | 19500 | 0.371 | 88.03% | 88.08% | 88.08% |
| 27 | 19600 | 0.512 | 88.25% | 88.05% | 88.08% |
| 27 | 19700 | 0.641 | 88.23% | 87.79% | 88.08% |
| 27 | 19800 | 0.318 | 88.34% | 87.95% | 88.08% |
| 27 | 19900 | 0.543 | 88.02% | 87.88% | 88.08% |
| 27 | 20000 | 0.555 | 87.94% | 87.87% | 88.08% |
| 27 | 20100 | 0.559 | 88.02% | 87.57% | 88.08% |
| 27 | 20200 | 0.686 | 88.43% | 88.28% | 88.28% |
| 28 | 20300 | 0.341 | 88.10% | 87.94% | 88.28% |
| 28 | 20400 | 0.261 | 88.70% | 88.48% | 88.48% |
| 28 | 20500 | 0.403 | 88.58% | 88.18% | 88.48% |
| 28 | 20600 | 0.591 | 88.67% | 88.28% | 88.48% |
| 28 | 20700 | 0.253 | 88.35% | 88.18% | 88.48% |
| 28 | 20800 | 0.517 | 88.65% | 88.53% | 88.53% |
| 28 | 20900 | 0.632 | 88.00% | 87.53% | 88.53% |
| 29 | 21000 | 0.333 | 88.72% | 88.43% | 88.53% |
| 29 | 21100 | 0.49 | 88.89% | 88.60% | 88.60% |
| 29 | 21200 | 0.608 | 88.61% | 88.23% | 88.60% |
| 29 | 21300 | 0.302 | 88.93% | 88.59% | 88.60% |
| 29 | 21400 | 0.514 | 88.65% | 88.58% | 88.60% |
| 29 | 21500 | 0.516 | 88.54% | 88.43% | 88.60% |
| 29 | 21600 | 0.534 | 88.57% | 88.12% | 88.60% |
| 29 | 21700 | 0.66 | 88.97% | 88.96% | 88.96% |
| 30 | 21800 | 0.319 | 88.66% | 88.46% | 88.96% |
| 30 | 21900 | 0.241 | 89.20% | 89.01% | 89.01% |
| 30 | 22000 | 0.387 | 89.04% | 88.89% | 89.01% |
| 30 | 22100 | 0.547 | 89.18% | 88.56% | 89.01% |
| 30 | 22200 | 0.244 | 88.92% | 88.61% | 89.01% |
| 30 | 22300 | 0.496 | 89.19% | 88.79% | 89.01% |
| 30 | 22400 | 0.613 | 88.64% | 88.18% | 89.01% |
| 31 | 22500 | 0.303 | 89.25% | 88.93% | 89.01% |
| 31 | 22600 | 0.468 | 89.42% | 88.96% | 89.01% |
| 31 | 22700 | 0.582 | 89.04% | 88.81% | 89.01% |
| 31 | 22800 | 0.289 | 89.38% | 88.94% | 89.01% |
| 31 | 22900 | 0.488 | 89.22% | 88.96% | 89.01% |
| 31 | 23000 | 0.48 | 89.13% | 89.08% | 89.08% |
| 31 | 23100 | 0.506 | 89.05% | 88.68% | 89.08% |
| 31 | 23200 | 0.631 | 89.35% | 89.33% | 89.33% |
| 32 | 23300 | 0.307 | 89.11% | 88.85% | 89.33% |
| 32 | 23400 | 0.22 | 89.57% | 89.38% | 89.38% |
| 32 | 23500 | 0.376 | 89.59% | 89.29% | 89.38% |
| 32 | 23600 | 0.501 | 89.60% | 89.09% | 89.38% |
| 32 | 23700 | 0.24 | 89.47% | 89.13% | 89.38% |
| 32 | 23800 | 0.475 | 89.61% | 89.18% | 89.38% |
| 32 | 23900 | 0.599 | 89.16% | 88.63% | 89.38% |
| 33 | 24000 | 0.276 | 89.61% | 89.42% | 89.42% |
| 33 | 24100 | 0.443 | 89.86% | 89.46% | 89.46% |
| 33 | 24200 | 0.567 | 89.39% | 89.07% | 89.46% |
| 33 | 24300 | 0.281 | 89.79% | 89.30% | 89.46% |
| 33 | 24400 | 0.484 | 89.65% | 89.33% | 89.46% |
| 33 | 24500 | 0.455 | 89.50% | 89.28% | 89.46% |
| 33 | 24600 | 0.488 | 89.50% | 89.08% | 89.46% |
| 33 | 24700 | 0.611 | 89.79% | 89.57% | 89.57% |
| 34 | 24800 | 0.295 | 89.51% | 89.32% | 89.57% |
| 34 | 24900 | 0.203 | 89.94% | 89.71% | 89.71% |
| 34 | 25000 | 0.368 | 89.94% | 89.59% | 89.71% |
| 34 | 25100 | 0.46 | 89.99% | 89.48% | 89.71% |
| 34 | 25200 | 0.234 | 89.90% | 89.41% | 89.71% |
| 34 | 25300 | 0.458 | 90.05% | 89.53% | 89.71% |
| 34 | 25400 | 0.587 | 89.57% | 89.17% | 89.71% |
| 35 | 25500 | 0.256 | 89.99% | 89.83% | 89.83% |
| 35 | 25600 | 0.414 | 90.20% | 89.75% | 89.83% |
| 35 | 25700 | 0.553 | 89.74% | 89.39% | 89.83% |
| 35 | 25800 | 0.267 | 90.14% | 89.58% | 89.83% |
| 35 | 25900 | 0.482 | 90.03% | 89.64% | 89.83% |
| 35 | 26000 | 0.435 | 89.87% | 89.61% | 89.83% |
| 35 | 26100 | 0.476 | 89.89% | 89.60% | 89.83% |
| 35 | 26200 | 0.596 | 90.21% | 89.84% | 89.84% |
| 36 | 26300 | 0.291 | 89.90% | 89.57% | 89.84% |
| 36 | 26400 | 0.193 | 90.23% | 89.96% | 89.96% |
| 36 | 26500 | 0.36 | 90.37% | 90.10% | 90.10% |
| 36 | 26600 | 0.427 | 90.34% | 89.80% | 90.10% |
| 36 | 26700 | 0.226 | 90.30% | 89.72% | 90.10% |
| 36 | 26800 | 0.435 | 90.39% | 89.87% | 90.10% |
| 36 | 26900 | 0.58 | 89.95% | 89.52% | 90.10% |
| 37 | 27000 | 0.24 | 90.36% | 90.20% | 90.20% |
| 37 | 27100 | 0.378 | 90.49% | 90.03% | 90.20% |
| 37 | 27200 | 0.532 | 90.14% | 89.75% | 90.20% |
| 37 | 27300 | 0.251 | 90.50% | 89.89% | 90.20% |
| 37 | 27400 | 0.485 | 90.34% | 90.02% | 90.20% |
| 37 | 27500 | 0.417 | 90.17% | 89.90% | 90.20% |
| 37 | 27600 | 0.458 | 90.27% | 89.90% | 90.20% |
| 37 | 27700 | 0.592 | 90.48% | 90.18% | 90.20% |
| 38 | 27800 | 0.283 | 90.39% | 89.93% | 90.20% |
| 38 | 27900 | 0.185 | 90.53% | 90.28% | 90.28% |
| 38 | 28000 | 0.348 | 90.70% | 90.43% | 90.43% |
| 38 | 28100 | 0.399 | 90.63% | 90.18% | 90.43% |
| 38 | 28200 | 0.223 | 90.62% | 89.95% | 90.43% |
| 38 | 28300 | 0.423 | 90.65% | 90.19% | 90.43% |
| 38 | 28400 | 0.576 | 90.32% | 89.78% | 90.43% |
| 39 | 28500 | 0.223 | 90.66% | 90.33% | 90.43% |
| 39 | 28600 | 0.35 | 90.86% | 90.43% | 90.43% |
| 39 | 28700 | 0.513 | 90.49% | 89.88% | 90.43% |
| 39 | 28800 | 0.242 | 90.77% | 90.14% | 90.43% |
| 39 | 28900 | 0.49 | 90.65% | 90.30% | 90.43% |
| 39 | 29000 | 0.399 | 90.45% | 90.16% | 90.43% |
| 39 | 29100 | 0.445 | 90.63% | 90.28% | 90.43% |
| 39 | 29200 | 0.587 | 90.79% | 90.29% | 90.43% |
| 40 | 29300 | 0.274 | 90.66% | 90.20% | 90.43% |
| 40 | 29400 | 0.182 | 90.83% | 90.53% | 90.53% |
| 40 | 29500 | 0.335 | 91.00% | 90.58% | 90.58% |
| 40 | 29600 | 0.367 | 90.94% | 90.47% | 90.58% |
| 40 | 29700 | 0.219 | 91.01% | 90.33% | 90.58% |
| 40 | 29800 | 0.413 | 90.92% | 90.42% | 90.58% |
| 40 | 29900 | 0.556 | 90.65% | 90.13% | 90.58% |
| 41 | 30000 | 0.207 | 90.97% | 90.48% | 90.58% |
| 41 | 30100 | 0.329 | 91.16% | 90.59% | 90.59% |
| 41 | 30200 | 0.496 | 90.84% | 90.18% | 90.59% |
| 41 | 30300 | 0.234 | 91.12% | 90.40% | 90.59% |
| 41 | 30400 | 0.493 | 90.99% | 90.52% | 90.59% |
| 41 | 30500 | 0.383 | 90.80% | 90.30% | 90.59% |
| 41 | 30600 | 0.429 | 90.97% | 90.42% | 90.59% |
| 41 | 30700 | 0.576 | 91.07% | 90.49% | 90.59% |
| 42 | 30800 | 0.269 | 90.97% | 90.50% | 90.59% |
| 42 | 30900 | 0.18 | 91.18% | 90.78% | 90.78% |
| 42 | 31000 | 0.324 | 91.28% | 90.74% | 90.78% |
| 42 | 31100 | 0.34 | 91.27% | 90.64% | 90.78% |
| 42 | 31200 | 0.212 | 91.28% | 90.62% | 90.78% |
| 42 | 31300 | 0.409 | 91.20% | 90.58% | 90.78% |
| 42 | 31400 | 0.529 | 90.96% | 90.26% | 90.78% |
| 43 | 31500 | 0.195 | 91.23% | 90.68% | 90.78% |
| 43 | 31600 | 0.315 | 91.43% | 90.73% | 90.78% |
| 43 | 31700 | 0.479 | 91.11% | 90.29% | 90.78% |
| 43 | 31800 | 0.217 | 91.43% | 90.58% | 90.78% |
| 43 | 31900 | 0.497 | 91.27% | 90.71% | 90.78% |
| 43 | 32000 | 0.373 | 91.00% | 90.53% | 90.78% |
| 43 | 32100 | 0.417 | 91.27% | 90.63% | 90.78% |
| 43 | 32200 | 0.559 | 91.39% | 90.73% | 90.78% |
| 44 | 32300 | 0.26 | 91.23% | 90.65% | 90.78% |
| 44 | 32400 | 0.175 | 91.43% | 90.89% | 90.89% |
| 44 | 32500 | 0.31 | 91.54% | 90.95% | 90.95% |
| 44 | 32600 | 0.32 | 91.55% | 90.76% | 90.95% |
| 44 | 32700 | 0.2 | 91.53% | 90.88% | 90.95% |
| 44 | 32800 | 0.408 | 91.42% | 90.85% | 90.95% |
| 44 | 32900 | 0.511 | 91.19% | 90.42% | 90.95% |
| 45 | 33000 | 0.184 | 91.51% | 90.88% | 90.95% |
| 45 | 33100 | 0.299 | 91.61% | 90.96% | 90.96% |
| 45 | 33200 | 0.465 | 91.28% | 90.38% | 90.96% |
| 45 | 33300 | 0.204 | 91.63% | 90.70% | 90.96% |
| 45 | 33400 | 0.494 | 91.51% | 90.88% | 90.96% |
| 45 | 33500 | 0.369 | 91.30% | 90.73% | 90.96% |
| 45 | 33600 | 0.408 | 91.54% | 90.79% | 90.96% |
| 45 | 33700 | 0.541 | 91.58% | 90.92% | 90.96% |
| 46 | 33800 | 0.252 | 91.45% | 90.83% | 90.96% |
| 46 | 33900 | 0.173 | 91.67% | 91.11% | 91.11% |
| 46 | 34000 | 0.297 | 91.79% | 91.07% | 91.11% |
| 46 | 34100 | 0.308 | 91.75% | 90.88% | 91.11% |
| 46 | 34200 | 0.191 | 91.80% | 91.08% | 91.11% |
| 46 | 34300 | 0.402 | 91.74% | 91.03% | 91.11% |
| 46 | 34400 | 0.496 | 91.36% | 90.57% | 91.11% |
| 47 | 34500 | 0.176 | 91.74% | 91.03% | 91.11% |
| 47 | 34600 | 0.285 | 91.86% | 91.14% | 91.14% |
| 47 | 34700 | 0.454 | 91.46% | 90.63% | 91.14% |
| 47 | 34800 | 0.194 | 91.89% | 90.95% | 91.14% |
| 47 | 34900 | 0.494 | 91.70% | 91.04% | 91.14% |
| 47 | 35000 | 0.361 | 91.59% | 90.77% | 91.14% |
| 47 | 35100 | 0.397 | 91.75% | 90.98% | 91.14% |
| 47 | 35200 | 0.534 | 91.77% | 90.93% | 91.14% |
| 48 | 35300 | 0.247 | 91.66% | 91.01% | 91.14% |
| 48 | 35400 | 0.17 | 91.92% | 91.17% | 91.17% |
| 48 | 35500 | 0.288 | 92.01% | 91.22% | 91.22% |
| 48 | 35600 | 0.298 | 91.94% | 91.11% | 91.22% |
| 48 | 35700 | 0.184 | 92.01% | 91.25% | 91.25% |
| 48 | 35800 | 0.397 | 91.96% | 91.21% | 91.25% |
| 48 | 35900 | 0.482 | 91.56% | 90.75% | 91.25% |
| 49 | 36000 | 0.168 | 91.97% | 91.11% | 91.25% |
| 49 | 36100 | 0.274 | 92.13% | 91.28% | 91.28% |
| 49 | 36200 | 0.445 | 91.66% | 90.66% | 91.28% |
| 49 | 36300 | 0.182 | 92.08% | 91.08% | 91.28% |
| 49 | 36400 | 0.485 | 91.95% | 91.08% | 91.28% |
| 49 | 36500 | 0.351 | 91.79% | 90.96% | 91.28% |
| 49 | 36600 | 0.391 | 91.88% | 91.13% | 91.28% |
| 49 | 36700 | 0.527 | 91.92% | 91.23% | 91.28% |
| 50 | 36800 | 0.238 | 91.85% | 91.23% | 91.28% |
| 50 | 36900 | 0.166 | 92.08% | 91.30% | 91.30% |
| 50 | 37000 | 0.282 | 92.15% | 91.33% | 91.33% |
| 50 | 37100 | 0.288 | 92.13% | 91.23% | 91.33% |
| 50 | 37200 | 0.177 | 92.20% | 91.34% | 91.34% |
| 50 | 37300 | 0.395 | 92.20% | 91.32% | 91.34% |
| 50 | 37400 | 0.468 | 91.75% | 90.86% | 91.34% |
| 51 | 37500 | 0.161 | 92.18% | 91.13% | 91.34% |
| 51 | 37600 | 0.264 | 92.28% | 91.38% | 91.38% |
| 51 | 37700 | 0.439 | 91.82% | 90.73% | 91.38% |
| 51 | 37800 | 0.172 | 92.24% | 91.23% | 91.38% |
| 51 | 37900 | 0.478 | 92.10% | 91.18% | 91.38% |
| 51 | 38000 | 0.344 | 91.95% | 91.12% | 91.38% |
| 51 | 38100 | 0.382 | 92.06% | 91.18% | 91.38% |
| 51 | 38200 | 0.52 | 92.11% | 91.33% | 91.38% |
| 52 | 38300 | 0.233 | 92.04% | 91.18% | 91.38% |
| 52 | 38400 | 0.163 | 92.27% | 91.41% | 91.41% |
| 52 | 38500 | 0.277 | 92.30% | 91.42% | 91.42% |
| 52 | 38600 | 0.277 | 92.29% | 91.32% | 91.42% |
| 52 | 38700 | 0.17 | 92.32% | 91.39% | 91.42% |
| 52 | 38800 | 0.383 | 92.35% | 91.37% | 91.42% |
| 52 | 38900 | 0.46 | 91.90% | 90.91% | 91.42% |
