▾ Building Chatbot Using Attention Based Neural Networks

```python
1 from __future__ import division
2 from __future__ import print_function
3 from __future__ import unicode_literals
4 from __future__ import absolute_import
5 import torch
6 from torch.jit import script, trace
7 import torch.nn as nn
8 from torch import optim
9 import torch.nn.functional as F
10 import csv
11 import random
12 import re
13 import os
14 import unicodedata
15 import codecs
16 from io import open
17 import itertools
18 import math
19
20 USE_CUDA = torch.cuda.is_available()
21 device = torch.device("cuda" if USE_CUDA else "cpu")
```

```python
1 corpus = "movie_corpus"
2 corpus_name = "movie_corpus"
3 datafile = os.path.join(corpus, "formatted_movie_lines.txt")
```

```python
1 with open(datafile, 'rb') as file:
2     lines = file.readlines()
3
4 for line in lines[:3]:
5     print(str(line) + '\n')
```

⤷ b"Can we make this quick? Roxanne Korrine and Andrew Barrett are having an i

    b"Well, I thought we'd start with pronunciation, if that's okay with you.\tNo

    b"Not the hacking and gagging and spitting part. Please.\tOkay... then how '

```python
1 PAD_token = 0
2 SOS_token = 1
3 EOS_token = 2
4
5 class Vocabulary:
6     def __init__(self, name):
7         self.name = name
```

```python
 8            self.trimmed = False
 9            self.word2index = {}
10            self.word2count = {}
11            self.index2word = {PAD_token: "PAD", SOS_token: "SOS", EOS_token: "EOS"}
12            self.num_words = 3
13
14        def addWord(self, w):
15            if w not in self.word2index:
16                self.word2index[w] = self.num_words
17                self.word2count[w] = 1
18                self.index2word[self.num_words] = w
19                self.num_words += 1
20            else:
21                self.word2count[w] += 1
22
23        def addSentence(self, sent):
24            for word in sent.split(' '):
25                self.addWord(word)
26
27
28        def trim(self, min_cnt):
29            if self.trimmed:
30                return
31            self.trimmed = True
32
33            words_to_keep = []
34
35            for k, v in self.word2count.items():
36                if v >= min_cnt:
37                    words_to_keep.append(k)
38
39            print('Words to Keep: {} / {} = {:.2%}'.format(
40                len(words_to_keep), len(self.word2index), len(words_to_keep) / len(
41            ))
42
43            self.word2index = {}
44            self.word2count = {}
45            self.index2word = {PAD_token: "PAD", SOS_token: "SOS", EOS_token: "EOS"}
46            self.num_words = 3
47
48            for w in words_to_keep:
49                self.addWord(w)
```

```python
 1  def unicodeToAscii(s):
 2      return ''.join(
 3          c for c in unicodedata.normalize('NFD', s)
 4          if unicodedata.category(c) != 'Mn'
 5      )
 6
 7  def cleanString(s):
 8      s = unicodeToAscii(s.lower().strip())
 9      s = re.sub(r"([.!?])", r" \1", s)
10      s = re.sub(r"[^a-zA-Z.!?]+", r" ", s)
11      s = re.sub(r"\s+", r" ", s).strip()
```

```
12      return s
13
14 def readVocs(datafile, corpus_name):
15     lines = open(datafile, encoding='utf-8').\
16         read().strip().split('\n')
17     pairs = [[cleanString(s) for s in l.split('\t')] for l in lines]
18     voc = Vocabulary(corpus_name)
19     return voc, pairs
20
21 def filterPair(p, max_length):
22     return len(p[0].split(' ')) < max_length and len(p[1].split(' ')) < max_leng
23
24 def filterPairs(pairs, max_length):
25     return [pair for pair in pairs if filterPair(pair, max_length)]
26
27 def loadData(corpus, corpus_name, datafile, max_length):
28     voc, pairs = readVocs(datafile, corpus_name)
29     print(str(len(pairs)) + " Sentence pairs")
30     pairs = filterPairs(pairs,max_length)
31     print(str(len(pairs))+ " Sentence pairs after trimming")
32     for p in pairs:
33         voc.addSentence(p[0])
34         voc.addSentence(p[1])
35     print(str(voc.num_words) + " Distinct words in vocabulary")
36     return voc, pairs
```

```
1 max_length = 10
2 voc, pairs = loadData(corpus, corpus_name, datafile, max_length)
```

```
221282 Sentence pairs
64271 Sentence pairs after trimming
18008 Distinct words in vocabulary
```

```
1 print("Example Pairs:")
2 for pair in pairs[-10:]:
3     print(pair)
```

```
Example Pairs:
['four', 'three minutes to go !']
['three minutes to go !', 'yes .']
['another fifteen seconds to go .', 'do something ! stall them !']
['yes sir name please ?', 'food !']
['food !', 'do you have a reservation ?']
['do you have a reservation ?', 'food ! !']
['grrrhmmnnnjkjmmmnn !', 'franz ! help ! lunatic !']
['what o clock is it mr noggs ?', 'eleven o clock my lorj']
['stuart ?', 'yes .']
['yes .', 'how quickly can you move your artillery forward ?']