| 53 | 39000 | 0.156 | 92.38% | 91.32% | 91.42% |
| 53 | 39100 | 0.257 | 92.44% | 91.57% | 91.57% |
| 53 | 39200 | 0.434 | 91.98% | 90.84% | 91.57% |
| 53 | 39300 | 0.161 | 92.39% | 91.39% | 91.57% |
| 53 | 39400 | 0.474 | 92.22% | 91.29% | 91.57% |
| 53 | 39500 | 0.338 | 92.16% | 91.23% | 91.57% |
| 53 | 39600 | 0.372 | 92.24% | 91.25% | 91.57% |
| 53 | 39700 | 0.509 | 92.24% | 91.38% | 91.57% |
| 54 | 39800 | 0.231 | 92.20% | 91.27% | 91.57% |
| 54 | 39900 | 0.16 | 92.43% | 91.47% | 91.57% |
| 54 | 40000 | 0.271 | 92.47% | 91.46% | 91.57% |
| 54 | 40100 | 0.268 | 92.44% | 91.53% | 91.57% |
| 54 | 40200 | 0.162 | 92.44% | 91.54% | 91.57% |
| 54 | 40300 | 0.377 | 92.55% | 91.62% | 91.62% |
| 54 | 40400 | 0.451 | 92.02% | 91.03% | 91.62% |
| 55 | 40500 | 0.149 | 92.53% | 91.44% | 91.62% |
| 55 | 40600 | 0.253 | 92.59% | 91.59% | 91.62% |
| 55 | 40700 | 0.425 | 92.10% | 91.01% | 91.62% |
| 55 | 40800 | 0.153 | 92.51% | 91.52% | 91.62% |
| 55 | 40900 | 0.47 | 92.36% | 91.38% | 91.62% |
| 55 | 41000 | 0.326 | 92.29% | 91.38% | 91.62% |
| 55 | 41100 | 0.363 | 92.34% | 91.23% | 91.62% |
| 55 | 41200 | 0.5 | 92.39% | 91.46% | 91.62% |
| 56 | 41300 | 0.225 | 92.33% | 91.37% | 91.62% |
| 56 | 41400 | 0.156 | 92.61% | 91.63% | 91.63% |
| 56 | 41500 | 0.27 | 92.60% | 91.48% | 91.63% |
| 56 | 41600 | 0.259 | 92.59% | 91.52% | 91.63% |
| 56 | 41700 | 0.16 | 92.56% | 91.62% | 91.63% |
| 56 | 41800 | 0.373 | 92.68% | 91.67% | 91.67% |
| 56 | 41900 | 0.44 | 92.18% | 91.03% | 91.67% |
| 57 | 42000 | 0.141 | 92.66% | 91.56% | 91.67% |
| 57 | 42100 | 0.247 | 92.72% | 91.62% | 91.67% |
| 57 | 42200 | 0.417 | 92.19% | 91.13% | 91.67% |
| 57 | 42300 | 0.145 | 92.62% | 91.53% | 91.67% |
| 57 | 42400 | 0.46 | 92.53% | 91.53% | 91.67% |
| 57 | 42500 | 0.319 | 92.45% | 91.53% | 91.67% |
| 57 | 42600 | 0.356 | 92.52% | 91.34% | 91.67% |
| 57 | 42700 | 0.492 | 92.58% | 91.63% | 91.67% |
| 58 | 42800 | 0.224 | 92.49% | 91.47% | 91.67% |
| 58 | 42900 | 0.153 | 92.79% | 91.68% | 91.68% |
| 58 | 43000 | 0.267 | 92.75% | 91.53% | 91.68% |
| 58 | 43100 | 0.253 | 92.72% | 91.65% | 91.68% |
| 58 | 43200 | 0.156 | 92.70% | 91.68% | 91.68% |
| 58 | 43300 | 0.367 | 92.78% | 91.74% | 91.74% |
| 58 | 43400 | 0.429 | 92.32% | 91.16% | 91.74% |
| 59 | 43500 | 0.134 | 92.77% | 91.62% | 91.74% |
| 59 | 43600 | 0.243 | 92.83% | 91.77% | 91.77% |
| 59 | 43700 | 0.413 | 92.34% | 91.22% | 91.77% |
| 59 | 43800 | 0.137 | 92.75% | 91.64% | 91.77% |
| 59 | 43900 | 0.455 | 92.69% | 91.68% | 91.77% |
| 59 | 44000 | 0.311 | 92.54% | 91.61% | 91.77% |
| 59 | 44100 | 0.349 | 92.61% | 91.51% | 91.77% |
| 59 | 44200 | 0.484 | 92.63% | 91.63% | 91.77% |
| 60 | 44300 | 0.216 | 92.65% | 91.57% | 91.77% |
| 60 | 44400 | 0.151 | 92.88% | 91.73% | 91.77% |
| 60 | 44500 | 0.263 | 92.88% | 91.62% | 91.77% |
| 60 | 44600 | 0.246 | 92.84% | 91.67% | 91.77% |
| 60 | 44700 | 0.152 | 92.84% | 91.74% | 91.77% |
| 60 | 44800 | 0.361 | 92.89% | 91.86% | 91.86% |
| 60 | 44900 | 0.418 | 92.41% | 91.24% | 91.86% |
| 61 | 45000 | 0.129 | 92.89% | 91.67% | 91.86% |
| 61 | 45100 | 0.241 | 92.94% | 91.78% | 91.86% |
| 61 | 45200 | 0.407 | 92.48% | 91.31% | 91.86% |
| 61 | 45300 | 0.134 | 92.88% | 91.77% | 91.86% |
| 61 | 45400 | 0.446 | 92.83% | 91.63% | 91.86% |
| 61 | 45500 | 0.302 | 92.71% | 91.72% | 91.86% |
| 61 | 45600 | 0.339 | 92.71% | 91.61% | 91.86% |
| 61 | 45700 | 0.474 | 92.73% | 91.67% | 91.86% |
| 62 | 45800 | 0.213 | 92.76% | 91.65% | 91.86% |
| 62 | 45900 | 0.148 | 93.01% | 91.71% | 91.86% |
| 62 | 46000 | 0.26 | 93.02% | 91.63% | 91.86% |
| 62 | 46100 | 0.242 | 92.94% | 91.70% | 91.86% |
| 62 | 46200 | 0.149 | 92.93% | 91.74% | 91.86% |
| 62 | 46300 | 0.352 | 93.01% | 91.91% | 91.91% |
| 62 | 46400 | 0.41 | 92.53% | 91.39% | 91.91% |
| 63 | 46500 | 0.126 | 93.00% | 91.76% | 91.91% |
| 63 | 46600 | 0.238 | 93.04% | 91.85% | 91.91% |
| 63 | 46700 | 0.402 | 92.62% | 91.47% | 91.91% |
| 63 | 46800 | 0.129 | 92.97% | 91.79% | 91.91% |
| 63 | 46900 | 0.439 | 92.93% | 91.77% | 91.91% |
| 63 | 47000 | 0.294 | 92.88% | 91.78% | 91.91% |
| 63 | 47100 | 0.333 | 92.78% | 91.68% | 91.91% |
| 63 | 47200 | 0.464 | 92.82% | 91.70% | 91.91% |
| 64 | 47300 | 0.208 | 92.87% | 91.64% | 91.91% |
| 64 | 47400 | 0.145 | 93.11% | 91.85% | 91.91% |
| 64 | 47500 | 0.259 | 93.11% | 91.80% | 91.91% |
| 64 | 47600 | 0.238 | 93.05% | 91.82% | 91.91% |
| 64 | 47700 | 0.148 | 93.03% | 91.79% | 91.91% |
| 64 | 47800 | 0.344 | 93.08% | 92.03% | 92.03% |
| 64 | 47900 | 0.402 | 92.58% | 91.46% | 92.03% |
| 65 | 48000 | 0.118 | 93.12% | 91.88% | 92.03% |
| 65 | 48100 | 0.235 | 93.15% | 91.89% | 92.03% |
| 65 | 48200 | 0.397 | 92.73% | 91.50% | 92.03% |
| 65 | 48300 | 0.125 | 93.06% | 91.89% | 92.03% |
| 65 | 48400 | 0.435 | 93.05% | 91.89% | 92.03% |
| 65 | 48500 | 0.289 | 93.02% | 91.86% | 92.03% |
| 65 | 48600 | 0.329 | 92.84% | 91.73% | 92.03% |
| 65 | 48700 | 0.457 | 92.90% | 91.78% | 92.03% |
| 66 | 48800 | 0.201 | 93.00% | 91.74% | 92.03% |
| 66 | 48900 | 0.141 | 93.21% | 91.93% | 92.03% |
| 66 | 49000 | 0.257 | 93.23% | 91.87% | 92.03% |
| 66 | 49100 | 0.232 | 93.13% | 91.88% | 92.03% |
| 66 | 49200 | 0.145 | 93.13% | 91.87% | 92.03% |
| 66 | 49300 | 0.331 | 93.21% | 92.05% | 92.05% |
| 66 | 49400 | 0.396 | 92.64% | 91.53% | 92.05% |
| 67 | 49500 | 0.112 | 93.22% | 91.88% | 92.05% |
| 67 | 49600 | 0.236 | 93.25% | 91.93% | 92.05% |
| 67 | 49700 | 0.391 | 92.86% | 91.46% | 92.05% |
| 67 | 49800 | 0.122 | 93.21% | 91.92% | 92.05% |
| 67 | 49900 | 0.427 | 93.15% | 91.97% | 92.05% |
| 67 | 50000 | 0.281 | 93.10% | 91.97% | 92.05% |
| 67 | 50100 | 0.323 | 92.94% | 91.76% | 92.05% |
| 67 | 50200 | 0.449 | 93.01% | 91.78% | 92.05% |
| 68 | 50300 | 0.197 | 93.13% | 91.83% | 92.05% |
| 68 | 50400 | 0.137 | 93.28% | 91.96% | 92.05% |
| 68 | 50500 | 0.255 | 93.32% | 91.95% | 92.05% |
| 68 | 50600 | 0.227 | 93.23% | 91.95% | 92.05% |
| 68 | 50700 | 0.142 | 93.24% | 91.94% | 92.05% |
| 68 | 50800 | 0.323 | 93.32% | 92.18% | 92.18% |
| 68 | 50900 | 0.393 | 92.73% | 91.67% | 92.18% |
| 69 | 51000 | 0.109 | 93.34% | 91.98% | 92.18% |
| 69 | 51100 | 0.233 | 93.31% | 92.01% | 92.18% |
| 69 | 51200 | 0.39 | 92.96% | 91.57% | 92.18% |
| 69 | 51300 | 0.118 | 93.28% | 91.96% | 92.18% |
| 69 | 51400 | 0.422 | 93.27% | 92.01% | 92.18% |
| 69 | 51500 | 0.273 | 93.23% | 92.01% | 92.18% |
| 69 | 51600 | 0.321 | 93.06% | 91.82% | 92.18% |
| 69 | 51700 | 0.45 | 93.04% | 91.83% | 92.18% |
| 70 | 51800 | 0.196 | 93.22% | 91.88% | 92.18% |
| 70 | 51900 | 0.135 | 93.35% | 92.04% | 92.18% |
| 70 | 52000 | 0.252 | 93.40% | 92.04% | 92.18% |
| 70 | 52100 | 0.224 | 93.36% | 92.03% | 92.18% |
| 70 | 52200 | 0.14 | 93.33% | 92.05% | 92.18% |
| 70 | 52300 | 0.311 | 93.42% | 92.26% | 92.26% |
| 70 | 52400 | 0.388 | 92.82% | 91.73% | 92.26% |
| 71 | 52500 | 0.105 | 93.45% | 92.01% | 92.26% |
| 71 | 52600 | 0.237 | 93.43% | 92.04% | 92.26% |
| 71 | 52700 | 0.387 | 93.12% | 91.64% | 92.26% |
| 71 | 52800 | 0.115 | 93.38% | 91.98% | 92.26% |
| 71 | 52900 | 0.417 | 93.36% | 92.05% | 92.26% |
| 71 | 53000 | 0.267 | 93.29% | 92.03% | 92.26% |
| 71 | 53100 | 0.318 | 93.15% | 91.91% | 92.26% |
| 71 | 53200 | 0.446 | 93.12% | 91.87% | 92.26% |
| 72 | 53300 | 0.194 | 93.25% | 91.90% | 92.26% |
| 72 | 53400 | 0.131 | 93.47% | 92.09% | 92.26% |
| 72 | 53500 | 0.25 | 93.51% | 92.11% | 92.26% |
| 72 | 53600 | 0.221 | 93.47% | 92.12% | 92.26% |
| 72 | 53700 | 0.141 | 93.40% | 92.10% | 92.26% |
| 72 | 53800 | 0.304 | 93.46% | 92.28% | 92.28% |
| 72 | 53900 | 0.38 | 92.94% | 91.78% | 92.28% |
| 73 | 54000 | 0.102 | 93.60% | 92.07% | 92.28% |
| 73 | 54100 | 0.237 | 93.51% | 92.10% | 92.28% |
| 73 | 54200 | 0.382 | 93.22% | 91.71% | 92.28% |
| 73 | 54300 | 0.112 | 93.46% | 92.01% | 92.28% |
| 73 | 54400 | 0.411 | 93.43% | 92.13% | 92.28% |
| 73 | 54500 | 0.261 | 93.38% | 92.08% | 92.28% |
| 73 | 54600 | 0.314 | 93.21% | 91.93% | 92.28% |
| 73 | 54700 | 0.441 | 93.17% | 91.98% | 92.28% |
| 74 | 54800 | 0.195 | 93.35% | 91.98% | 92.28% |
| 74 | 54900 | 0.127 | 93.55% | 92.14% | 92.28% |
| 74 | 55000 | 0.245 | 93.62% | 92.16% | 92.28% |
| 74 | 55100 | 0.216 | 93.56% | 92.21% | 92.28% |
| 74 | 55200 | 0.139 | 93.47% | 92.13% | 92.28% |
| 74 | 55300 | 0.297 | 93.57% | 92.35% | 92.35% |
| 74 | 55400 | 0.374 | 93.02% | 91.78% | 92.35% |
| 75 | 55500 | 0.1 | 93.67% | 92.13% | 92.35% |
| 75 | 55600 | 0.239 | 93.60% | 92.21% | 92.35% |
| 75 | 55700 | 0.379 | 93.29% | 91.73% | 92.35% |
| 75 | 55800 | 0.109 | 93.54% | 92.08% | 92.35% |
| 75 | 55900 | 0.403 | 93.54% | 92.18% | 92.35% |
| 75 | 56000 | 0.258 | 93.49% | 92.17% | 92.35% |
| 75 | 56100 | 0.309 | 93.32% | 91.98% | 92.35% |
| 75 | 56200 | 0.438 | 93.30% | 92.08% | 92.35% |
| 76 | 56300 | 0.195 | 93.45% | 92.03% | 92.35% |
| 76 | 56400 | 0.125 | 93.69% | 92.30% | 92.35% |
| 76 | 56500 | 0.242 | 93.70% | 92.24% | 92.35% |
| 76 | 56600 | 0.212 | 93.60% | 92.33% | 92.35% |
| 76 | 56700 | 0.138 | 93.54% | 92.18% | 92.35% |
| 76 | 56800 | 0.288 | 93.61% | 92.33% | 92.35% |
| 76 | 56900 | 0.374 | 93.19% | 91.89% | 92.35% |
| 77 | 57000 | 0.096 | 93.77% | 92.11% | 92.35% |
| 77 | 57100 | 0.239 | 93.66% | 92.28% | 92.35% |
| 77 | 57200 | 0.378 | 93.35% | 91.79% | 92.35% |
| 77 | 57300 | 0.107 | 93.62% | 92.08% | 92.35% |
| 77 | 57400 | 0.398 | 93.67% | 92.15% | 92.35% |

Question 5 – Cost per Iteration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Epoch | Iteration | Training Cost | Training Accuracy | Validation Accuracy | Best Validation Accuracy |
| 1 | 0 | 2.323 | 9.36% | 9.67% | 9.67% |
| 1 | 100 | 2.279 | 15.34% | 15.77% | 15.77% |
| 2 | 200 | 2.238 | 18.91% | 19.52% | 19.52% |
| 2 | 300 | 2.188 | 21.08% | 21.67% | 21.67% |
| 3 | 400 | 2.123 | 22.58% | 22.82% | 22.82% |
| 3 | 500 | 2.123 | 23.73% | 24.07% | 24.07% |
| 4 | 600 | 2.083 | 25.21% | 25.30% | 25.30% |