```

```
1 def removeRareWords(voc, all_pairs, minimum):
2     voc.trim(minimum)
3
4     pairs_to_keep = []
5
6     for n in all pairs:
```

```
 6      for p in att_pairs:
 7          keep = True
 8
 9          for word in p[0].split(' '):
10              if word not in voc.word2index:
11                  keep = False
12                  break
13          for word in p[1].split(' '):
14              if word not in voc.word2index:
15                  keep = False
16                  break
17
18          if keep:
19              pairs_to_keep.append(p)
20
21      print("Trimmed from {} pairs to {}, {:.2%} of total".format(len(all_pairs)\
22          , len(pairs_to_keep), len(pairs_to_keep)/ len(all_pairs)))
23      return pairs_to_keep
24
25
26 minimum_count = 3
27 pairs = removeRareWords(voc, pairs, minimum_count)
```

⤷

```
 1 def indexFromSentence(voc, sent):
 2     return [voc.word2index[w] for w in sent.split(' ')] + [EOS_token]
 3
 4 def zeroPad(l, fillvalue=PAD_token):
 5     return list(itertools.zip_longest(*l, fillvalue=fillvalue))
 6
 7 def inputVar(l, voc):
 8     indexes_batch = [indexFromSentence(voc, sentence) for sentence in l]
 9     padList = zeroPad(indexes_batch)
10     padTensor = torch.LongTensor(padList)
11     lengths = torch.tensor([len(indexes) for indexes in indexes_batch])
12     return padTensor, lengths
13
14 def getMask(l, value=PAD_token):
15     m = []
16     for i, seq in enumerate(l):
17         m.append([])
18         for token in seq:
19             if token == PAD_token:
20                 m[i].append(0)
21             else:
22                 m[i].append(1)
23     return m
24
25 def outputVar(l, voc):
26     indexes_batch = [indexFromSentence(voc, sentence) for sentence in l]
27     max_target_len = max([len(indexes) for indexes in indexes_batch])
28     padList = zeroPad(indexes_batch)
29     mask = torch.BoolTensor(getMask(padList))
```

```
30      padTensor = torch.LongTensor(padList)
31      return padTensor, mask, max_target_len
32
33 def batch2Train(voc, batch):
34      batch.sort(key=lambda x: len(x[0].split(" ")), reverse=True)
35
36      input_batch = []
37      output_batch = []
38
39      for p in batch:
40          input_batch.append(p[0])
41          output_batch.append(p[1])
42
43      inp, lengths = inputVar(input_batch, voc)
44      output, mask, max_target_len = outputVar(output_batch, voc)
45
46      return inp, lengths, output, mask, max_target_len
```

```
1 test_batch_size = 5
2 batches = batch2Train(voc, [random.choice(pairs) for _ in range(test_batch_size
3 input_variable, lengths, target_variable, mask, max_target_len = batches
4
5 print("Input:")
6 print(input_variable)
7
8 print("Target:")
9 print(target_variable)
10
11 print("Mask:")
12 print(mask)
```

⤷

```python
1  class EncoderRNN(nn.Module):
2      def __init__(self, hidden_size, embedding, n_layers=1, dropout=0):
3          super(EncoderRNN, self).__init__()
4          self.n_layers = n_layers
5          self.hidden_size = hidden_size
6          self.embedding = embedding
7
8          self.gru = nn.GRU(hidden_size, hidden_size, n_layers,
9                            dropout=(0 if n_layers == 1 else dropout), bidirectio
10
11     def forward(self, input_seq, input_lengths, hidden=None):
12         embedded = self.embedding(input_seq)
13         packed = nn.utils.rnn.pack_padded_sequence(embedded, input_lengths)
14         outputs, hidden = self.gru(packed, hidden)
15         # Unpack padding
16         outputs, _ = nn.utils.rnn.pad_packed_sequence(outputs)
17         # Sum bidirectional GRU outputs
18         outputs = outputs[:, :, :self.hidden_size] + outputs[:, : ,self.hidden_
19         # Return output and final hidden state
20         return outputs, hidden
```

```python
1  class Attn(nn.Module):
2      def __init__(self, hidden_size):
3          super(Attn, self).__init__()
4          self.hidden_size = hidden_size
5
6      def dot_score(self, hidden, encoder_output):
7          return torch.sum(hidden * encoder_output, dim=2)
8
9      def forward(self, hidden, encoder_outputs):
10         attn_energies = self.dot_score(hidden, encoder_outputs)
11         attn_energies = attn_energies.t()
12         return F.softmax(attn_energies, dim=1).unsqueeze(1)
```

```python
1  class DecoderRNN(nn.Module):
2      def __init__(self, embedding, hidden_size, output_size, n_layers=1, dropout=
3          super(DecoderRNN, self).__init__()
4
5          self.hidden_size = hidden_size
6          self.output_size = output_size
7          self.n_layers = n_layers
8          self.dropout = dropout
9
10         self.embedding = embedding
11         self.embedding_dropout = nn.Dropout(dropout)
12         self.gru = nn.GRU(hidden_size, hidden_size, n_layers, dropout=(0 if n_la
13         self.concat = nn.Linear(2 * hidden_size, hidden_size)
14         self.out = nn.Linear(hidden_size, output_size)
```

```
15
16            self.attn = Attn(hidden_size)
17
18      def forward(self, input_step, last_hidden, encoder_outputs):
19            embedded = self.embedding(input_step)
20            embedded = self.embedding_dropout(embedded)
21            rnn_output, hidden = self.gru(embedded, last_hidden)
22            attn_weights = self.attn(rnn_output, encoder_outputs)
23            context = attn_weights.bmm(encoder_outputs.transpose(0, 1))
24            rnn_output = rnn_output.squeeze(0)
25            context = context.squeeze(1)
26            concat_input = torch.cat((rnn_output, context), 1)
27            concat_output = torch.tanh(self.concat(concat_input))
28            output = self.out(concat_output)
29            output = F.softmax(output, dim=1)
30            return output, hidden
```

```
1 def NLLMaskLoss(inp, target, mask):
2      TotalN = mask.sum()
3      CELoss = -torch.log(torch.gather(inp, 1, target.view(-1, 1)).squeeze(1))
4      loss = CELoss.masked_select(mask).mean()
5      loss = loss.to(device)
6      return loss, TotalN.item()
```

```
1 MAX_LENGTH = 10
2 def train(input_variable, lengths, target_variable, mask, max_target_len, encode
3            encoder_optimizer, decoder_optimizer, batch_size, clip, max_length=MA)
4
5      encoder_optimizer.zero_grad()
6      decoder_optimizer.zero_grad()
7
8      input_variable = input_variable.to(device)
9      lengths = lengths.to(device)
10     target_variable = target_variable.to(device)
11     mask = mask.to(device)
12
13     loss = 0
14     print_losses = []
15     n_totals = 0
16