| 4 | 700 | 2.025 | 26.74% | 26.98% | 26.98% |
| 5 | 800 | 1.999 | 28.19% | 28.39% | 28.39% |
| 5 | 900 | 1.949 | 29.43% | 29.79% | 29.79% |
| 6 | 1000 | 1.912 | 31.15% | 31.29% | 31.29% |
| 6 | 1100 | 1.885 | 32.39% | 32.65% | 32.65% |
| 7 | 1200 | 1.85 | 33.99% | 34.13% | 34.13% |
| 7 | 1300 | 1.841 | 35.57% | 35.76% | 35.76% |
| 8 | 1400 | 1.788 | 37.27% | 37.46% | 37.46% |
| 8 | 1500 | 1.76 | 38.91% | 39.39% | 39.39% |
| 9 | 1600 | 1.719 | 40.25% | 40.73% | 40.73% |
| 10 | 1700 | 1.724 | 41.66% | 42.32% | 42.32% |
| 10 | 1800 | 1.62 | 42.54% | 43.38% | 43.38% |
| 11 | 1900 | 1.61 | 43.71% | 44.35% | 44.35% |
| 11 | 2000 | 1.544 | 44.25% | 44.83% | 44.83% |
| 12 | 2100 | 1.519 | 45.13% | 45.81% | 45.81% |
| 12 | 2200 | 1.537 | 45.82% | 46.34% | 46.34% |
| 13 | 2300 | 1.531 | 46.40% | 47.03% | 47.03% |
| 13 | 2400 | 1.48 | 47.08% | 47.56% | 47.56% |
| 14 | 2500 | 1.487 | 47.63% | 48.28% | 48.28% |
| 14 | 2600 | 1.43 | 48.05% | 48.38% | 48.38% |
| 15 | 2700 | 1.396 | 48.82% | 49.13% | 49.13% |
| 15 | 2800 | 1.305 | 49.25% | 49.61% | 49.61% |
| 16 | 2900 | 1.36 | 49.83% | 50.23% | 50.23% |
| 16 | 3000 | 1.419 | 50.39% | 51.00% | 51.00% |
| 17 | 3100 | 1.312 | 51.00% | 51.55% | 51.55% |
| 18 | 3200 | 1.382 | 51.76% | 52.48% | 52.48% |
| 18 | 3300 | 1.384 | 52.47% | 53.24% | 53.24% |
| 19 | 3400 | 1.364 | 53.34% | 54.00% | 54.00% |
| 19 | 3500 | 1.285 | 54.14% | 54.84% | 54.84% |
| 20 | 3600 | 1.317 | 54.79% | 55.30% | 55.30% |
| 20 | 3700 | 1.258 | 55.53% | 56.14% | 56.14% |
| 21 | 3800 | 1.307 | 55.92% | 56.45% | 56.45% |
| 21 | 3900 | 1.223 | 56.50% | 57.03% | 57.03% |
| 22 | 4000 | 1.275 | 57.04% | 57.61% | 57.61% |
| 22 | 4100 | 1.309 | 57.41% | 57.98% | 57.98% |
| 23 | 4200 | 1.277 | 57.93% | 58.59% | 58.59% |
| 23 | 4300 | 1.272 | 58.18% | 58.94% | 58.94% |
| 24 | 4400 | 1.202 | 58.56% | 59.42% | 59.42% |
| 24 | 4500 | 1.38 | 58.91% | 59.71% | 59.71% |
| 25 | 4600 | 1.238 | 59.24% | 60.28% | 60.28% |
| 26 | 4700 | 1.187 | 59.52% | 60.33% | 60.33% |
| 26 | 4800 | 1.198 | 59.91% | 60.68% | 60.68% |
| 27 | 4900 | 1.209 | 60.30% | 61.05% | 61.05% |
| 27 | 5000 | 1.142 | 60.55% | 61.25% | 61.25% |
| 28 | 5100 | 1.108 | 60.82% | 61.49% | 61.49% |
| 28 | 5200 | 1.184 | 61.01% | 61.66% | 61.66% |
| 29 | 5300 | 1.134 | 61.37% | 62.02% | 62.02% |
| 29 | 5400 | 1.128 | 61.41% | 62.02% | 62.02% |
| 30 | 5500 | 1.149 | 61.72% | 62.34% | 62.34% |
| 30 | 5600 | 1.096 | 61.84% | 62.49% | 62.49% |
| 31 | 5700 | 1.128 | 62.22% | 62.82% | 62.82% |
| 31 | 5800 | 1.074 | 62.34% | 62.93% | 62.93% |
| 32 | 5900 | 1.124 | 62.63% | 63.12% | 63.12% |
| 32 | 6000 | 1.068 | 62.79% | 63.47% | 63.47% |
| 33 | 6100 | 1.074 | 62.99% | 63.54% | 63.54% |
| 33 | 6200 | 1.17 | 63.35% | 63.86% | 63.86% |
| 34 | 6300 | 1.09 | 63.42% | 63.86% | 63.86% |
| 35 | 6400 | 1.181 | 63.75% | 64.29% | 64.29% |
| 35 | 6500 | 1.031 | 63.89% | 64.38% | 64.38% |
| 36 | 6600 | 1.029 | 64.10% | 64.56% | 64.56% |
| 36 | 6700 | 1.028 | 64.12% | 64.63% | 64.63% |
| 37 | 6800 | 1.039 | 64.50% | 64.97% | 64.97% |
| 37 | 6900 | 1.116 | 64.52% | 65.06% | 65.06% |
| 38 | 7000 | 1.109 | 64.84% | 65.45% | 65.45% |
| 38 | 7100 | 1.02 | 64.91% | 65.41% | 65.45% |
| 39 | 7200 | 1.054 | 65.19% | 65.91% | 65.91% |
| 39 | 7300 | 1.03 | 65.35% | 65.93% | 65.93% |
| 40 | 7400 | 0.96 | 65.71% | 66.22% | 66.22% |
| 40 | 7500 | 0.963 | 65.79% | 66.33% | 66.33% |
| 41 | 7600 | 0.945 | 66.18% | 66.65% | 66.65% |
| 41 | 7700 | 1.056 | 66.32% | 66.78% | 66.78% |
| 42 | 7800 | 0.98 | 66.59% | 66.98% | 66.98% |
| 43 | 7900 | 0.963 | 66.84% | 67.23% | 67.23% |
| 43 | 8000 | 0.987 | 67.10% | 67.34% | 67.34% |
| 44 | 8100 | 0.998 | 67.32% | 67.62% | 67.62% |
| 44 | 8200 | 0.955 | 67.63% | 67.83% | 67.83% |
| 45 | 8300 | 0.983 | 67.78% | 68.09% | 68.09% |
| 45 | 8400 | 0.938 | 68.04% | 68.34% | 68.34% |
| 46 | 8500 | 0.939 | 68.28% | 68.35% | 68.35% |
| 46 | 8600 | 0.909 | 68.28% | 68.40% | 68.40% |
| 47 | 8700 | 0.959 | 68.59% | 68.63% | 68.63% |
| 47 | 8800 | 0.972 | 68.78% | 69.03% | 69.03% |
| 48 | 8900 | 0.97 | 69.09% | 69.27% | 69.27% |
| 48 | 9000 | 0.933 | 69.22% | 69.36% | 69.36% |
| 49 | 9100 | 0.899 | 69.48% | 69.62% | 69.62% |
| 49 | 9200 | 1.09 | 69.60% | 69.78% | 69.78% |
| 50 | 9300 | 0.958 | 69.79% | 70.01% | 70.01% |
| 51 | 9400 | 0.883 | 70.06% | 70.42% | 70.42% |
| 51 | 9500 | 0.968 | 70.19% | 70.39% | 70.42% |
| 52 | 9600 | 0.928 | 70.47% | 70.59% | 70.59% |
| 52 | 9700 | 0.853 | 70.65% | 70.81% | 70.81% |
| 53 | 9800 | 0.833 | 70.87% | 71.05% | 71.05% |
| 53 | 9900 | 0.921 | 71.06% | 71.21% | 71.21% |
| 54 | 10000 | 0.874 | 71.27% | 71.47% | 71.47% |
| 54 | 10100 | 0.882 | 71.38% | 71.52% | 71.52% |
| 55 | 10200 | 0.926 | 71.68% | 71.83% | 71.83% |
| 55 | 10300 | 0.849 | 71.78% | 71.93% | 71.93% |
| 56 | 10400 | 0.895 | 71.93% | 72.13% | 72.13% |
| 56 | 10500 | 0.809 | 72.07% | 72.27% | 72.27% |
| 57 | 10600 | 0.874 | 72.37% | 72.55% | 72.55% |
| 57 | 10700 | 0.854 | 72.56% | 72.92% | 72.92% |
| 58 | 10800 | 0.822 | 72.64% | 72.87% | 72.92% |
| 58 | 10900 | 0.936 | 72.93% | 73.18% | 73.18% |
| 59 | 11000 | 0.857 | 72.98% | 73.17% | 73.18% |
| 60 | 11100 | 0.974 | 73.26% | 73.45% | 73.45% |
| 60 | 11200 | 0.817 | 73.35% | 73.53% | 73.53% |
| 61 | 11300 | 0.809 | 73.50% | 73.63% | 73.63% |
| 61 | 11400 | 0.796 | 73.55% | 73.79% | 73.79% |
| 62 | 11500 | 0.806 | 73.82% | 74.01% | 74.01% |
| 62 | 11600 | 0.915 | 73.84% | 74.08% | 74.08% |
| 63 | 11700 | 0.916 | 74.06% | 74.24% | 74.24% |
| 63 | 11800 | 0.823 | 74.06% | 74.29% | 74.29% |
| 64 | 11900 | 0.876 | 74.37% | 74.53% | 74.53% |
| 64 | 12000 | 0.827 | 74.43% | 74.58% | 74.58% |
| 65 | 12100 | 0.747 | 74.65% | 74.84% | 74.84% |
| 65 | 12200 | 0.782 | 74.69% | 74.89% | 74.89% |
| 66 | 12300 | 0.756 | 74.93% | 75.13% | 75.13% |
| 66 | 12400 | 0.838 | 75.02% | 75.20% | 75.20% |
| 67 | 12500 | 0.821 | 75.16% | 75.45% | 75.45% |
| 68 | 12600 | 0.764 | 75.37% | 75.52% | 75.52% |
| 68 | 12700 | 0.798 | 75.41% | 75.63% | 75.63% |
| 69 | 12800 | 0.806 | 75.63% | 75.73% | 75.73% |
| 69 | 12900 | 0.812 | 75.71% | 75.89% | 75.89% |
| 70 | 13000 | 0.824 | 75.87% | 75.98% | 75.98% |
| 70 | 13100 | 0.766 | 75.99% | 76.22% | 76.22% |
| 71 | 13200 | 0.754 | 76.10% | 76.36% | 76.36% |
| 71 | 13300 | 0.728 | 76.12% | 76.41% | 76.41% |
| 72 | 13400 | 0.787 | 76.33% | 76.67% | 76.67% |
| 72 | 13500 | 0.79 | 76.47% | 76.75% | 76.75% |
| 73 | 13600 | 0.796 | 76.69% | 77.04% | 77.04% |
| 73 | 13700 | 0.755 | 76.68% | 76.98% | 77.04% |
| 74 | 13800 | 0.752 | 76.92% | 77.23% | 77.23% |
| 74 | 13900 | 0.941 | 77.01% | 77.30% | 77.30% |
| 75 | 14000 | 0.8 | 77.17% | 77.63% | 77.63% |
| 76 | 14100 | 0.707 | 77.32% | 77.61% | 77.63% |
| 76 | 14200 | 0.822 | 77.39% | 77.78% | 77.78% |
| 77 | 14300 | 0.757 | 77.54% | 77.96% | 77.96% |
| 77 | 14400 | 0.69 | 77.74% | 78.07% | 78.07% |
| 78 | 14500 | 0.667 | 77.81% | 78.21% | 78.21% |
| 78 | 14600 | 0.739 | 77.93% | 78.28% | 78.28% |
| 79 | 14700 | 0.703 | 78.03% | 78.42% | 78.42% |
| 79 | 14800 | 0.704 | 78.16% | 78.45% | 78.45% |
| 80 | 14900 | 0.801 | 78.29% | 78.67% | 78.67% |
| 80 | 15000 | 0.695 | 78.37% | 78.69% | 78.69% |
| 81 | 15100 | 0.745 | 78.53% | 78.98% | 78.98% |
| 81 | 15200 | 0.679 | 78.59% | 78.98% | 78.98% |
| 82 | 15300 | 0.702 | 78.74% | 79.20% | 79.20% |
| 82 | 15400 | 0.715 | 78.87% | 79.18% | 79.20% |
| 83 | 15500 | 0.67 | 79.00% | 79.38% | 79.38% |
| 83 | 15600 | 0.764 | 79.08% | 79.30% | 79.38% |
| 84 | 15700 | 0.701 | 79.23% | 79.53% | 79.53% |
| 85 | 15800 | 0.814 | 79.27% | 79.48% | 79.53% |
| 85 | 15900 | 0.674 | 79.41% | 79.63% | 79.63% |
| 86 | 16000 | 0.649 | 79.49% | 79.71% | 79.71% |
| 86 | 16100 | 0.641 | 79.59% | 79.90% | 79.90% |
| 87 | 16200 | 0.628 | 79.75% | 79.93% | 79.93% |
| 87 | 16300 | 0.768 | 79.83% | 80.07% | 80.07% |
| 88 | 16400 | 0.767 | 79.92% | 80.26% | 80.26% |
| 88 | 16500 | 0.693 | 80.00% | 80.17% | 80.26% |
| 89 | 16600 | 0.735 | 80.14% | 80.42% | 80.42% |
| 89 | 16700 | 0.691 | 80.24% | 80.36% | 80.42% |
| 90 | 16800 | 0.592 | 80.38% | 80.53% | 80.53% |
| 90 | 16900 | 0.642 | 80.40% | 80.55% | 80.55% |
| 91 | 17000 | 0.614 | 80.55% | 80.68% | 80.68% |
| 91 | 17100 | 0.677 | 80.53% | 80.74% | 80.74% |
| 92 | 17200 | 0.686 | 80.69% | 80.85% | 80.85% |
| 93 | 17300 | 0.62 | 80.79% | 80.83% | 80.85% |
| 93 | 17400 | 0.664 | 80.86% | 81.01% | 81.01% |
| 94 | 17500 | 0.654 | 80.95% | 81.02% | 81.02% |
| 94 | 17600 | 0.699 | 81.02% | 81.16% | 81.16% |
| 95 | 17700 | 0.709 | 81.10% | 81.18% | 81.18% |
| 95 | 17800 | 0.633 | 81.24% | 81.31% | 81.31% |
| 96 | 17900 | 0.618 | 81.29% | 81.34% | 81.34% |
| 96 | 18000 | 0.581 | 81.38% | 81.44% | 81.44% |
| 97 | 18100 | 0.649 | 81.40% | 81.62% | 81.62% |
| 97 | 18200 | 0.639 | 81.56% | 81.55% | 81.62% |
| 98 | 18300 | 0.649 | 81.63% | 81.82% | 81.82% |
| 98 | 18400 | 0.63 | 81.66% | 81.73% | 81.82% |
| 99 | 18500 | 0.614 | 81.80% | 81.87% | 81.87% |
| 99 | 18600 | 0.812 | 81.86% | 81.90% | 81.90% |
| 100 | 18700 | 0.671 | 82.00% | 81.98% | 81.98% |
| 101 | 18800 | 0.563 | 81.92% | 82.12% | 82.12% |
| 101 | 18900 | 0.691 | 82.14% | 82.19% | 82.19% |
| 102 | 19000 | 0.638 | 82.24% | 82.27% | 82.27% |
| 102 | 19100 | 0.562 | 82.31% | 82.34% | 82.34% |
| 103 | 19200 | 0.531 | 82.36% | 82.46% | 82.46% |
| 103 | 19300 | 0.597 | 82.46% | 82.53% | 82.53% |
| 104 | 19400 | 0.567 | 82.53% | 82.63% | 82.63% |
| 104 | 19500 | 0.572 | 82.63% | 82.63% | 82.63% |
| 105 | 19600 | 0.686 | 82.71% | 82.84% | 82.84% |
| 105 | 19700 | 0.572 | 82.83% | 82.92% | 82.92% |
| 106 | 19800 | 0.633 | 82.87% | 83.01% | 83.01% |
| 106 | 19900 | 0.584 | 82.94% | 83.06% | 83.06% |
| 107 | 20000 | 0.569 | 83.03% | 83.20% | 83.20% |
| 107 | 20100 | 0.603 | 83.07% | 83.28% | 83.28% |
| 108 | 20200 | 0.561 | 83.19% | 83.40% | 83.40% |
| 108 | 20300 | 0.634 | 83.21% | 83.53% | 83.53% |
| 109 | 20400 | 0.587 | 83.31% | 83.60% | 83.60% |
| 110 | 20500 | 0.679 | 83.36% | 83.55% | 83.60% |
| 110 | 20600 | 0.554 | 83.50% | 83.73% | 83.73% |
| 111 | 20700 | 0.521 | 83.56% | 83.88% | 83.88% |
| 111 | 20800 | 0.542 | 83.63% | 83.98% | 83.98% |
| 112 | 20900 | 0.516 | 83.70% | 83.88% | 83.98% |
| 112 | 21000 | 0.649 | 83.82% | 84.06% | 84.06% |
| 113 | 21100 | 0.642 | 83.88% | 84.12% | 84.12% |
| 113 | 21200 | 0.581 | 83.93% | 84.23% | 84.23% |
| 114 | 21300 | 0.61 | 83.99% | 84.23% | 84.23% |
| 114 | 21400 | 0.601 | 84.06% | 84.36% | 84.36% |
| 115 | 21500 | 0.484 | 84.15% | 84.48% | 84.48% |
| 115 | 21600 | 0.53 | 84.21% | 84.52% | 84.52% |
| 116 | 21700 | 0.503 | 84.28% | 84.59% | 84.59% |
| 116 | 21800 | 0.562 | 84.34% | 84.55% | 84.59% |
| 117 | 21900 | 0.575 | 84.46% | 84.79% | 84.79% |
| 118 | 22000 | 0.515 | 84.54% | 84.63% | 84.79% |
| 118 | 22100 | 0.563 | 84.63% | 84.80% | 84.80% |
| 119 | 22200 | 0.544 | 84.69% | 84.88% | 84.88% |
| 119 | 22300 | 0.602 | 84.74% | 84.92% | 84.92% |
| 120 | 22400 | 0.603 | 84.82% | 84.93% | 84.93% |
| 120 | 22500 | 0.536 | 84.90% | 85.09% | 85.09% |
| 121 | 22600 | 0.524 | 84.98% | 85.10% | 85.10% |
| 121 | 22700 | 0.465 | 85.04% | 85.23% | 85.23% |
| 122 | 22800 | 0.539 | 85.18% | 85.33% | 85.33% |
| 122 | 22900 | 0.53 | 85.18% | 85.36% | 85.36% |
| 123 | 23000 | 0.531 | 85.32% | 85.45% | 85.45% |
| 123 | 23100 | 0.534 | 85.34% | 85.41% | 85.45% |
| 124 | 23200 | 0.502 | 85.43% | 85.43% | 85.45% |
| 124 | 23300 | 0.71 | 85.56% | 85.60% | 85.60% |
| 125 | 23400 | 0.551 | 85.61% | 85.73% | 85.73% |
| 126 | 23500 | 0.453 | 85.56% | 85.52% | 85.73% |
| 126 | 23600 | 0.59 | 85.75% | 85.79% | 85.79% |
| 127 | 23700 | 0.558 | 85.79% | 85.86% | 85.86% |
| 127 | 23800 | 0.47 | 85.88% | 85.81% | 85.86% |
| 128 | 23900 | 0.425 | 85.95% | 85.93% | 85.93% |
| 128 | 24000 | 0.487 | 86.02% | 85.96% | 85.96% |
| 129 | 24100 | 0.453 | 86.00% | 85.95% | 85.96% |
| 129 | 24200 | 0.475 | 86.12% | 86.11% | 86.11% |
| 130 | 24300 | 0.582 | 86.29% | 86.16% | 86.16% |
| 130 | 24400 | 0.475 | 86.30% | 86.18% | 86.18% |
| 131 | 24500 | 0.552 | 86.39% | 86.23% | 86.23% |
| 131 | 24600 | 0.504 | 86.38% | 86.23% | 86.23% |
| 132 | 24700 | 0.467 | 86.48% | 86.33% | 86.33% |
| 132 | 24800 | 0.499 | 86.43% | 86.33% | 86.33% |
| 133 | 24900 | 0.478 | 86.64% | 86.53% | 86.53% |
| 133 | 25000 | 0.532 | 86.58% | 86.52% | 86.53% |
| 134 | 25100 | 0.493 | 86.74% | 86.56% | 86.56% |
| 135 | 25200 | 0.562 | 86.75% | 86.60% | 86.60% |
| 135 | 25300 | 0.463 | 86.89% | 86.73% | 86.73% |
| 136 | 25400 | 0.415 | 86.93% | 86.73% | 86.73% |
| 136 | 25500 | 0.461 | 87.00% | 86.83% | 86.83% |
| 137 | 25600 | 0.43 | 87.00% | 86.83% | 86.83% |
| 137 | 25700 | 0.543 | 87.15% | 87.06% | 87.06% |
| 138 | 25800 | 0.543 | 87.19% | 87.01% | 87.06% |
| 138 | 25900 | 0.479 | 87.24% | 87.01% | 87.06% |
| 139 | 26000 | 0.509 | 87.30% | 87.14% | 87.14% |
| 139 | 26100 | 0.535 | 87.39% | 87.16% | 87.16% |
| 140 | 26200 | 0.403 | 87.47% | 87.22% | 87.22% |
| 140 | 26300 | 0.437 | 87.49% | 87.22% | 87.22% |
| 141 | 26400 | 0.412 | 87.57% | 87.36% | 87.36% |
| 141 | 26500 | 0.47 | 87.55% | 87.26% | 87.36% |
| 142 | 26600 | 0.476 | 87.70% | 87.43% | 87.43% |
| 143 | 26700 | 0.433 | 87.67% | 87.35% | 87.43% |
| 143 | 26800 | 0.477 | 87.81% | 87.53% | 87.53% |
| 144 | 26900 | 0.461 | 87.78% | 87.53% | 87.53% |
| 144 | 27000 | 0.512 | 87.87% | 87.64% | 87.64% |
| 145 | 27100 | 0.508 | 87.89% | 87.60% | 87.64% |
| 145 | 27200 | 0.456 | 88.03% | 87.68% | 87.68% |
| 146 | 27300 | 0.446 | 88.02% | 87.70% | 87.70% |
| 146 | 27400 | 0.375 | 88.11% | 87.70% | 87.70% |
| 147 | 27500 | 0.444 | 88.17% | 87.81% | 87.81% |
| 147 | 27600 | 0.439 | 88.22% | 87.89% | 87.89% |
| 148 | 27700 | 0.435 | 88.32% | 87.98% | 87.98% |
| 148 | 27800 | 0.447 | 88.30% | 87.85% | 87.98% |
| 149 | 27900 | 0.408 | 88.33% | 87.93% | 87.98% |
| 149 | 28000 | 0.616 | 88.40% | 88.11% | 88.11% |
| 150 | 28100 | 0.442 | 88.50% | 88.15% | 88.15% |
| 151 | 28200 | 0.362 | 88.40% | 88.09% | 88.15% |
| 151 | 28300 | 0.486 | 88.65% | 88.22% | 88.22% |
| 152 | 28400 | 0.487 | 88.64% | 88.33% | 88.33% |
| 152 | 28500 | 0.393 | 88.71% | 88.27% | 88.33% |
| 153 | 28600 | 0.342 | 88.75% | 88.44% | 88.44% |
| 153 | 28700 | 0.399 | 88.81% | 88.38% | 88.44% |
| 154 | 28800 | 0.357 | 88.78% | 88.44% | 88.44% |
| 154 | 28900 | 0.404 | 88.92% | 88.43% | 88.44% |
| 155 | 29000 | 0.495 | 89.03% | 88.63% | 88.63% |
| 155 | 29100 | 0.402 | 89.07% | 88.59% | 88.63% |
| 156 | 29200 | 0.486 | 89.10% | 88.67% | 88.67% |
| 156 | 29300 | 0.432 | 89.12% | 88.65% | 88.67% |
| 157 | 29400 | 0.383 | 89.15% | 88.79% | 88.79% |
| 157 | 29500 | 0.405 | 89.11% | 88.71% | 88.79% |
| 158 | 29600 | 0.403 | 89.22% | 88.90% | 88.90% |
| 158 | 29700 | 0.458 | 89.20% | 88.73% | 88.90% |
| 159 | 29800 | 0.407 | 89.33% | 88.93% | 88.93% |
| 160 | 29900 | 0.46 | 89.32% | 88.91% | 88.93% |
| 160 | 30000 | 0.393 | 89.49% | 89.04% | 89.04% |
| 161 | 30100 | 0.334 | 89.48% | 89.05% | 89.05% |
| 161 | 30200 | 0.394 | 89.56% | 89.14% | 89.14% |
| 162 | 30300 | 0.358 | 89.51% | 89.14% | 89.14% |
| 162 | 30400 | 0.451 | 89.66% | 89.26% | 89.26% |
| 163 | 30500 | 0.458 | 89.70% | 89.34% | 89.34% |
| 163 | 30600 | 0.394 | 89.77% | 89.32% | 89.34% |
| 164 | 30700 | 0.42 | 89.78% | 89.31% | 89.34% |
| 164 | 30800 | 0.479 | 89.86% | 89.38% | 89.38% |
| 165 | 30900 | 0.335 | 89.95% | 89.55% | 89.55% |
| 165 | 31000 | 0.363 | 89.92% | 89.47% | 89.55% |
| 166 | 31100 | 0.335 | 90.00% | 89.58% | 89.58% |
| 166 | 31200 | 0.39 | 90.00% | 89.56% | 89.58% |
| 167 | 31300 | 0.391 | 90.14% | 89.70% | 89.70% |
| 168 | 31400 | 0.363 | 90.07% | 89.66% | 89.70% |
| 168 | 31500 | 0.405 | 90.23% | 89.89% | 89.89% |
| 169 | 31600 | 0.402 | 90.21% | 89.81% | 89.89% |
| 169 | 31700 | 0.434 | 90.32% | 89.95% | 89.95% |
| 170 | 31800 | 0.422 | 90.29% | 89.91% | 89.95% |
| 170 | 31900 | 0.391 | 90.37% | 90.04% | 90.04% |
| 171 | 32000 | 0.377 | 90.42% | 90.03% | 90.04% |
| 171 | 32100 | 0.3 | 90.43% | 90.04% | 90.04% |
| 172 | 32200 | 0.361 | 90.54% | 90.13% | 90.13% |
| 172 | 32300 | 0.365 | 90.53% | 90.08% | 90.13% |
| 173 | 32400 | 0.353 | 90.63% | 90.19% | 90.19% |
| 173 | 32500 | 0.367 | 90.56% | 90.15% | 90.19% |
| 174 | 32600 | 0.328 | 90.61% | 90.16% | 90.19% |
| 174 | 32700 | 0.532 | 90.64% | 90.20% | 90.20% |
| 175 | 32800 | 0.351 | 90.71% | 90.24% | 90.24% |
| 176 | 32900 | 0.286 | 90.65% | 90.17% | 90.24% |
| 176 | 33000 | 0.387 | 90.81% | 90.37% | 90.37% |
| 177 | 33100 | 0.416 | 90.84% | 90.35% | 90.37% |
| 177 | 33200 | 0.325 | 90.88% | 90.42% | 90.42% |
| 178 | 33300 | 0.28 | 90.88% | 90.43% | 90.43% |
| 178 | 33400 | 0.33 | 90.89% | 90.50% | 90.50% |
| 179 | 33500 | 0.289 | 90.93% | 90.45% | 90.50% |
| 179 | 33600 | 0.35 | 90.95% | 90.60% | 90.60% |
| 180 | 33700 | 0.413 | 91.10% | 90.55% | 90.60% |
| 180 | 33800 | 0.338 | 91.07% | 90.68% | 90.68% |
| 181 | 33900 | 0.422 | 91.11% | 90.71% | 90.71% |
| 181 | 34000 | 0.361 | 91.09% | 90.72% | 90.72% |
| 182 | 34100 | 0.313 | 91.09% | 90.73% | 90.73% |
| 182 | 34200 | 0.327 | 91.10% | 90.64% | 90.73% |
| 183 | 34300 | 0.337 | 91.21% | 90.81% | 90.81% |
| 183 | 34400 | 0.395 | 91.15% | 90.68% | 90.81% |
| 184 | 34500 | 0.334 | 91.27% | 90.80% | 90.81% |
| 185 | 34600 | 0.383 | 91.31% | 90.73% | 90.81% |
| 185 | 34700 | 0.337 | 91.39% | 90.83% | 90.83% |
| 186 | 34800 | 0.266 | 91.35% | 90.80% | 90.83% |
| 186 | 34900 | 0.326 | 91.38% | 90.84% | 90.84% |
| 187 | 35000 | 0.306 | 91.43% | 90.81% | 90.84% |
| 187 | 35100 | 0.374 | 91.47% | 90.91% | 90.91% |
| 188 | 35200 | 0.392 | 91.49% | 90.93% | 90.93% |
| 188 | 35300 | 0.321 | 91.55% | 90.97% | 90.97% |
| 189 | 35400 | 0.336 | 91.56% | 90.98% | 90.98% |
| 189 | 35500 | 0.428 | 91.57% | 91.01% | 91.01% |
| 190 | 35600 | 0.275 | 91.65% | 91.00% | 91.01% |
| 190 | 35700 | 0.306 | 91.58% | 90.95% | 91.01% |
| 191 | 35800 | 0.276 | 91.66% | 91.08% | 91.08% |
| 191 | 35900 | 0.326 | 91.59% | 90.96% | 91.08% |
| 192 | 36000 | 0.33 | 91.66% | 91.03% | 91.08% |
| 193 | 36100 | 0.311 | 91.67% | 91.05% | 91.08% |
| 193 | 36200 | 0.349 | 91.76% | 91.21% | 91.21% |
| 194 | 36300 | 0.35 | 91.75% | 91.09% | 91.21% |
| 194 | 36400 | 0.374 | 91.81% | 91.28% | 91.28% |
| 195 | 36500 | 0.355 | 91.79% | 91.16% | 91.28% |
| 195 | 36600 | 0.338 | 91.83% | 91.29% | 91.29% |
| 196 | 36700 | 0.322 | 91.86% | 91.27% | 91.29% |
| 196 | 36800 | 0.244 | 91.85% | 91.33% | 91.33% |
| 197 | 36900 | 0.293 | 91.93% | 91.33% | 91.33% |
| 197 | 37000 | 0.308 | 91.87% | 91.34% | 91.34% |
| 198 | 37100 | 0.287 | 91.98% | 91.43% | 91.43% |
| 198 | 37200 | 0.301 | 91.92% | 91.41% | 91.43% |
| 199 | 37300 | 0.271 | 91.92% | 91.35% | 91.43% |
| 199 | 37400 | 0.469 | 92.00% | 91.44% | 91.44% |
| 200 | 37500 | 0.289 | 92.02% | 91.50% | 91.50% |
| 201 | 37600 | 0.232 | 91.90% | 91.31% | 91.50% |
| 201 | 37700 | 0.315 | 92.06% | 91.57% | 91.57% |
| 202 | 37800 | 0.37 | 92.09% | 91.56% | 91.57% |
| 202 | 37900 | 0.282 | 92.09% | 91.61% | 91.61% |
| 203 | 38000 | 0.242 | 92.13% | 91.57% | 91.61% |
| 203 | 38100 | 0.287 | 92.14% | 91.63% | 91.63% |
| 204 | 38200 | 0.248 | 92.08% | 91.42% | 91.63% |
| 204 | 38300 | 0.316 | 92.15% | 91.63% | 91.63% |
| 205 | 38400 | 0.356 | 92.24% | 91.72% | 91.72% |
| 205 | 38500 | 0.287 | 92.23% | 91.73% | 91.73% |
| 206 | 38600 | 0.371 | 92.20% | 91.68% | 91.73% |
| 206 | 38700 | 0.313 | 92.21% | 91.74% | 91.74% |
| 207 | 38800 | 0.267 | 92.20% | 91.67% | 91.74% |
| 207 | 38900 | 0.278 | 92.23% | 91.60% | 91.74% |
| 208 | 39000 | 0.292 | 92.28% | 91.72% | 91.74% |
| 208 | 39100 | 0.354 | 92.21% | 91.55% | 91.74% |
| 209 | 39200 | 0.281 | 92.31% | 91.74% | 91.74% |
| 210 | 39300 | 0.339 | 92.30% | 91.63% | 91.74% |
| 210 | 39400 | 0.303 | 92.39% | 91.87% | 91.87% |