17     encoder_outputs, encoder_hidden = encoder(input_variable, lengths)
18
19     decoder_input = torch.LongTensor([[SOS_token for _ in range(batch_size)]])
20     decoder_input = decoder_input.to(device)
21
22     decoder_hidden = encoder_hidden[:decoder.n_layers]
23
24     use_TF = True if random.random() < teacher_forcing_ratio else False
25
26     if use_TF:
27         for t in range(max_target_len):
28             decoder_output, decoder_hidden = decoder(
29                 decoder_input, decoder_hidden, encoder_outputs
30             )
```

```
31            decoder_input = target_variable[t].view(1, -1)
32            mask_loss, nTotal = NLLMaskLoss(decoder_output, target_variable[t],
33            loss += mask_loss
34            print_losses.append(mask_loss.item() * nTotal)
35            n_totals += nTotal
36     else:
37         for t in range(max_target_len):
38             decoder_output, decoder_hidden = decoder(
39                 decoder_input, decoder_hidden, encoder_outputs
40             )
41             _, topi = decoder_output.topk(1)
42             decoder_input = torch.LongTensor([[topi[i][0] for i in range(batch_
43             decoder_input = decoder_input.to(device)
44             mask_loss, nTotal = NLLMaskLoss(decoder_output, target_variable[t],
45             loss += mask_loss
46             print_losses.append(mask_loss.item() * nTotal)
47             n_totals += nTotal
48
49     loss.backward()
50
51     _ = nn.utils.clip_grad_norm_(encoder.parameters(), clip)
52     _ = nn.utils.clip_grad_norm_(decoder.parameters(), clip)
53
54     encoder_optimizer.step()
55     decoder_optimizer.step()
56
57     return sum(print_losses) / n_totals
```

```
 1 def trainIters(model_name, voc, pairs, encoder, decoder, encoder_optimizer,\
 2                decoder_optimizer, embedding, encoder_n_layers, decoder_n_layers
 3                save_dir, n_iteration, batch_size, print_every, save_every, clip
 4
 5     training_batches = [batch2Train(voc, [random.choice(pairs) for _ in range(ba
 6                        for _ in range(n_iteration)]
 7
 8     print('Starting ...')
 9     start_iteration = 1
10     print_loss = 0
11     if loadFilename:
12         start_iteration = checkpoint['iteration'] + 1
13
14     print("Beginning Training...")
15     for iteration in range(start_iteration, n_iteration + 1):
16         training_batch = training_batches[iteration - 1]
17         # Extract fields from batch
18         input_variable, lengths, target_variable, mask, max_target_len = traini
19
20         # Run a training iteration with batch
21         loss = train(input_variable, lengths, target_variable, mask, max_target_
22                      decoder, embedding, encoder_optimizer, decoder_optimizer, l
23         print_loss += loss
24
25         if iteration % print_every == 0:
26             print_loss_avg = print_loss / print_every
```

```
27             print("Iteration: {}; Percent done: {:.1f}%; Mean loss: {:.4f}".for
28             print_loss = 0
29
30         if (iteration % save_every == 0):
31             directory = os.path.join(save_dir, model_name, corpus_name, '{}-{}_
32             if not os.path.exists(directory):
33                 os.makedirs(directory)
34             torch.save({
35                 'iteration': iteration,
36                 'en': encoder.state_dict(),
37                 'de': decoder.state_dict(),
38                 'en_opt': encoder_optimizer.state_dict(),
39                 'de_opt': decoder_optimizer.state_dict(),
40                 'loss': loss,
41                 'voc_dict': voc.__dict__,
42                 'embedding': embedding.state_dict()
43             }, os.path.join(directory, '{}_{}.tar'.format(iteration, 'checkpoin
```

```
1 class GreedySearchDecoder(nn.Module):
2     def __init__(self, encoder, decoder):
3         super(GreedySearchDecoder, self).__init__()
4         self.encoder = encoder
5         self.decoder = decoder
6
7     def forward(self, input_seq, input_length, max_length):
8         encoder_outputs, encoder_hidden = self.encoder(input_seq, input_length)
9         decoder_hidden = encoder_hidden[:decoder.n_layers]
10        decoder_input = torch.ones(1, 1, device=device, dtype=torch.long) * SOS_
11        all_tokens = torch.zeros([0], device=device, dtype=torch.long)
12        all_scores = torch.zeros([0], device=device)
13        for _ in range(max_length):
14            decoder_output, decoder_hidden = self.decoder(decoder_input, decode
15            decoder_scores, decoder_input = torch.max(decoder_output, dim=1)
16            all_tokens = torch.cat((all_tokens, decoder_input), dim=0)
17            all_scores = torch.cat((all_scores, decoder_scores), dim=0)
18            decoder_input = torch.unsqueeze(decoder_input, 0)
19        return all_tokens, all_scores
```

```
1 def evaluate(encoder, decoder, searcher, voc, sentence, max_length=max_length):
2     indices = [indexFromSentence(voc, sentence)]
3     lengths = torch.tensor([len(indexes) for indexes in indices])
4     input_batch = torch.LongTensor(indices).transpose(0, 1)
5     input_batch = input_batch.to(device)
6     lengths = lengths.to(device)
7     tokens, scores = searcher(input_batch, lengths, max_length)
8     decoded_words = [voc.index2word[token.item()] for token in tokens]
9     return decoded_words
10
11
12 def runChatBot(encoder, decoder, searcher, voc):
13     input_sentence = ''
14     while(1):
15         try:
16             input_sentence = input('> ')
```

```
17              if input_sentence == 'quit': break
18              input_sentence = cleanString(input_sentence)
19              output_words = evaluate(encoder, decoder, searcher, voc, input_sente
20              output_words[:] = [x for x in output_words if not (x == 'EOS' or x =
21              print('Response:', ' '.join(output_words))
22
23          except KeyError:
24              print("Error: Unknown Word")
```

```
 1 model_name = 'chatbot_model'
 2 hidden_size = 500
 3 encoder_n_layers = 2
 4 decoder_n_layers = 2
 5 dropout = 0.15
 6 batch_size = 64
 7
 8 loadFilename = None
 9 checkpoint_iter = 4000
10
11 if loadFilename:
12     checkpoint = torch.load(loadFilename)
13     encoder_sd = checkpoint['en']
14     decoder_sd = checkpoint['de']
15     encoder_optimizer_sd = checkpoint['en_opt']
16     decoder_optimizer_sd = checkpoint['de_opt']
17     embedding_sd = checkpoint['embedding']
18     voc.__dict__ = checkpoint['voc_dict']
19
20
21 print('Building encoder and decoder ...')
22
23 embedding = nn.Embedding(voc.num_words, hidden_size)
24
25 if loadFilename:
26     embedding.load_state_dict(embedding_sd)
27
28 encoder = EncoderRNN(hidden_size, embedding, encoder_n_layers, dropout)
29 decoder = DecoderRNN(embedding, hidden_size, voc.num_words, decoder_n_layers, d
30
31 if loadFilename:
32     encoder.load_state_dict(encoder_sd)
33     decoder.load_state_dict(decoder_sd)
34
35 encoder = encoder.to(device)
36 decoder = decoder.to(device)
37 print('Models built and ready to go!')
```

⤷

```
 1 save_dir = './'
 2
 3 clip = 50.0
 4 teacher forcing ratio = 1.0
```

```
   4 teacher_forcing_ratio = 1.0
   5 learning_rate = 0.0001
   6 decoder_learning_ratio = 5.0
   7
   8 epochs = 4000
   9
  10 print_every = 1
  11 save_every = 500
  12
  13 encoder.train()
  14 decoder.train()
  15
  16 print('Building optimizers ...')
  17 encoder_optimizer = optim.Adam(encoder.parameters(), lr=learning_rate)
  18 decoder_optimizer = optim.Adam(decoder.parameters(), lr=learning_rate * decoder_
  19
  20 if loadFilename:
  21     encoder_optimizer.load_state_dict(encoder_optimizer_sd)
  22     decoder_optimizer.load_state_dict(decoder_optimizer_sd)
  23
  24 for state in encoder_optimizer.state.values():
  25     for k, v in state.items():
  26         if isinstance(v, torch.Tensor):
  27             state[k] = v.cuda()
  28
  29 for state in decoder_optimizer.state.values():
  30     for k, v in state.items():
  31         if isinstance(v, torch.Tensor):
  32             state[k] = v.cuda()
  33
  34 print("Starting Training!")
  35 trainIters(model_name, voc, pairs, encoder, decoder, encoder_optimizer, decoder_
  36             embedding, encoder_n_layers, decoder_n_layers, save_dir, epochs, bat
  37             print_every, save_every, clip, corpus_name, loadFilename)
```

⮕

```
Building optimizers ...
Starting Training!
Starting ...
Beginning Training...
Iteration: 1; Percent done: 0.0%; Mean loss: 8.9581
Iteration: 2; Percent done: 0.1%; Mean loss: 8.8519
Iteration: 3; Percent done: 0.1%; Mean loss: 8.6399
Iteration: 4; Percent done: 0.1%; Mean loss: 8.4067
Iteration: 5; Percent done: 0.1%; Mean loss: 8.0479
Iteration: 6; Percent done: 0.1%; Mean loss: 7.4559
Iteration: 7; Percent done: 0.2%; Mean loss: 6.9914
Iteration: 8; Percent done: 0.2%; Mean loss: 6.8347
Iteration: 9; Percent done: 0.2%; Mean loss: 6.7042
Iteration: 10; Percent done: 0.2%; Mean loss: 6.3910
Iteration: 11; Percent done: 0.3%; Mean loss: 6.3344
Iteration: 12; Percent done: 0.3%; Mean loss: 5.9856
Iteration: 13; Percent done: 0.3%; Mean loss: 5.7622
Iteration: 14; Percent done: 0.4%; Mean loss: 5.4934
Iteration: 15; Percent done: 0.4%; Mean loss: 5.5479
Iteration: 16; Percent done: 0.4%; Mean loss: 5.2254
Iteration: 17; Percent done: 0.4%; Mean loss: 5.1725
Iteration: 18; Percent done: 0.4%; Mean loss: 5.1551
Iteration: 19; Percent done: 0.5%; Mean loss: 5.1796
Iteration: 20; Percent done: 0.5%; Mean loss: 4.8271
Iteration: 21; Percent done: 0.5%; Mean loss: 5.2203
Iteration: 22; Percent done: 0.5%; Mean loss: 5.0126
Iteration: 23; Percent done: 0.6%; Mean loss: 4.8671
Iteration: 24; Percent done: 0.6%; Mean loss: 4.8162
Iteration: 25; Percent done: 0.6%; Mean loss: 4.9392
Iteration: 26; Percent done: 0.7%; Mean loss: 4.9565
Iteration: 27; Percent done: 0.7%; Mean loss: 4.8175
Iteration: 28; Percent done: 0.7%; Mean loss: 4.9639
Iteration: 29; Percent done: 0.7%; Mean loss: 4.7501
Iteration: 30; Percent done: 0.8%; Mean loss: 4.7141
Iteration: 31; Percent done: 0.8%; Mean loss: 4.6156
Iteration: 32; Percent done: 0.8%; Mean loss: 4.8186
Iteration: 33; Percent done: 0.8%; Mean loss: 4.7505
Iteration: 34; Percent done: 0.9%; Mean loss: 4.6745
Iteration: 35; Percent done: 0.9%; Mean loss: 4.7869
Iteration: 36; Percent done: 0.9%; Mean loss: 4.7639
Iteration: 37; Percent done: 0.9%; Mean loss: 4.8241
Iteration: 38; Percent done: 0.9%; Mean loss: 4.7306