| 211 | 39500 | 0.218 | 92.36% | 91.72% | 91.87% |
| 211 | 39600 | 0.279 | 92.40% | 91.84% | 91.87% |
| 212 | 39700 | 0.272 | 92.36% | 91.67% | 91.87% |
| 212 | 39800 | 0.323 | 92.43% | 91.93% | 91.93% |
| 213 | 39900 | 0.349 | 92.44% | 91.80% | 91.93% |
| 213 | 40000 | 0.278 | 92.48% | 91.93% | 91.93% |
| 214 | 40100 | 0.281 | 92.45% | 91.84% | 91.93% |
| 214 | 40200 | 0.394 | 92.48% | 91.98% | 91.98% |
| 215 | 40300 | 0.238 | 92.51% | 91.91% | 91.98% |
| 215 | 40400 | 0.271 | 92.48% | 91.90% | 91.98% |
| 216 | 40500 | 0.24 | 92.52% | 91.89% | 91.98% |
| 216 | 40600 | 0.293 | 92.44% | 91.82% | 91.98% |
| 217 | 40700 | 0.293 | 92.53% | 91.97% | 91.98% |
| 218 | 40800 | 0.281 | 92.49% | 91.84% | 91.98% |
| 218 | 40900 | 0.315 | 92.59% | 91.99% | 91.99% |
| 219 | 41000 | 0.314 | 92.58% | 91.93% | 91.99% |
| 219 | 41100 | 0.337 | 92.64% | 92.09% | 92.09% |
| 220 | 41200 | 0.311 | 92.55% | 91.95% | 92.09% |
| 220 | 41300 | 0.305 | 92.64% | 92.11% | 92.11% |
| 221 | 41400 | 0.287 | 92.63% | 92.07% | 92.11% |
| 221 | 41500 | 0.208 | 92.68% | 92.15% | 92.15% |
| 222 | 41600 | 0.249 | 92.72% | 92.09% | 92.15% |
| 222 | 41700 | 0.275 | 92.70% | 92.11% | 92.15% |
| 223 | 41800 | 0.244 | 92.77% | 92.23% | 92.23% |
| 223 | 41900 | 0.259 | 92.71% | 92.12% | 92.23% |
| 224 | 42000 | 0.238 | 92.70% | 92.04% | 92.23% |
| 224 | 42100 | 0.427 | 92.73% | 92.17% | 92.23% |
| 225 | 42200 | 0.258 | 92.81% | 92.16% | 92.23% |
| 226 | 42300 | 0.199 | 92.66% | 92.01% | 92.23% |
| 226 | 42400 | 0.271 | 92.80% | 92.24% | 92.24% |
| 227 | 42500 | 0.341 | 92.80% | 92.20% | 92.24% |
| 227 | 42600 | 0.259 | 92.82% | 92.28% | 92.28% |
| 228 | 42700 | 0.218 | 92.82% | 92.19% | 92.28% |
| 228 | 42800 | 0.257 | 92.85% | 92.27% | 92.28% |
| 229 | 42900 | 0.222 | 92.75% | 92.13% | 92.28% |
| 229 | 43000 | 0.292 | 92.88% | 92.28% | 92.28% |
| 230 | 43100 | 0.322 | 92.90% | 92.40% | 92.40% |
| 230 | 43200 | 0.253 | 92.90% | 92.33% | 92.40% |
| 231 | 43300 | 0.332 | 92.94% | 92.33% | 92.40% |
| 231 | 43400 | 0.286 | 92.87% | 92.31% | 92.40% |
| 232 | 43500 | 0.24 | 92.88% | 92.29% | 92.40% |
| 232 | 43600 | 0.248 | 92.87% | 92.33% | 92.40% |
| 233 | 43700 | 0.263 | 92.94% | 92.38% | 92.40% |
| 233 | 43800 | 0.326 | 92.84% | 92.18% | 92.40% |
| 234 | 43900 | 0.247 | 92.97% | 92.42% | 92.42% |
| 235 | 44000 | 0.313 | 92.91% | 92.31% | 92.42% |
| 235 | 44100 | 0.281 | 93.00% | 92.45% | 92.45% |
| 236 | 44200 | 0.186 | 92.97% | 92.34% | 92.45% |
| 236 | 44300 | 0.249 | 93.03% | 92.42% | 92.45% |
| 237 | 44400 | 0.248 | 92.95% | 92.29% | 92.45% |
| 237 | 44500 | 0.287 | 93.06% | 92.45% | 92.45% |
| 238 | 44600 | 0.317 | 93.04% | 92.42% | 92.45% |
| 238 | 44700 | 0.252 | 93.04% | 92.47% | 92.47% |
| 239 | 44800 | 0.242 | 93.04% | 92.43% | 92.47% |
| 239 | 44900 | 0.37 | 93.07% | 92.43% | 92.47% |
| 240 | 45000 | 0.211 | 93.11% | 92.46% | 92.47% |
| 240 | 45100 | 0.248 | 93.12% | 92.43% | 92.47% |
| 241 | 45200 | 0.221 | 93.07% | 92.38% | 92.47% |
| 241 | 45300 | 0.276 | 93.04% | 92.36% | 92.47% |
| 242 | 45400 | 0.266 | 93.14% | 92.46% | 92.47% |
| 243 | 45500 | 0.258 | 93.11% | 92.39% | 92.47% |
| 243 | 45600 | 0.293 | 93.18% | 92.50% | 92.50% |
| 244 | 45700 | 0.288 | 93.14% | 92.45% | 92.50% |
| 244 | 45800 | 0.31 | 93.19% | 92.46% | 92.50% |
| 245 | 45900 | 0.282 | 93.16% | 92.42% | 92.50% |
| 245 | 46000 | 0.283 | 93.23% | 92.55% | 92.55% |
| 246 | 46100 | 0.265 | 93.21% | 92.45% | 92.55% |
| 246 | 46200 | 0.184 | 93.24% | 92.55% | 92.55% |
| 247 | 46300 | 0.219 | 93.24% | 92.54% | 92.55% |
| 247 | 46400 | 0.248 | 93.24% | 92.49% | 92.55% |
| 248 | 46500 | 0.212 | 93.30% | 92.57% | 92.57% |
| 248 | 46600 | 0.232 | 93.29% | 92.50% | 92.57% |
| 249 | 46700 | 0.219 | 93.25% | 92.48% | 92.57% |
| 249 | 46800 | 0.399 | 93.27% | 92.53% | 92.57% |
| 250 | 46900 | 0.24 | 93.31% | 92.53% | 92.57% |
| 251 | 47000 | 0.176 | 93.23% | 92.39% | 92.57% |
| 251 | 47100 | 0.239 | 93.39% | 92.51% | 92.57% |
| 252 | 47200 | 0.321 | 93.32% | 92.48% | 92.57% |
| 252 | 47300 | 0.245 | 93.38% | 92.55% | 92.57% |
| 253 | 47400 | 0.201 | 93.32% | 92.53% | 92.57% |
| 253 | 47500 | 0.238 | 93.41% | 92.57% | 92.57% |
| 254 | 47600 | 0.204 | 93.30% | 92.47% | 92.57% |
| 254 | 47700 | 0.269 | 93.40% | 92.54% | 92.57% |
| 255 | 47800 | 0.298 | 93.48% | 92.73% | 92.73% |
| 255 | 47900 | 0.226 | 93.41% | 92.71% | 92.73% |
| 256 | 48000 | 0.306 | 93.45% | 92.58% | 92.73% |
| 256 | 48100 | 0.265 | 93.40% | 92.59% | 92.73% |
| 257 | 48200 | 0.223 | 93.42% | 92.53% | 92.73% |
| 257 | 48300 | 0.227 | 93.41% | 92.63% | 92.73% |
| 258 | 48400 | 0.242 | 93.48% | 92.56% | 92.73% |
| 258 | 48500 | 0.304 | 93.40% | 92.48% | 92.73% |
| 259 | 48600 | 0.22 | 93.50% | 92.58% | 92.73% |
| 260 | 48700 | 0.294 | 93.42% | 92.58% | 92.73% |
| 260 | 48800 | 0.26 | 93.52% | 92.64% | 92.73% |
| 261 | 48900 | 0.167 | 93.47% | 92.63% | 92.73% |
| 261 | 49000 | 0.228 | 93.57% | 92.70% | 92.73% |
| 262 | 49100 | 0.234 | 93.49% | 92.62% | 92.73% |
| 262 | 49200 | 0.26 | 93.57% | 92.72% | 92.73% |
| 263 | 49300 | 0.294 | 93.54% | 92.68% | 92.73% |
| 263 | 49400 | 0.229 | 93.56% | 92.75% | 92.75% |
| 264 | 49500 | 0.215 | 93.57% | 92.68% | 92.75% |
| 264 | 49600 | 0.35 | 93.56% | 92.74% | 92.75% |
| 265 | 49700 | 0.189 | 93.59% | 92.71% | 92.75% |
| 265 | 49800 | 0.227 | 93.58% | 92.74% | 92.75% |
| 266 | 49900 | 0.208 | 93.62% | 92.71% | 92.75% |
| 266 | 50000 | 0.263 | 93.58% | 92.69% | 92.75% |
| 267 | 50100 | 0.245 | 93.64% | 92.72% | 92.75% |
| 268 | 50200 | 0.241 | 93.60% | 92.70% | 92.75% |
| 268 | 50300 | 0.274 | 93.67% | 92.75% | 92.75% |
| 269 | 50400 | 0.27 | 93.63% | 92.74% | 92.75% |
| 269 | 50500 | 0.287 | 93.64% | 92.83% | 92.83% |
| 270 | 50600 | 0.261 | 93.63% | 92.78% | 92.83% |
| 270 | 50700 | 0.267 | 93.67% | 92.84% | 92.84% |
| 271 | 50800 | 0.245 | 93.65% | 92.81% | 92.84% |
| 271 | 50900 | 0.17 | 93.65% | 92.88% | 92.88% |
| 272 | 51000 | 0.198 | 93.71% | 92.88% | 92.88% |
| 272 | 51100 | 0.229 | 93.68% | 92.87% | 92.88% |
| 273 | 51200 | 0.189 | 93.74% | 92.88% | 92.88% |
| 273 | 51300 | 0.212 | 93.68% | 92.86% | 92.88% |
| 274 | 51400 | 0.206 | 93.71% | 92.81% | 92.88% |
| 274 | 51500 | 0.381 | 93.69% | 92.89% | 92.89% |
| 275 | 51600 | 0.23 | 93.76% | 92.90% | 92.90% |
| 276 | 51700 | 0.161 | 93.72% | 92.76% | 92.90% |
| 276 | 51800 | 0.215 | 93.80% | 92.88% | 92.90% |
| 277 | 51900 | 0.305 | 93.79% | 92.85% | 92.90% |
| 277 | 52000 | 0.233 | 93.78% | 93.01% | 93.01% |
| 278 | 52100 | 0.187 | 93.76% | 92.90% | 93.01% |
| 278 | 52200 | 0.222 | 93.80% | 92.93% | 93.01% |
| 279 | 52300 | 0.189 | 93.75% | 92.83% | 93.01% |
| 279 | 52400 | 0.25 | 93.80% | 92.97% | 93.01% |
| 280 | 52500 | 0.279 | 93.83% | 93.03% | 93.03% |
| 280 | 52600 | 0.207 | 93.81% | 92.95% | 93.03% |
| 281 | 52700 | 0.284 | 93.81% | 92.98% | 93.03% |
| 281 | 52800 | 0.249 | 93.79% | 93.00% | 93.03% |
| 282 | 52900 | 0.209 | 93.84% | 92.85% | 93.03% |
| 282 | 53000 | 0.211 | 93.81% | 92.95% | 93.03% |
| 283 | 53100 | 0.227 | 93.86% | 92.93% | 93.03% |
| 283 | 53200 | 0.284 | 93.83% | 92.82% | 93.03% |
| 284 | 53300 | 0.199 | 93.88% | 93.00% | 93.03% |
| 285 | 53400 | 0.282 | 93.85% | 92.92% | 93.03% |
| 285 | 53500 | 0.242 | 93.88% | 93.03% | 93.03% |
| 286 | 53600 | 0.154 | 93.86% | 92.91% | 93.03% |
| 286 | 53700 | 0.211 | 93.94% | 93.01% | 93.03% |
| 287 | 53800 | 0.223 | 93.89% | 92.93% | 93.03% |
| 287 | 53900 | 0.24 | 93.95% | 93.06% | 93.06% |
| 288 | 54000 | 0.278 | 93.91% | 93.00% | 93.06% |
| 288 | 54100 | 0.213 | 93.92% | 93.07% | 93.07% |
| 289 | 54200 | 0.194 | 93.96% | 92.96% | 93.07% |
| 289 | 54300 | 0.328 | 93.93% | 93.07% | 93.07% |
| 290 | 54400 | 0.17 | 93.98% | 93.00% | 93.07% |
| 290 | 54500 | 0.21 | 93.97% | 93.11% | 93.11% |
| 291 | 54600 | 0.198 | 93.97% | 93.00% | 93.11% |
| 291 | 54700 | 0.25 | 93.96% | 92.98% | 93.11% |
| 292 | 54800 | 0.227 | 93.97% | 93.08% | 93.11% |
| 293 | 54900 | 0.225 | 93.99% | 93.04% | 93.11% |
| 293 | 55000 | 0.258 | 94.02% | 93.06% | 93.11% |
| 294 | 55100 | 0.252 | 94.05% | 93.03% | 93.11% |
| 294 | 55200 | 0.27 | 94.01% | 93.08% | 93.11% |
| 295 | 55300 | 0.245 | 94.04% | 93.00% | 93.11% |
| 295 | 55400 | 0.252 | 94.04% | 93.10% | 93.11% |
| 296 | 55500 | 0.228 | 94.06% | 93.00% | 93.11% |
| 296 | 55600 | 0.16 | 94.04% | 93.13% | 93.13% |
| 297 | 55700 | 0.181 | 94.07% | 93.01% | 93.13% |
| 297 | 55800 | 0.215 | 94.07% | 93.08% | 93.13% |
| 298 | 55900 | 0.172 | 94.07% | 93.14% | 93.14% |
| 298 | 56000 | 0.194 | 94.09% | 93.08% | 93.14% |
| 299 | 56100 | 0.197 | 94.10% | 92.99% | 93.14% |
| 299 | 56200 | 0.367 | 94.08% | 93.06% | 93.14% |
| 300 | 56300 | 0.223 | 94.12% | 93.09% | 93.14% |
| 301 | 56400 | 0.149 | 94.03% | 93.03% | 93.14% |
| 301 | 56500 | 0.197 | 94.11% | 93.19% | 93.19% |
| 302 | 56600 | 0.291 | 94.13% | 93.08% | 93.19% |
| 302 | 56700 | 0.222 | 94.11% | 93.14% | 93.19% |
| 303 | 56800 | 0.175 | 94.13% | 93.03% | 93.19% |
| 303 | 56900 | 0.21 | 94.12% | 93.13% | 93.19% |
| 304 | 57000 | 0.179 | 94.13% | 92.98% | 93.19% |
| 304 | 57100 | 0.235 | 94.15% | 93.19% | 93.19% |
| 305 | 57200 | 0.262 | 94.17% | 93.20% | 93.20% |
| 305 | 57300 | 0.19 | 94.17% | 93.19% | 93.20% |
| 306 | 57400 | 0.267 | 94.20% | 93.12% | 93.20% |
| 306 | 57500 | 0.235 | 94.14% | 93.12% | 93.20% |
| 307 | 57600 | 0.195 | 94.20% | 93.09% | 93.20% |
| 307 | 57700 | 0.199 | 94.16% | 93.05% | 93.20% |
| 308 | 57800 | 0.216 | 94.23% | 93.17% | 93.20% |
| 308 | 57900 | 0.267 | 94.15% | 93.05% | 93.20% |
| 309 | 58000 | 0.181 | 94.22% | 93.19% | 93.20% |
| 310 | 58100 | 0.272 | 94.20% | 93.11% | 93.20% |
| 310 | 58200 | 0.226 | 94.20% | 93.17% | 93.20% |
| 311 | 58300 | 0.145 | 94.23% | 93.16% | 93.20% |
| 311 | 58400 | 0.197 | 94.26% | 93.20% | 93.20% |
| 312 | 58500 | 0.214 | 94.21% | 93.11% | 93.20% |
| 312 | 58600 | 0.227 | 94.27% | 93.24% | 93.24% |
| 313 | 58700 | 0.264 | 94.25% | 93.18% | 93.24% |
| 313 | 58800 | 0.202 | 94.28% | 93.21% | 93.24% |
| 314 | 58900 | 0.179 | 94.28% | 93.11% | 93.24% |
| 314 | 59000 | 0.312 | 94.28% | 93.22% | 93.24% |
| 315 | 59100 | 0.155 | 94.31% | 93.13% | 93.24% |
| 315 | 59200 | 0.198 | 94.31% | 93.23% | 93.24% |
| 316 | 59300 | 0.188 | 94.32% | 93.16% | 93.24% |
| 316 | 59400 | 0.237 | 94.24% | 93.13% | 93.24% |
| 317 | 59500 | 0.214 | 94.32% | 93.22% | 93.24% |
| 318 | 59600 | 0.211 | 94.30% | 93.19% | 93.24% |
| 318 | 59700 | 0.244 | 94.32% | 93.21% | 93.24% |
| 319 | 59800 | 0.238 | 94.34% | 93.21% | 93.24% |
| 319 | 59900 | 0.258 | 94.31% | 93.21% | 93.24% |
| 320 | 60000 | 0.233 | 94.32% | 93.18% | 93.24% |
| 320 | 60100 | 0.238 | 94.37% | 93.25% | 93.25% |
| 321 | 60200 | 0.212 | 94.35% | 93.20% | 93.25% |
| 321 | 60300 | 0.152 | 94.39% | 93.28% | 93.28% |
| 322 | 60400 | 0.167 | 94.38% | 93.15% | 93.28% |
| 322 | 60500 | 0.204 | 94.38% | 93.24% | 93.28% |
| 323 | 60600 | 0.158 | 94.40% | 93.25% | 93.28% |
| 323 | 60700 | 0.178 | 94.38% | 93.25% | 93.28% |
| 324 | 60800 | 0.19 | 94.42% | 93.18% | 93.28% |
| 324 | 60900 | 0.355 | 94.37% | 93.23% | 93.28% |
| 325 | 61000 | 0.219 | 94.44% | 93.30% | 93.30% |
| 326 | 61100 | 0.14 | 94.34% | 93.17% | 93.30% |
| 326 | 61200 | 0.183 | 94.44% | 93.33% | 93.33% |
| 327 | 61300 | 0.28 | 94.45% | 93.26% | 93.33% |
| 327 | 61400 | 0.212 | 94.42% | 93.33% | 93.33% |
| 328 | 61500 | 0.165 | 94.41% | 93.23% | 93.33% |
| 328 | 61600 | 0.2 | 94.45% | 93.34% | 93.34% |
| 329 | 61700 | 0.17 | 94.37% | 93.16% | 93.34% |
| 329 | 61800 | 0.221 | 94.48% | 93.32% | 93.34% |
| 330 | 61900 | 0.248 | 94.42% | 93.36% | 93.36% |
| 330 | 62000 | 0.176 | 94.46% | 93.39% | 93.39% |
| 331 | 62100 | 0.254 | 94.50% | 93.27% | 93.39% |
| 331 | 62200 | 0.225 | 94.43% | 93.34% | 93.39% |
| 332 | 62300 | 0.184 | 94.48% | 93.33% | 93.39% |
| 332 | 62400 | 0.191 | 94.45% | 93.28% | 93.39% |
| 333 | 62500 | 0.209 | 94.52% | 93.36% | 93.39% |
| 333 | 62600 | 0.253 | 94.43% | 93.22% | 93.39% |
| 334 | 62700 | 0.166 | 94.53% | 93.38% | 93.39% |
| 335 | 62800 | 0.262 | 94.50% | 93.29% | 93.39% |
| 335 | 62900 | 0.212 | 94.51% | 93.36% | 93.39% |
| 336 | 63000 | 0.137 | 94.49% | 93.28% | 93.39% |
| 336 | 63100 | 0.186 | 94.55% | 93.43% | 93.43% |
| 337 | 63200 | 0.206 | 94.49% | 93.26% | 93.43% |
| 337 | 63300 | 0.216 | 94.56% | 93.35% | 93.43% |
| 338 | 63400 | 0.254 | 94.55% | 93.33% | 93.43% |
| 338 | 63500 | 0.192 | 94.56% | 93.38% | 93.43% |
| 339 | 63600 | 0.167 | 94.56% | 93.30% | 93.43% |
| 339 | 63700 | 0.297 | 94.56% | 93.45% | 93.45% |
| 340 | 63800 | 0.144 | 94.60% | 93.33% | 93.45% |
| 340 | 63900 | 0.188 | 94.59% | 93.47% | 93.47% |
| 341 | 64000 | 0.18 | 94.58% | 93.35% | 93.47% |
| 341 | 64100 | 0.224 | 94.53% | 93.34% | 93.47% |
| 342 | 64200 | 0.203 | 94.60% | 93.48% | 93.48% |
| 343 | 64300 | 0.202 | 94.58% | 93.40% | 93.48% |
| 343 | 64400 | 0.233 | 94.62% | 93.43% | 93.48% |
| 344 | 64500 | 0.225 | 94.59% | 93.38% | 93.48% |
| 344 | 64600 | 0.246 | 94.62% | 93.40% | 93.48% |
| 345 | 64700 | 0.222 | 94.61% | 93.42% | 93.48% |
| 345 | 64800 | 0.228 | 94.65% | 93.48% | 93.48% |
| 346 | 64900 | 0.198 | 94.61% | 93.38% | 93.48% |
| 346 | 65000 | 0.146 | 94.63% | 93.52% | 93.52% |
| 347 | 65100 | 0.155 | 94.65% | 93.48% | 93.52% |
| 347 | 65200 | 0.197 | 94.65% | 93.54% | 93.54% |
| 348 | 65300 | 0.148 | 94.68% | 93.58% | 93.58% |
| 348 | 65400 | 0.165 | 94.65% | 93.53% | 93.58% |
| 349 | 65500 | 0.184 | 94.65% | 93.38% | 93.58% |
| 349 | 65600 | 0.345 | 94.64% | 93.48% | 93.58% |
| 350 | 65700 | 0.214 | 94.71% | 93.54% | 93.58% |
| 351 | 65800 | 0.132 | 94.62% | 93.33% | 93.58% |
| 351 | 65900 | 0.172 | 94.70% | 93.59% | 93.59% |
| 352 | 66000 | 0.27 | 94.68% | 93.49% | 93.59% |
| 352 | 66100 | 0.204 | 94.68% | 93.51% | 93.59% |
| 353 | 66200 | 0.158 | 94.66% | 93.50% | 93.59% |
| 353 | 66300 | 0.192 | 94.71% | 93.58% | 93.59% |
| 354 | 66400 | 0.161 | 94.61% | 93.37% | 93.59% |
| 354 | 66500 | 0.21 | 94.74% | 93.61% | 93.61% |
| 355 | 66600 | 0.236 | 94.67% | 93.57% | 93.61% |
| 355 | 66700 | 0.165 | 94.71% | 93.56% | 93.61% |
| 356 | 66800 | 0.243 | 94.76% | 93.56% | 93.61% |
| 356 | 66900 | 0.215 | 94.73% | 93.58% | 93.61% |
| 357 | 67000 | 0.175 | 94.71% | 93.49% | 93.61% |
| 357 | 67100 | 0.184 | 94.68% | 93.53% | 93.61% |
| 358 | 67200 | 0.202 | 94.75% | 93.59% | 93.61% |
| 358 | 67300 | 0.241 | 94.70% | 93.44% | 93.61% |
| 359 | 67400 | 0.154 | 94.78% | 93.62% | 93.62% |
| 360 | 67500 | 0.253 | 94.70% | 93.48% | 93.62% |
| 360 | 67600 | 0.2 | 94.76% | 93.56% | 93.62% |
| 361 | 67700 | 0.13 | 94.72% | 93.53% | 93.62% |
| 361 | 67800 | 0.176 | 94.76% | 93.61% | 93.62% |
| 362 | 67900 | 0.198 | 94.72% | 93.45% | 93.62% |
| 362 | 68000 | 0.208 | 94.80% | 93.65% | 93.65% |
| 363 | 68100 | 0.246 | 94.76% | 93.63% | 93.65% |
| 363 | 68200 | 0.182 | 94.78% | 93.60% | 93.65% |
| 364 | 68300 | 0.158 | 94.78% | 93.56% | 93.65% |
| 364 | 68400 | 0.281 | 94.79% | 93.68% | 93.68% |
| 365 | 68500 | 0.134 | 94.82% | 93.61% | 93.68% |
| 365 | 68600 | 0.18 | 94.80% | 93.68% | 93.68% |
| 366 | 68700 | 0.171 | 94.79% | 93.59% | 93.68% |
| 366 | 68800 | 0.211 | 94.77% | 93.53% | 93.68% |
| 367 | 68900 | 0.193 | 94.82% | 93.70% | 93.70% |
| 368 | 69000 | 0.194 | 94.80% | 93.58% | 93.70% |
| 368 | 69100 | 0.224 | 94.82% | 93.68% | 93.70% |
| 369 | 69200 | 0.213 | 94.79% | 93.55% | 93.70% |
| 369 | 69300 | 0.234 | 94.84% | 93.62% | 93.70% |
| 370 | 69400 | 0.214 | 94.80% | 93.57% | 93.70% |
| 370 | 69500 | 0.218 | 94.87% | 93.68% | 93.70% |
| 371 | 69600 | 0.188 | 94.83% | 93.57% | 93.70% |
| 371 | 69700 | 0.141 | 94.85% | 93.69% | 93.70% |
| 372 | 69800 | 0.144 | 94.87% | 93.68% | 93.70% |
| 372 | 69900 | 0.191 | 94.88% | 93.66% | 93.70% |
| 373 | 70000 | 0.138 | 94.91% | 93.66% | 93.70% |
| 373 | 70100 | 0.153 | 94.86% | 93.67% | 93.70% |
| 374 | 70200 | 0.179 | 94.83% | 93.61% | 93.70% |
| 374 | 70300 | 0.336 | 94.89% | 93.65% | 93.70% |
| 375 | 70400 | 0.208 | 94.89% | 93.72% | 93.72% |
| 376 | 70500 | 0.127 | 94.83% | 93.57% | 93.72% |
| 376 | 70600 | 0.164 | 94.90% | 93.71% | 93.72% |
| 377 | 70700 | 0.259 | 94.86% | 93.67% | 93.72% |
| 377 | 70800 | 0.196 | 94.91% | 93.71% | 93.72% |
| 378 | 70900 | 0.152 | 94.87% | 93.58% | 93.72% |
| 378 | 71000 | 0.185 | 94.92% | 93.71% | 93.72% |
| 379 | 71100 | 0.154 | 94.83% | 93.54% | 93.72% |
| 379 | 71200 | 0.202 | 94.95% | 93.73% | 93.73% |
| 380 | 71300 | 0.224 | 94.91% | 93.63% | 93.73% |
| 380 | 71400 | 0.156 | 94.91% | 93.70% | 93.73% |
| 381 | 71500 | 0.234 | 94.95% | 93.70% | 93.73% |
| 381 | 71600 | 0.206 | 94.93% | 93.70% | 93.73% |
| 382 | 71700 | 0.167 | 94.87% | 93.64% | 93.73% |
| 382 | 71800 | 0.178 | 94.93% | 93.67% | 93.73% |
| 383 | 71900 | 0.198 | 94.92% | 93.68% | 93.73% |
| 383 | 72000 | 0.232 | 94.89% | 93.58% | 93.73% |
| 384 | 72100 | 0.145 | 94.94% | 93.73% | 93.73% |
| 385 | 72200 | 0.246 | 94.90% | 93.67% | 93.73% |
| 385 | 72300 | 0.191 | 94.95% | 93.74% | 93.74% |
| 386 | 72400 | 0.124 | 94.90% | 93.64% | 93.74% |
| 386 | 72500 | 0.168 | 94.95% | 93.73% | 93.74% |
| 387 | 72600 | 0.191 | 94.90% | 93.65% | 93.74% |
| 387 | 72700 | 0.2 | 94.98% | 93.74% | 93.74% |
| 388 | 72800 | 0.238 | 94.98% | 93.71% | 93.74% |
| 388 | 72900 | 0.174 | 95.00% | 93.73% | 93.74% |
| 389 | 73000 | 0.15 | 94.98% | 93.70% | 93.74% |
| 389 | 73100 | 0.267 | 94.99% | 93.73% | 93.74% |
| 390 | 73200 | 0.125 | 95.02% | 93.70% | 93.74% |
| 390 | 73300 | 0.174 | 94.99% | 93.74% | 93.74% |
| 391 | 73400 | 0.163 | 94.98% | 93.68% | 93.74% |
| 391 | 73500 | 0.201 | 94.96% | 93.69% | 93.74% |
| 392 | 73600 | 0.183 | 95.00% | 93.76% | 93.76% |
| 393 | 73700 | 0.188 | 94.96% | 93.65% | 93.76% |
| 393 | 73800 | 0.216 | 95.03% | 93.74% | 93.76% |
| 394 | 73900 | 0.203 | 94.97% | 93.68% | 93.76% |
| 394 | 74000 | 0.223 | 95.04% | 93.79% | 93.79% |
| 395 | 74100 | 0.205 | 94.97% | 93.68% | 93.79% |
| 395 | 74200 | 0.21 | 95.07% | 93.78% | 93.79% |
| 396 | 74300 | 0.179 | 95.03% | 93.69% | 93.79% |
| 396 | 74400 | 0.137 | 95.04% | 93.74% | 93.79% |
| 397 | 74500 | 0.133 | 95.05% | 93.75% | 93.79% |
| 397 | 74600 | 0.186 | 95.08% | 93.78% | 93.79% |
| 398 | 74700 | 0.131 | 95.07% | 93.78% | 93.79% |
| 398 | 74800 | 0.143 | 95.04% | 93.74% | 93.79% |
| 399 | 74900 | 0.174 | 94.99% | 93.66% | 93.79% |
| 399 | 75000 | 0.328 | 95.05% | 93.77% | 93.79% |
| 400 | 75100 | 0.202 | 95.05% | 93.78% | 93.79% |
| 401 | 75200 | 0.122 | 95.02% | 93.58% | 93.79% |
| 401 | 75300 | 0.156 | 95.08% | 93.76% | 93.79% |
| 402 | 75400 | 0.25 | 95.04% | 93.69% | 93.79% |
| 402 | 75500 | 0.19 | 95.09% | 93.78% | 93.79% |
| 403 | 75600 | 0.147 | 95.04% | 93.78% | 93.79% |
| 403 | 75700 | 0.179 | 95.09% | 93.74% | 93.79% |
| 404 | 75800 | 0.149 | 95.04% | 93.67% | 93.79% |
| 404 | 75900 | 0.192 | 95.13% | 93.79% | 93.79% |
| 405 | 76000 | 0.213 | 95.10% | 93.79% | 93.79% |
| 405 | 76100 | 0.149 | 95.10% | 93.73% | 93.79% |

Question 6 – Cost per Iteration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Epoch | Iteration | Training Cost | Training Accuracy | Validation Accuracy | Best Validation Accuracy |
| 1 | 0 | 2.3 | 5.88% | 6.05% | 6.05% |
| 1 | 100 | 2.303 | 11.44% | 11.39% | 11.39% |
| 1 | 200 | 2.302 | 11.30% | 11.30% | 11.39% |
| 1 | 300 | 2.299 | 11.25% | 11.28% | 11.39% |
| 1 | 400 | 2.297 | 11.25% | 11.25% | 11.39% |
| 1 | 500 | 2.298 | 11.24% | 11.23% | 11.39% |
| 1 | 600 | 2.302 | 11.24% | 11.23% | 11.39% |
| 1 | 700 | 2.3 | 11.24% | 11.23% | 11.39% |
| 2 | 800 | 2.305 | 11.24% | 11.23% | 11.39% |
| 2 | 900 | 2.305 | 11.24% | 11.23% | 11.39% |
| 2 | 1000 | 2.299 | 11.24% | 11.23% | 11.39% |
| 2 | 1100 | 2.3 | 11.24% | 11.23% | 11.39% |
| 2 | 1200 | 2.293 | 11.24% | 11.23% | 11.39% |