Iteration: 39; Percent done: 1.0%; Mean loss: 4.5520
Iteration: 40; Percent done: 1.0%; Mean loss: 4.5247
Iteration: 41; Percent done: 1.0%; Mean loss: 4.5195
Iteration: 42; Percent done: 1.1%; Mean loss: 4.6028
Iteration: 43; Percent done: 1.1%; Mean loss: 4.5771
Iteration: 44; Percent done: 1.1%; Mean loss: 4.8822
Iteration: 45; Percent done: 1.1%; Mean loss: 4.6050
Iteration: 46; Percent done: 1.1%; Mean loss: 4.7812
Iteration: 47; Percent done: 1.2%; Mean loss: 4.5923
Bteration: 48; Percent done: 1.2%; Mean loss: 4.5784
Iteration: 49; Percent done: 1.2%; Mean loss: 4.6167
Iteration: 50; Percent done: 1.2%; Mean loss: 4.5435
Iteration: 51; Percent done: 1.3%; Mean loss: 4.7255
Iteration: 52; Percent done: 1.3%; Mean loss: 4.6102
Iteration: 53; Percent done: 1.3%; Mean loss: 4.7064
Iteration: 54; Percent done: 1.4%; Mean loss: 4.5472
```

```
Iteration: 55; Percent done: 1.4%; Mean loss: 4.7857
Iteration: 56; Percent done: 1.4%; Mean loss: 4.4636
Iteration: 57; Percent done: 1.4%; Mean loss: 4.6796
Iteration: 58; Percent done: 1.5%; Mean loss: 4.7259
Iteration: 59; Percent done: 1.5%; Mean loss: 4.6357
Iteration: 60; Percent done: 1.5%; Mean loss: 4.6566
Iteration: 61; Percent done: 1.5%; Mean loss: 4.3333
Iteration: 62; Percent done: 1.6%; Mean loss: 4.6421
Iteration: 63; Percent done: 1.6%; Mean loss: 4.4621
Iteration: 64; Percent done: 1.6%; Mean loss: 4.6995
Iteration: 65; Percent done: 1.6%; Mean loss: 4.6953
Iteration: 66; Percent done: 1.7%; Mean loss: 4.4795
Iteration: 67; Percent done: 1.7%; Mean loss: 4.3945
Iteration: 68; Percent done: 1.7%; Mean loss: 4.4584
Iteration: 69; Percent done: 1.7%; Mean loss: 4.7332
Iteration: 70; Percent done: 1.8%; Mean loss: 4.4423
Iteration: 71; Percent done: 1.8%; Mean loss: 4.5471
Iteration: 72; Percent done: 1.8%; Mean loss: 4.5861
Iteration: 73; Percent done: 1.8%; Mean loss: 4.5356
Iteration: 74; Percent done: 1.8%; Mean loss: 4.6687
Iteration: 75; Percent done: 1.9%; Mean loss: 4.6715
Iteration: 76; Percent done: 1.9%; Mean loss: 4.6212
Iteration: 77; Percent done: 1.9%; Mean loss: 4.4219
Iteration: 78; Percent done: 1.9%; Mean loss: 4.5047
Iteration: 79; Percent done: 2.0%; Mean loss: 4.6054
Iteration: 80; Percent done: 2.0%; Mean loss: 4.1720
Iteration: 81; Percent done: 2.0%; Mean loss: 4.4715
Iteration: 82; Percent done: 2.1%; Mean loss: 4.4921
Iteration: 83; Percent done: 2.1%; Mean loss: 4.4883
Iteration: 84; Percent done: 2.1%; Mean loss: 4.6285
Iteration: 85; Percent done: 2.1%; Mean loss: 4.6200
Iteration: 86; Percent done: 2.1%; Mean loss: 4.6363
Iteration: 87; Percent done: 2.2%; Mean loss: 4.4163
Iteration: 88; Percent done: 2.2%; Mean loss: 4.4476
Iteration: 89; Percent done: 2.2%; Mean loss: 4.4544
Iteration: 90; Percent done: 2.2%; Mean loss: 4.4778
Iteration: 91; Percent done: 2.3%; Mean loss: 4.4331
Iteration: 92; Percent done: 2.3%; Mean loss: 4.6828
Iteration: 93; Percent done: 2.3%; Mean loss: 4.3553
Iteration: 94; Percent done: 2.4%; Mean loss: 4.1909
Iteration: 95; Percent done: 2.4%; Mean loss: 4.6419
Iteration: 96; Percent done: 2.4%; Mean loss: 4.2013
Iteration: 97; Percent done: 2.4%; Mean loss: 4.3105
Iteration: 98; Percent done: 2.5%; Mean loss: 4.3145
Iteration: 99; Percent done: 2.5%; Mean loss: 4.3909
Iteration: 100; Percent done: 2.5%; Mean loss: 4.5448
Iteration: 101; Percent done: 2.5%; Mean loss: 4.3938
Iteration: 102; Percent done: 2.5%; Mean loss: 4.6773
Iteration: 103; Percent done: 2.6%; Mean loss: 4.3940
Iteration: 104; Percent done: 2.6%; Mean loss: 4.0794
Iteration: 105; Percent done: 2.6%; Mean loss: 4.2262
Iteration: 106; Percent done: 2.6%; Mean loss: 4.4636
Iteration: 107; Percent done: 2.7%; Mean loss: 4.5437
Iteration: 108; Percent done: 2.7%; Mean loss: 4.3697
Iteration: 109; Percent done: 2.7%; Mean loss: 4.5532
Iteration: 110; Percent done: 2.8%; Mean loss: 4.4100
Iteration: 111; Percent done: 2.8%; Mean loss: 4.4088
Iteration: 112; Percent done: 2.8%; Mean loss: 4.1835
```