| 2 | 1300 | 2.297 | 11.24% | 11.23% | 11.39% |
| 2 | 1400 | 2.289 | 11.24% | 11.23% | 11.39% |
| 3 | 1500 | 2.292 | 11.27% | 11.27% | 11.39% |
| 3 | 1600 | 2.294 | 11.26% | 11.25% | 11.39% |
| 3 | 1700 | 2.291 | 11.34% | 11.30% | 11.39% |
| 3 | 1800 | 2.285 | 12.60% | 12.63% | 12.63% |
| 3 | 1900 | 2.277 | 13.92% | 13.93% | 13.93% |
| 3 | 2000 | 2.284 | 15.31% | 15.33% | 15.33% |
| 3 | 2100 | 2.28 | 16.56% | 16.24% | 16.24% |
| 3 | 2200 | 2.285 | 18.14% | 17.63% | 17.63% |
| 4 | 2300 | 2.28 | 19.29% | 18.79% | 18.79% |
| 4 | 2400 | 2.275 | 20.35% | 19.92% | 19.92% |
| 4 | 2500 | 2.264 | 20.38% | 19.93% | 19.93% |
| 4 | 2600 | 2.246 | 22.33% | 22.35% | 22.35% |
| 4 | 2700 | 2.184 | 25.63% | 25.34% | 25.34% |
| 4 | 2800 | 2.189 | 25.35% | 25.01% | 25.34% |
| 4 | 2900 | 2.066 | 24.17% | 24.21% | 25.34% |
| 5 | 3000 | 2.036 | 23.45% | 23.30% | 25.34% |
| 5 | 3100 | 2.01 | 23.91% | 23.52% | 25.34% |
| 5 | 3200 | 1.878 | 26.08% | 26.19% | 26.19% |
| 5 | 3300 | 1.867 | 28.43% | 28.41% | 28.41% |
| 5 | 3400 | 1.557 | 29.67% | 30.08% | 30.08% |
| 5 | 3500 | 1.767 | 33.89% | 34.07% | 34.07% |
| 5 | 3600 | 1.692 | 35.62% | 35.81% | 35.81% |
| 5 | 3700 | 1.751 | 37.49% | 37.62% | 37.62% |
| 6 | 3800 | 1.539 | 34.56% | 34.89% | 37.62% |
| 6 | 3900 | 1.336 | 40.48% | 40.90% | 40.90% |
| 6 | 4000 | 1.553 | 41.60% | 42.59% | 42.59% |
| 6 | 4100 | 1.523 | 43.08% | 43.61% | 43.61% |
| 6 | 4200 | 1.339 | 45.74% | 46.55% | 46.55% |
| 6 | 4300 | 1.553 | 48.41% | 49.23% | 49.23% |
| 6 | 4400 | 1.467 | 46.19% | 46.59% | 49.23% |
| 7 | 4500 | 1.417 | 47.64% | 48.22% | 49.23% |
| 7 | 4600 | 1.524 | 52.51% | 53.02% | 53.02% |
| 7 | 4700 | 1.319 | 53.10% | 53.39% | 53.39% |
| 7 | 4800 | 1.306 | 53.88% | 54.49% | 54.49% |
| 7 | 4900 | 1.129 | 56.24% | 56.66% | 56.66% |
| 7 | 5000 | 1.361 | 57.70% | 57.55% | 57.55% |
| 7 | 5100 | 1.26 | 57.75% | 58.38% | 58.38% |
| 7 | 5200 | 1.326 | 60.94% | 61.42% | 61.42% |
| 8 | 5300 | 1.192 | 61.32% | 61.60% | 61.60% |
| 8 | 5400 | 0.815 | 62.61% | 63.08% | 63.08% |
| 8 | 5500 | 1.104 | 64.33% | 64.92% | 64.92% |
| 8 | 5600 | 1.005 | 67.69% | 67.73% | 67.73% |
| 8 | 5700 | 0.834 | 68.17% | 68.57% | 68.57% |
| 8 | 5800 | 0.993 | 70.55% | 70.77% | 70.77% |
| 8 | 5900 | 0.949 | 71.70% | 71.47% | 71.47% |
| 9 | 6000 | 0.976 | 73.40% | 73.36% | 73.36% |
| 9 | 6100 | 0.828 | 74.14% | 74.13% | 74.13% |
| 9 | 6200 | 0.913 | 75.12% | 75.23% | 75.23% |
| 9 | 6300 | 0.74 | 75.22% | 75.18% | 75.23% |
| 9 | 6400 | 0.662 | 76.45% | 76.81% | 76.81% |
| 9 | 6500 | 0.895 | 77.40% | 77.20% | 77.20% |
| 9 | 6600 | 0.827 | 77.25% | 76.95% | 77.20% |
| 9 | 6700 | 0.968 | 78.85% | 78.97% | 78.97% |
| 10 | 6800 | 0.743 | 79.08% | 79.07% | 79.07% |
| 10 | 6900 | 0.492 | 79.44% | 79.63% | 79.63% |
| 10 | 7000 | 0.598 | 80.74% | 80.78% | 80.78% |
| 10 | 7100 | 0.669 | 81.19% | 81.34% | 81.34% |
| 10 | 7200 | 0.497 | 81.44% | 81.36% | 81.36% |
| 10 | 7300 | 0.621 | 81.63% | 81.66% | 81.66% |
| 10 | 7400 | 0.735 | 81.77% | 81.57% | 81.66% |
| 11 | 7500 | 0.711 | 82.17% | 82.23% | 82.23% |
| 11 | 7600 | 0.506 | 82.84% | 82.91% | 82.91% |
| 11 | 7700 | 0.657 | 82.69% | 82.73% | 82.91% |
| 11 | 7800 | 0.521 | 83.22% | 83.11% | 83.11% |
| 11 | 7900 | 0.555 | 83.65% | 83.57% | 83.57% |
| 11 | 8000 | 0.799 | 83.84% | 83.57% | 83.57% |
| 11 | 8100 | 0.628 | 83.52% | 83.24% | 83.57% |
| 11 | 8200 | 0.835 | 84.47% | 84.54% | 84.54% |
| 12 | 8300 | 0.561 | 84.27% | 84.30% | 84.54% |
| 12 | 8400 | 0.38 | 84.60% | 84.50% | 84.54% |
| 12 | 8500 | 0.413 | 85.24% | 85.20% | 85.20% |
| 12 | 8600 | 0.545 | 85.50% | 85.41% | 85.41% |
| 12 | 8700 | 0.386 | 85.61% | 85.45% | 85.45% |
| 12 | 8800 | 0.507 | 85.49% | 85.61% | 85.61% |
| 12 | 8900 | 0.595 | 85.57% | 85.33% | 85.61% |
| 13 | 9000 | 0.57 | 85.91% | 85.85% | 85.85% |
| 13 | 9100 | 0.421 | 86.46% | 86.48% | 86.48% |
| 13 | 9200 | 0.526 | 86.09% | 86.17% | 86.48% |
| 13 | 9300 | 0.428 | 86.73% | 86.52% | 86.52% |
| 13 | 9400 | 0.477 | 86.96% | 86.58% | 86.58% |
| 13 | 9500 | 0.713 | 87.04% | 86.86% | 86.86% |
| 13 | 9600 | 0.506 | 86.87% | 86.56% | 86.86% |
| 13 | 9700 | 0.743 | 87.47% | 87.35% | 87.35% |
| 14 | 9800 | 0.474 | 87.29% | 87.02% | 87.35% |
| 14 | 9900 | 0.307 | 87.47% | 87.46% | 87.46% |
| 14 | 10000 | 0.306 | 87.68% | 87.57% | 87.57% |
| 14 | 10100 | 0.466 | 87.96% | 87.67% | 87.67% |
| 14 | 10200 | 0.33 | 87.97% | 87.48% | 87.67% |
| 14 | 10300 | 0.467 | 87.98% | 87.79% | 87.79% |
| 14 | 10400 | 0.52 | 87.96% | 87.41% | 87.79% |
| 15 | 10500 | 0.452 | 87.88% | 87.84% | 87.84% |
| 15 | 10600 | 0.378 | 88.48% | 88.26% | 88.26% |
| 15 | 10700 | 0.463 | 88.34% | 88.06% | 88.26% |
| 15 | 10800 | 0.347 | 88.57% | 88.19% | 88.26% |
| 15 | 10900 | 0.429 | 88.68% | 88.43% | 88.43% |
| 15 | 11000 | 0.626 | 88.73% | 88.47% | 88.47% |
| 15 | 11100 | 0.463 | 88.63% | 88.23% | 88.47% |
| 15 | 11200 | 0.676 | 89.06% | 88.63% | 88.63% |
| 16 | 11300 | 0.422 | 88.81% | 88.68% | 88.68% |
| 16 | 11400 | 0.283 | 89.02% | 88.89% | 88.89% |
| 16 | 11500 | 0.253 | 89.11% | 88.93% | 88.93% |
| 16 | 11600 | 0.469 | 89.35% | 89.02% | 89.02% |
| 16 | 11700 | 0.287 | 89.34% | 88.86% | 89.02% |
| 16 | 11800 | 0.424 | 89.43% | 89.09% | 89.09% |
| 16 | 11900 | 0.495 | 89.35% | 88.86% | 89.09% |
| 17 | 12000 | 0.376 | 89.20% | 89.01% | 89.09% |
| 17 | 12100 | 0.332 | 89.76% | 89.43% | 89.43% |
| 17 | 12200 | 0.428 | 89.56% | 89.23% | 89.43% |
| 17 | 12300 | 0.309 | 89.85% | 89.28% | 89.43% |
| 17 | 12400 | 0.395 | 89.96% | 89.48% | 89.48% |
| 17 | 12500 | 0.55 | 89.90% | 89.50% | 89.50% |
| 17 | 12600 | 0.431 | 89.89% | 89.27% | 89.50% |
| 17 | 12700 | 0.618 | 90.20% | 89.84% | 89.84% |
| 18 | 12800 | 0.363 | 90.03% | 89.74% | 89.84% |
| 18 | 12900 | 0.271 | 90.15% | 89.65% | 89.84% |
| 18 | 13000 | 0.229 | 90.19% | 89.81% | 89.84% |
| 18 | 13100 | 0.471 | 90.53% | 89.99% | 89.99% |
| 18 | 13200 | 0.256 | 90.41% | 89.86% | 89.99% |
| 18 | 13300 | 0.403 | 90.44% | 89.96% | 89.99% |
| 18 | 13400 | 0.474 | 90.38% | 89.80% | 89.99% |
| 19 | 13500 | 0.328 | 90.37% | 90.03% | 90.03% |
| 19 | 13600 | 0.3 | 90.67% | 90.29% | 90.29% |
| 19 | 13700 | 0.403 | 90.58% | 90.01% | 90.29% |
| 19 | 13800 | 0.29 | 90.83% | 90.13% | 90.29% |
| 19 | 13900 | 0.36 | 90.93% | 90.17% | 90.29% |
| 19 | 14000 | 0.476 | 90.74% | 90.23% | 90.29% |
| 19 | 14100 | 0.401 | 90.72% | 90.26% | 90.29% |
| 19 | 14200 | 0.571 | 91.04% | 90.58% | 90.58% |
| 20 | 14300 | 0.327 | 90.93% | 90.56% | 90.58% |
| 20 | 14400 | 0.258 | 90.88% | 90.36% | 90.58% |
| 20 | 14500 | 0.212 | 91.00% | 90.38% | 90.58% |
| 20 | 14600 | 0.448 | 91.32% | 90.70% | 90.70% |
| 20 | 14700 | 0.237 | 91.26% | 90.53% | 90.70% |
| 20 | 14800 | 0.378 | 91.25% | 90.78% | 90.78% |
| 20 | 14900 | 0.455 | 91.15% | 90.54% | 90.78% |
| 21 | 15000 | 0.301 | 91.22% | 90.66% | 90.78% |
| 21 | 15100 | 0.274 | 91.41% | 91.00% | 91.00% |
| 21 | 15200 | 0.382 | 91.32% | 90.84% | 91.00% |
| 21 | 15300 | 0.272 | 91.53% | 90.75% | 91.00% |
| 21 | 15400 | 0.327 | 91.65% | 90.94% | 91.00% |
| 21 | 15500 | 0.415 | 91.45% | 90.88% | 91.00% |
| 21 | 15600 | 0.381 | 91.40% | 90.83% | 91.00% |
| 21 | 15700 | 0.536 | 91.73% | 91.18% | 91.18% |
| 22 | 15800 | 0.293 | 91.53% | 90.94% | 91.18% |
| 22 | 15900 | 0.252 | 91.55% | 91.08% | 91.18% |
| 22 | 16000 | 0.196 | 91.57% | 91.05% | 91.18% |
| 22 | 16100 | 0.417 | 91.85% | 91.42% | 91.42% |
| 22 | 16200 | 0.225 | 91.83% | 91.01% | 91.42% |
| 22 | 16300 | 0.358 | 91.81% | 91.47% | 91.47% |
| 22 | 16400 | 0.442 | 91.66% | 91.12% | 91.47% |
| 23 | 16500 | 0.287 | 91.78% | 91.19% | 91.47% |
| 23 | 16600 | 0.26 | 91.94% | 91.49% | 91.49% |
| 23 | 16700 | 0.367 | 91.83% | 91.38% | 91.49% |
| 23 | 16800 | 0.252 | 92.08% | 91.40% | 91.49% |
| 23 | 16900 | 0.303 | 92.12% | 91.51% | 91.51% |
| 23 | 17000 | 0.369 | 91.99% | 91.49% | 91.51% |
| 23 | 17100 | 0.37 | 91.97% | 91.33% | 91.51% |
| 23 | 17200 | 0.514 | 92.13% | 91.46% | 91.51% |
| 24 | 17300 | 0.274 | 92.08% | 91.39% | 91.51% |
| 24 | 17400 | 0.25 | 92.04% | 91.46% | 91.51% |
| 24 | 17500 | 0.182 | 92.06% | 91.62% | 91.62% |
| 24 | 17600 | 0.384 | 92.35% | 91.78% | 91.78% |
| 24 | 17700 | 0.215 | 92.32% | 91.40% | 91.78% |
| 24 | 17800 | 0.344 | 92.28% | 91.68% | 91.78% |
| 24 | 17900 | 0.433 | 92.10% | 91.50% | 91.78% |
| 25 | 18000 | 0.269 | 92.31% | 91.52% | 91.78% |
| 25 | 18100 | 0.247 | 92.39% | 91.83% | 91.83% |
| 25 | 18200 | 0.355 | 92.37% | 91.82% | 91.83% |
| 25 | 18300 | 0.23 | 92.51% | 91.88% | 91.88% |
| 25 | 18400 | 0.279 | 92.58% | 91.85% | 91.88% |
| 25 | 18500 | 0.335 | 92.48% | 91.88% | 91.88% |
| 25 | 18600 | 0.36 | 92.41% | 91.75% | 91.88% |
| 25 | 18700 | 0.494 | 92.48% | 91.80% | 91.88% |
| 26 | 18800 | 0.268 | 92.55% | 91.73% | 91.88% |
| 26 | 18900 | 0.244 | 92.53% | 91.85% | 91.88% |
| 26 | 19000 | 0.165 | 92.58% | 91.93% | 91.93% |
| 26 | 19100 | 0.355 | 92.78% | 92.08% | 92.08% |
| 26 | 19200 | 0.202 | 92.76% | 91.93% | 92.08% |
| 26 | 19300 | 0.334 | 92.75% | 92.01% | 92.08% |
| 26 | 19400 | 0.425 | 92.52% | 91.84% | 92.08% |
| 27 | 19500 | 0.252 | 92.70% | 91.87% | 92.08% |
| 27 | 19600 | 0.236 | 92.79% | 92.20% | 92.20% |
| 27 | 19700 | 0.349 | 92.80% | 92.08% | 92.20% |
| 27 | 19800 | 0.212 | 92.92% | 92.20% | 92.20% |
| 27 | 19900 | 0.261 | 92.93% | 92.13% | 92.20% |
| 27 | 20000 | 0.319 | 92.90% | 92.21% | 92.21% |
| 27 | 20100 | 0.352 | 92.79% | 92.03% | 92.21% |
| 27 | 20200 | 0.477 | 92.85% | 92.08% | 92.21% |
| 28 | 20300 | 0.262 | 92.86% | 92.11% | 92.21% |
| 28 | 20400 | 0.241 | 92.94% | 92.37% | 92.37% |
| 28 | 20500 | 0.152 | 92.94% | 92.28% | 92.37% |
| 28 | 20600 | 0.324 | 93.08% | 92.33% | 92.37% |
| 28 | 20700 | 0.192 | 93.15% | 92.13% | 92.37% |
| 28 | 20800 | 0.324 | 93.08% | 92.38% | 92.38% |
| 28 | 20900 | 0.415 | 92.82% | 92.12% | 92.38% |
| 29 | 21000 | 0.239 | 93.02% | 92.16% | 92.38% |