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Iteration: 113; Percent done: 2.8%; Mean loss: 4.4675
Iteration: 114; Percent done: 2.9%; Mean loss: 4.3748
Iteration: 115; Percent done: 2.9%; Mean loss: 4.3390
Iteration: 116; Percent done: 2.9%; Mean loss: 4.1245
Iteration: 117; Percent done: 2.9%; Mean loss: 4.0184
Iteration: 118; Percent done: 2.9%; Mean loss: 4.4403
Iteration: 119; Percent done: 3.0%; Mean loss: 4.2744
Iteration: 120; Percent done: 3.0%; Mean loss: 4.7951
Iteration: 121; Percent done: 3.0%; Mean loss: 4.6074
Iteration: 122; Percent done: 3.0%; Mean loss: 4.2955
Iteration: 123; Percent done: 3.1%; Mean loss: 4.4385
Iteration: 124; Percent done: 3.1%; Mean loss: 4.3685
Iteration: 125; Percent done: 3.1%; Mean loss: 4.2513
Iteration: 126; Percent done: 3.1%; Mean loss: 4.2773
Iteration: 127; Percent done: 3.2%; Mean loss: 4.3423
Iteration: 128; Percent done: 3.2%; Mean loss: 4.2337
Iteration: 129; Percent done: 3.2%; Mean loss: 4.3413
Iteration: 130; Percent done: 3.2%; Mean loss: 4.2174
Iteration: 131; Percent done: 3.3%; Mean loss: 4.3775
Iteration: 132; Percent done: 3.3%; Mean loss: 4.2109
Iteration: 133; Percent done: 3.3%; Mean loss: 4.3792
Iteration: 134; Percent done: 3.4%; Mean loss: 4.5518
Iteration: 135; Percent done: 3.4%; Mean loss: 4.4289
Iteration: 136; Percent done: 3.4%; Mean loss: 4.1223
Iteration: 137; Percent done: 3.4%; Mean loss: 4.3096
Iteration: 138; Percent done: 3.5%; Mean loss: 3.9825
Iteration: 139; Percent done: 3.5%; Mean loss: 4.2452
Iteration: 140; Percent done: 3.5%; Mean loss: 4.2074
Iteration: 141; Percent done: 3.5%; Mean loss: 4.4232
Iteration: 142; Percent done: 3.5%; Mean loss: 4.2644
Iteration: 143; Percent done: 3.6%; Mean loss: 4.1868
Iteration: 144; Percent done: 3.6%; Mean loss: 4.1109
Iteration: 145; Percent done: 3.6%; Mean loss: 4.3265
Iteration: 146; Percent done: 3.6%; Mean loss: 4.2572
Iteration: 147; Percent done: 3.7%; Mean loss: 4.4057
Iteration: 148; Percent done: 3.7%; Mean loss: 4.3141
Iteration: 149; Percent done: 3.7%; Mean loss: 4.3680
Iteration: 150; Percent done: 3.8%; Mean loss: 4.0603
Iteration: 151; Percent done: 3.8%; Mean loss: 4.3999
Iteration: 152; Percent done: 3.8%; Mean loss: 4.1103
Iteration: 153; Percent done: 3.8%; Mean loss: 4.2509
Iteration: 154; Percent done: 3.9%; Mean loss: 4.2616
Iteration: 155; Percent done: 3.9%; Mean loss: 4.3303
Iteration: 156; Percent done: 3.9%; Mean loss: 4.3242
Iteration: 157; Percent done: 3.9%; Mean loss: 4.5732
Iteration: 158; Percent done: 4.0%; Mean loss: 4.4532
Iteration: 159; Percent done: 4.0%; Mean loss: 4.3754
Iteration: 160; Percent done: 4.0%; Mean loss: 4.5129
Iteration: 161; Percent done: 4.0%; Mean loss: 4.4735
Iteration: 162; Percent done: 4.0%; Mean loss: 4.2551
Iteration: 163; Percent done: 4.1%; Mean loss: 4.1868
Iteration: 164; Percent done: 4.1%; Mean loss: 4.0305
Iteration: 165; Percent done: 4.1%; Mean loss: 4.0928
Iteration: 166; Percent done: 4.2%; Mean loss: 4.2220
Iteration: 167; Percent done: 4.2%; Mean loss: 4.3615
Iteration: 168; Percent done: 4.2%; Mean loss: 4.1535
Iteration: 169; Percent done: 4.2%; Mean loss: 4.0908
Iteration: 170; Percent done: 4.2%; Mean loss: 4.1924
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Iteration: 171; Percent done: 4.3%; Mean loss: 4.0123
Iteration: 172; Percent done: 4.3%; Mean loss: 4.2017
Iteration: 173; Percent done: 4.3%; Mean loss: 4.3829
Iteration: 174; Percent done: 4.3%; Mean loss: 4.1984
Iteration: 175; Percent done: 4.4%; Mean loss: 4.3433
Iteration: 176; Percent done: 4.4%; Mean loss: 4.0381
Iteration: 177; Percent done: 4.4%; Mean loss: 4.1949
Iteration: 178; Percent done: 4.5%; Mean loss: 4.1067
Iteration: 179; Percent done: 4.5%; Mean loss: 4.2232
Iteration: 180; Percent done: 4.5%; Mean loss: 4.3586
Iteration: 181; Percent done: 4.5%; Mean loss: 4.3342
Iteration: 182; Percent done: 4.5%; Mean loss: 4.1334
Iteration: 183; Percent done: 4.6%; Mean loss: 4.2777
Iteration: 184; Percent done: 4.6%; Mean loss: 4.0797
Iteration: 185; Percent done: 4.6%; Mean loss: 3.9360
Iteration: 186; Percent done: 4.7%; Mean loss: 4.2656
Iteration: 187; Percent done: 4.7%; Mean loss: 4.1282
Iteration: 188; Percent done: 4.7%; Mean loss: 3.9407
Iteration: 189; Percent done: 4.7%; Mean loss: 3.9936
Iteration: 190; Percent done: 4.8%; Mean loss: 4.2269
Iteration: 191; Percent done: 4.8%; Mean loss: 4.1298
Iteration: 192; Percent done: 4.8%; Mean loss: 4.0399
Iteration: 193; Percent done: 4.8%; Mean loss: 4.3275
Iteration: 194; Percent done: 4.9%; Mean loss: 4.2040
Iteration: 195; Percent done: 4.9%; Mean loss: 4.1119
Iteration: 196; Percent done: 4.9%; Mean loss: 4.1440
Iteration: 197; Percent done: 4.9%; Mean loss: 4.4085
Iteration: 198; Percent done: 5.0%; Mean loss: 4.0322
Iteration: 199; Percent done: 5.0%; Mean loss: 4.2550
Iteration: 200; Percent done: 5.0%; Mean loss: 4.0212
Iteration: 201; Percent done: 5.0%; Mean loss: 3.9557
Iteration: 202; Percent done: 5.1%; Mean loss: 3.9841
Iteration: 203; Percent done: 5.1%; Mean loss: 4.3822
Iteration: 204; Percent done: 5.1%; Mean loss: 4.0679
Iteration: 205; Percent done: 5.1%; Mean loss: 4.1521
Iteration: 206; Percent done: 5.1%; Mean loss: 4.1256
Iteration: 207; Percent done: 5.2%; Mean loss: 4.1131
Iteration: 208; Percent done: 5.2%; Mean loss: 3.9197
Iteration: 209; Percent done: 5.2%; Mean loss: 4.1591
Iteration: 210; Percent done: 5.2%; Mean loss: 4.2545
Iteration: 211; Percent done: 5.3%; Mean loss: 3.8558
Iteration: 212; Percent done: 5.3%; Mean loss: 4.2497
Iteration: 213; Percent done: 5.3%; Mean loss: 4.0786
Iteration: 214; Percent done: 5.3%; Mean loss: 3.9165
Iteration: 215; Percent done: 5.4%; Mean loss: 3.9585
Iteration: 216; Percent done: 5.4%; Mean loss: 3.8365
Iteration: 217; Percent done: 5.4%; Mean loss: 3.8945
Iteration: 218; Percent done: 5.5%; Mean loss: 3.9508
Iteration: 219; Percent done: 5.5%; Mean loss: 3.7969
Iteration: 220; Percent done: 5.5%; Mean loss: 3.8815
Iteration: 221; Percent done: 5.5%; Mean loss: 3.8415
Iteration: 222; Percent done: 5.5%; Mean loss: 4.0532
Iteration: 223; Percent done: 5.6%; Mean loss: 4.1165
Iteration: 224; Percent done: 5.6%; Mean loss: 4.1970
Iteration: 225; Percent done: 5.6%; Mean loss: 4.0703
Iteration: 226; Percent done: 5.7%; Mean loss: 4.1107
Iteration: 227; Percent done: 5.7%; Mean loss: 3.7836
Iteration: 228; Percent done: 5.7%; Mean loss: 4.0613
```

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Iteration: 229; Percent done: 5.7%; Mean loss: 4.0625
Iteration: 230; Percent done: 5.8%; Mean loss: 4.0162
Iteration: 231; Percent done: 5.8%; Mean loss: 4.1616
Iteration: 232; Percent done: 5.8%; Mean loss: 4.0755
Iteration: 233; Percent done: 5.8%; Mean loss: 4.1402
Iteration: 234; Percent done: 5.9%; Mean loss: 3.8788
Iteration: 235; Percent done: 5.9%; Mean loss: 4.1966
Iteration: 236; Percent done: 5.9%; Mean loss: 4.2234
Iteration: 237; Percent done: 5.9%; Mean loss: 4.0040
Iteration: 238; Percent done: 5.9%; Mean loss: 4.1663
Iteration: 239; Percent done: 6.0%; Mean loss: 3.8560
Iteration: 240; Percent done: 6.0%; Mean loss: 4.1712
Iteration: 241; Percent done: 6.0%; Mean loss: 3.9601
Iteration: 242; Percent done: 6.0%; Mean loss: 3.9526
Iteration: 243; Percent done: 6.1%; Mean loss: 4.1660
Iteration: 244; Percent done: 6.1%; Mean loss: 4.0131
Iteration: 245; Percent done: 6.1%; Mean loss: 3.9604
Iteration: 246; Percent done: 6.2%; Mean loss: 3.7639
Iteration: 247; Percent done: 6.2%; Mean loss: 3.9635
Iteration: 248; Percent done: 6.2%; Mean loss: 3.7591
Iteration: 249; Percent done: 6.2%; Mean loss: 4.1723
Iteration: 250; Percent done: 6.2%; Mean loss: 3.7345
Iteration: 251; Percent done: 6.3%; Mean loss: 3.9502
Iteration: 252; Percent done: 6.3%; Mean loss: 3.9755
Iteration: 253; Percent done: 6.3%; Mean loss: 3.9050
Iteration: 254; Percent done: 6.3%; Mean loss: 3.9808
Iteration: 255; Percent done: 6.4%; Mean loss: 3.8810