| 29 | 21100 | 0.221 | 93.12% | 92.52% | 92.52% |
| 29 | 21200 | 0.346 | 93.12% | 92.45% | 92.52% |
| 29 | 21300 | 0.195 | 93.32% | 92.49% | 92.52% |
| 29 | 21400 | 0.247 | 93.32% | 92.46% | 92.52% |
| 29 | 21500 | 0.308 | 93.24% | 92.48% | 92.52% |
| 29 | 21600 | 0.346 | 93.13% | 92.29% | 92.52% |
| 29 | 21700 | 0.459 | 93.21% | 92.38% | 92.52% |
| 30 | 21800 | 0.255 | 93.16% | 92.38% | 92.52% |
| 30 | 21900 | 0.24 | 93.24% | 92.57% | 92.57% |
| 30 | 22000 | 0.143 | 93.26% | 92.52% | 92.57% |
| 30 | 22100 | 0.304 | 93.42% | 92.59% | 92.59% |
| 30 | 22200 | 0.183 | 93.47% | 92.43% | 92.59% |
| 30 | 22300 | 0.311 | 93.35% | 92.57% | 92.59% |
| 30 | 22400 | 0.403 | 93.12% | 92.39% | 92.59% |
| 31 | 22500 | 0.227 | 93.39% | 92.51% | 92.59% |
| 31 | 22600 | 0.205 | 93.49% | 92.70% | 92.70% |
| 31 | 22700 | 0.34 | 93.38% | 92.63% | 92.70% |
| 31 | 22800 | 0.18 | 93.62% | 92.70% | 92.70% |
| 31 | 22900 | 0.232 | 93.62% | 92.70% | 92.70% |
| 31 | 23000 | 0.298 | 93.50% | 92.64% | 92.70% |
| 31 | 23100 | 0.335 | 93.41% | 92.56% | 92.70% |
| 31 | 23200 | 0.441 | 93.49% | 92.45% | 92.70% |
| 32 | 23300 | 0.247 | 93.53% | 92.56% | 92.70% |
| 32 | 23400 | 0.238 | 93.53% | 92.71% | 92.71% |
| 32 | 23500 | 0.136 | 93.55% | 92.74% | 92.74% |
| 32 | 23600 | 0.292 | 93.73% | 92.71% | 92.74% |
| 32 | 23700 | 0.175 | 93.73% | 92.74% | 92.74% |
| 32 | 23800 | 0.299 | 93.53% | 92.75% | 92.75% |
| 32 | 23900 | 0.393 | 93.36% | 92.56% | 92.75% |
| 33 | 24000 | 0.215 | 93.64% | 92.69% | 92.75% |
| 33 | 24100 | 0.19 | 93.77% | 92.91% | 92.91% |
| 33 | 24200 | 0.333 | 93.68% | 92.87% | 92.91% |
| 33 | 24300 | 0.167 | 93.86% | 92.90% | 92.91% |
| 33 | 24400 | 0.22 | 93.84% | 92.89% | 92.91% |
| 33 | 24500 | 0.293 | 93.75% | 92.81% | 92.91% |
| 33 | 24600 | 0.322 | 93.72% | 92.78% | 92.91% |
| 33 | 24700 | 0.422 | 93.70% | 92.63% | 92.91% |
| 34 | 24800 | 0.241 | 93.82% | 92.88% | 92.91% |
| 34 | 24900 | 0.236 | 93.74% | 92.94% | 92.94% |
| 34 | 25000 | 0.131 | 93.72% | 92.91% | 92.94% |
| 34 | 25100 | 0.279 | 93.97% | 92.98% | 92.98% |
| 34 | 25200 | 0.17 | 93.96% | 92.88% | 92.98% |
| 34 | 25300 | 0.289 | 93.78% | 92.91% | 92.98% |
| 34 | 25400 | 0.384 | 93.62% | 92.58% | 92.98% |
| 35 | 25500 | 0.199 | 93.87% | 93.05% | 93.05% |
| 35 | 25600 | 0.179 | 93.97% | 93.10% | 93.10% |
| 35 | 25700 | 0.32 | 93.93% | 93.02% | 93.10% |
| 35 | 25800 | 0.155 | 94.01% | 93.04% | 93.10% |
| 35 | 25900 | 0.211 | 94.00% | 93.11% | 93.11% |
| 35 | 26000 | 0.291 | 93.94% | 93.03% | 93.11% |
| 35 | 26100 | 0.314 | 93.95% | 93.00% | 93.11% |
| 35 | 26200 | 0.403 | 93.88% | 92.85% | 93.11% |
| 36 | 26300 | 0.232 | 94.00% | 93.11% | 93.11% |
| 36 | 26400 | 0.229 | 93.97% | 93.04% | 93.11% |
| 36 | 26500 | 0.127 | 93.91% | 93.08% | 93.11% |
| 36 | 26600 | 0.274 | 94.14% | 93.13% | 93.13% |
| 36 | 26700 | 0.163 | 94.12% | 93.25% | 93.25% |
| 36 | 26800 | 0.279 | 93.97% | 93.01% | 93.25% |
| 36 | 26900 | 0.377 | 93.82% | 92.77% | 93.25% |
| 37 | 27000 | 0.18 | 94.09% | 93.19% | 93.25% |
| 37 | 27100 | 0.168 | 94.19% | 93.28% | 93.28% |
| 37 | 27200 | 0.309 | 94.11% | 93.23% | 93.28% |
| 37 | 27300 | 0.143 | 94.22% | 93.23% | 93.28% |
| 37 | 27400 | 0.2 | 94.24% | 93.24% | 93.28% |
| 37 | 27500 | 0.29 | 94.13% | 93.21% | 93.28% |
| 37 | 27600 | 0.308 | 94.15% | 93.09% | 93.28% |
| 37 | 27700 | 0.391 | 94.05% | 92.99% | 93.28% |
| 38 | 27800 | 0.224 | 94.14% | 93.21% | 93.28% |
| 38 | 27900 | 0.226 | 94.15% | 93.24% | 93.28% |
| 38 | 28000 | 0.121 | 94.16% | 93.23% | 93.28% |
| 38 | 28100 | 0.266 | 94.31% | 93.38% | 93.38% |
| 38 | 28200 | 0.157 | 94.24% | 93.29% | 93.38% |
| 38 | 28300 | 0.271 | 94.15% | 93.23% | 93.38% |
| 38 | 28400 | 0.371 | 94.02% | 93.01% | 93.38% |
| 39 | 28500 | 0.165 | 94.24% | 93.23% | 93.38% |
| 39 | 28600 | 0.161 | 94.36% | 93.42% | 93.42% |
| 39 | 28700 | 0.301 | 94.29% | 93.40% | 93.42% |
| 39 | 28800 | 0.131 | 94.37% | 93.39% | 93.42% |
| 39 | 28900 | 0.189 | 94.40% | 93.37% | 93.42% |
| 39 | 29000 | 0.288 | 94.34% | 93.37% | 93.42% |
| 39 | 29100 | 0.3 | 94.36% | 93.29% | 93.42% |
| 39 | 29200 | 0.382 | 94.20% | 93.14% | 93.42% |
| 40 | 29300 | 0.218 | 94.33% | 93.28% | 93.42% |
| 40 | 29400 | 0.218 | 94.42% | 93.41% | 93.42% |
| 40 | 29500 | 0.12 | 94.34% | 93.29% | 93.42% |
| 40 | 29600 | 0.262 | 94.46% | 93.53% | 93.53% |
| 40 | 29700 | 0.151 | 94.46% | 93.40% | 93.53% |
| 40 | 29800 | 0.264 | 94.35% | 93.38% | 93.53% |
| 40 | 29900 | 0.366 | 94.18% | 93.03% | 93.53% |
| 41 | 30000 | 0.152 | 94.42% | 93.40% | 93.53% |
| 41 | 30100 | 0.155 | 94.52% | 93.56% | 93.56% |
| 41 | 30200 | 0.295 | 94.45% | 93.39% | 93.56% |
| 41 | 30300 | 0.121 | 94.51% | 93.45% | 93.56% |
| 41 | 30400 | 0.181 | 94.59% | 93.49% | 93.56% |
| 41 | 30500 | 0.287 | 94.54% | 93.46% | 93.56% |
| 41 | 30600 | 0.294 | 94.50% | 93.41% | 93.56% |
| 41 | 30700 | 0.375 | 94.34% | 93.18% | 93.56% |
| 42 | 30800 | 0.213 | 94.46% | 93.41% | 93.56% |
| 42 | 30900 | 0.214 | 94.57% | 93.50% | 93.56% |
| 42 | 31000 | 0.119 | 94.46% | 93.42% | 93.56% |
| 42 | 31100 | 0.257 | 94.62% | 93.63% | 93.63% |
| 42 | 31200 | 0.143 | 94.61% | 93.48% | 93.63% |
| 42 | 31300 | 0.255 | 94.49% | 93.53% | 93.63% |
| 42 | 31400 | 0.361 | 94.30% | 93.11% | 93.63% |
| 43 | 31500 | 0.139 | 94.60% | 93.47% | 93.63% |
| 43 | 31600 | 0.149 | 94.70% | 93.62% | 93.63% |
| 43 | 31700 | 0.288 | 94.61% | 93.48% | 93.63% |
| 43 | 31800 | 0.114 | 94.64% | 93.49% | 93.63% |
| 43 | 31900 | 0.173 | 94.74% | 93.55% | 93.63% |
| 43 | 32000 | 0.283 | 94.70% | 93.50% | 93.63% |
| 43 | 32100 | 0.291 | 94.62% | 93.46% | 93.63% |
| 43 | 32200 | 0.369 | 94.50% | 93.28% | 93.63% |
| 44 | 32300 | 0.206 | 94.61% | 93.52% | 93.63% |
| 44 | 32400 | 0.209 | 94.69% | 93.62% | 93.63% |
| 44 | 32500 | 0.113 | 94.60% | 93.46% | 93.63% |
| 44 | 32600 | 0.248 | 94.73% | 93.70% | 93.70% |
| 44 | 32700 | 0.135 | 94.74% | 93.59% | 93.70% |
| 44 | 32800 | 0.245 | 94.61% | 93.61% | 93.70% |
| 44 | 32900 | 0.355 | 94.42% | 93.10% | 93.70% |
| 45 | 33000 | 0.128 | 94.72% | 93.51% | 93.70% |
| 45 | 33100 | 0.145 | 94.84% | 93.65% | 93.70% |
| 45 | 33200 | 0.281 | 94.73% | 93.58% | 93.70% |
| 45 | 33300 | 0.106 | 94.75% | 93.57% | 93.70% |
| 45 | 33400 | 0.167 | 94.87% | 93.64% | 93.70% |
| 45 | 33500 | 0.278 | 94.83% | 93.52% | 93.70% |
| 45 | 33600 | 0.285 | 94.76% | 93.49% | 93.70% |
| 45 | 33700 | 0.362 | 94.62% | 93.35% | 93.70% |
| 46 | 33800 | 0.199 | 94.73% | 93.59% | 93.70% |
| 46 | 33900 | 0.205 | 94.79% | 93.63% | 93.70% |
| 46 | 34000 | 0.107 | 94.71% | 93.57% | 93.70% |
| 46 | 34100 | 0.241 | 94.85% | 93.72% | 93.72% |
| 46 | 34200 | 0.129 | 94.81% | 93.72% | 93.72% |
| 46 | 34300 | 0.236 | 94.73% | 93.72% | 93.72% |
| 46 | 34400 | 0.353 | 94.59% | 93.23% | 93.72% |
| 47 | 34500 | 0.116 | 94.86% | 93.61% | 93.72% |
| 47 | 34600 | 0.14 | 94.97% | 93.76% | 93.76% |
| 47 | 34700 | 0.272 | 94.84% | 93.63% | 93.76% |
| 47 | 34800 | 0.099 | 94.90% | 93.58% | 93.76% |
| 47 | 34900 | 0.163 | 94.95% | 93.69% | 93.76% |
| 47 | 35000 | 0.27 | 94.95% | 93.63% | 93.76% |
| 47 | 35100 | 0.279 | 94.88% | 93.63% | 93.76% |
| 47 | 35200 | 0.356 | 94.70% | 93.37% | 93.76% |
| 48 | 35300 | 0.193 | 94.87% | 93.67% | 93.76% |
| 48 | 35400 | 0.2 | 94.90% | 93.74% | 93.76% |
| 48 | 35500 | 0.108 | 94.82% | 93.55% | 93.76% |
| 48 | 35600 | 0.237 | 94.94% | 93.82% | 93.82% |
| 48 | 35700 | 0.123 | 94.97% | 93.69% | 93.82% |
| 48 | 35800 | 0.227 | 94.82% | 93.73% | 93.82% |
| 48 | 35900 | 0.349 | 94.73% | 93.24% | 93.82% |
| 49 | 36000 | 0.107 | 94.97% | 93.63% | 93.82% |
| 49 | 36100 | 0.135 | 95.04% | 93.83% | 93.83% |
| 49 | 36200 | 0.265 | 94.93% | 93.64% | 93.83% |
| 49 | 36300 | 0.093 | 94.95% | 93.66% | 93.83% |
| 49 | 36400 | 0.157 | 95.03% | 93.76% | 93.83% |
| 49 | 36500 | 0.259 | 95.05% | 93.70% | 93.83% |
| 49 | 36600 | 0.272 | 94.99% | 93.73% | 93.83% |
| 49 | 36700 | 0.349 | 94.85% | 93.45% | 93.83% |
| 50 | 36800 | 0.187 | 94.98% | 93.60% | 93.83% |
| 50 | 36900 | 0.195 | 95.02% | 93.83% | 93.83% |
| 50 | 37000 | 0.109 | 94.96% | 93.64% | 93.83% |
| 50 | 37100 | 0.232 | 95.05% | 93.85% | 93.85% |
| 50 | 37200 | 0.116 | 95.10% | 93.80% | 93.85% |
| 50 | 37300 | 0.219 | 94.97% | 93.72% | 93.85% |
| 50 | 37400 | 0.343 | 94.83% | 93.31% | 93.85% |
| 51 | 37500 | 0.1 | 95.10% | 93.76% | 93.85% |
| 51 | 37600 | 0.133 | 95.13% | 93.89% | 93.89% |
| 51 | 37700 | 0.257 | 95.06% | 93.72% | 93.89% |
| 51 | 37800 | 0.091 | 95.07% | 93.74% | 93.89% |
| 51 | 37900 | 0.152 | 95.13% | 93.77% | 93.89% |
| 51 | 38000 | 0.25 | 95.15% | 93.85% | 93.89% |
| 51 | 38100 | 0.267 | 95.11% | 93.80% | 93.89% |
| 51 | 38200 | 0.342 | 94.98% | 93.54% | 93.89% |
| 52 | 38300 | 0.179 | 95.08% | 93.68% | 93.89% |
| 52 | 38400 | 0.191 | 95.08% | 93.93% | 93.93% |
| 52 | 38500 | 0.109 | 95.02% | 93.68% | 93.93% |
| 52 | 38600 | 0.228 | 95.17% | 93.83% | 93.93% |
| 52 | 38700 | 0.111 | 95.21% | 93.81% | 93.93% |
| 52 | 38800 | 0.214 | 95.04% | 93.78% | 93.93% |
| 52 | 38900 | 0.339 | 94.92% | 93.29% | 93.93% |
| 53 | 39000 | 0.093 | 95.19% | 93.80% | 93.93% |
| 53 | 39100 | 0.13 | 95.24% | 93.92% | 93.93% |
| 53 | 39200 | 0.251 | 95.14% | 93.75% | 93.93% |
| 53 | 39300 | 0.088 | 95.10% | 93.67% | 93.93% |
| 53 | 39400 | 0.148 | 95.25% | 93.82% | 93.93% |
| 53 | 39500 | 0.24 | 95.24% | 93.85% | 93.93% |
| 53 | 39600 | 0.261 | 95.23% | 93.78% | 93.93% |
| 53 | 39700 | 0.334 | 95.07% | 93.63% | 93.93% |
| 54 | 39800 | 0.173 | 95.18% | 93.78% | 93.93% |
| 54 | 39900 | 0.188 | 95.20% | 93.92% | 93.93% |
| 54 | 40000 | 0.106 | 95.11% | 93.74% | 93.93% |
| 54 | 40100 | 0.227 | 95.29% | 93.88% | 93.93% |
| 54 | 40200 | 0.107 | 95.30% | 93.82% | 93.93% |
| 54 | 40300 | 0.21 | 95.15% | 93.88% | 93.93% |
| 54 | 40400 | 0.335 | 94.99% | 93.35% | 93.93% |
| 55 | 40500 | 0.086 | 95.30% | 93.79% | 93.93% |