Iteration: 256; Percent done: 6.4%; Mean loss: 4.0872
Iteration: 257; Percent done: 6.4%; Mean loss: 4.2145
Iteration: 258; Percent done: 6.5%; Mean loss: 3.8089
Iteration: 259; Percent done: 6.5%; Mean loss: 3.7720
Iteration: 260; Percent done: 6.5%; Mean loss: 3.9955
Iteration: 261; Percent done: 6.5%; Mean loss: 3.7672
Iteration: 262; Percent done: 6.6%; Mean loss: 3.9895
Iteration: 263; Percent done: 6.6%; Mean loss: 4.0982
Iteration: 264; Percent done: 6.6%; Mean loss: 3.9345
Iteration: 265; Percent done: 6.6%; Mean loss: 3.5046
Iteration: 266; Percent done: 6.7%; Mean loss: 3.7313
Iteration: 267; Percent done: 6.7%; Mean loss: 4.2685
Iteration: 268; Percent done: 6.7%; Mean loss: 3.8525
Iteration: 269; Percent done: 6.7%; Mean loss: 4.1154
Iteration: 270; Percent done: 6.8%; Mean loss: 3.8595
Iteration: 271; Percent done: 6.8%; Mean loss: 3.9527
Iteration: 272; Percent done: 6.8%; Mean loss: 4.0010
Iteration: 273; Percent done: 6.8%; Mean loss: 4.0335
Iteration: 274; Percent done: 6.9%; Mean loss: 3.9662
Iteration: 275; Percent done: 6.9%; Mean loss: 3.9554
Iteration: 276; Percent done: 6.9%; Mean loss: 3.9086
Iteration: 277; Percent done: 6.9%; Mean loss: 4.3026
Iteration: 278; Percent done: 7.0%; Mean loss: 4.0831
Iteration: 279; Percent done: 7.0%; Mean loss: 3.9587
Iteration: 280; Percent done: 7.0%; Mean loss: 4.2253
Iteration: 281; Percent done: 7.0%; Mean loss: 3.6515
Iteration: 282; Percent done: 7.0%; Mean loss: 4.0284
Iteration: 283; Percent done: 7.1%; Mean loss: 4.2201
Iteration: 284; Percent done: 7.1%; Mean loss: 3.8724
Iteration: 285; Percent done: 7.1%; Mean loss: 3.8735
Iteration: 286; Percent done: 7.1%; Mean loss: 3.8709
```

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Iteration: 287; Percent done: 7.2%; Mean loss: 4.0258
Iteration: 288; Percent done: 7.2%; Mean loss: 4.1207
Iteration: 289; Percent done: 7.2%; Mean loss: 4.0989
Iteration: 290; Percent done: 7.2%; Mean loss: 3.7391
Iteration: 291; Percent done: 7.3%; Mean loss: 3.5326
Iteration: 292; Percent done: 7.3%; Mean loss: 3.8391
Iteration: 293; Percent done: 7.3%; Mean loss: 3.9486
Iteration: 294; Percent done: 7.3%; Mean loss: 3.7456
Iteration: 295; Percent done: 7.4%; Mean loss: 3.7543
Iteration: 296; Percent done: 7.4%; Mean loss: 3.9217
Iteration: 297; Percent done: 7.4%; Mean loss: 3.8914
Iteration: 298; Percent done: 7.4%; Mean loss: 3.8747
Iteration: 299; Percent done: 7.5%; Mean loss: 3.9830
Iteration: 300; Percent done: 7.5%; Mean loss: 3.8218
Iteration: 301; Percent done: 7.5%; Mean loss: 3.9387
Iteration: 302; Percent done: 7.5%; Mean loss: 3.7249
Iteration: 303; Percent done: 7.6%; Mean loss: 3.8133
Iteration: 304; Percent done: 7.6%; Mean loss: 4.0822
Iteration: 305; Percent done: 7.6%; Mean loss: 3.9343
Iteration: 306; Percent done: 7.6%; Mean loss: 3.6265
Iteration: 307; Percent done: 7.7%; Mean loss: 3.7680
Iteration: 308; Percent done: 7.7%; Mean loss: 3.9426
Iteration: 309; Percent done: 7.7%; Mean loss: 3.6185
Iteration: 310; Percent done: 7.8%; Mean loss: 3.7309
Iteration: 311; Percent done: 7.8%; Mean loss: 3.7269
Iteration: 312; Percent done: 7.8%; Mean loss: 3.8294
Iteration: 313; Percent done: 7.8%; Mean loss: 3.8810
Iteration: 314; Percent done: 7.8%; Mean loss: 3.9808
Iteration: 315; Percent done: 7.9%; Mean loss: 3.9754
Iteration: 316; Percent done: 7.9%; Mean loss: 3.9736
Iteration: 317; Percent done: 7.9%; Mean loss: 3.8128
Iteration: 318; Percent done: 8.0%; Mean loss: 3.7480
Iteration: 319; Percent done: 8.0%; Mean loss: 3.9356
Iteration: 320; Percent done: 8.0%; Mean loss: 3.7620
Iteration: 321; Percent done: 8.0%; Mean loss: 3.8935
Iteration: 322; Percent done: 8.1%; Mean loss: 3.9673
Iteration: 323; Percent done: 8.1%; Mean loss: 3.7336
Iteration: 324; Percent done: 8.1%; Mean loss: 4.1732
Iteration: 325; Percent done: 8.1%; Mean loss: 4.0497
Iteration: 326; Percent done: 8.2%; Mean loss: 3.9192
Iteration: 327; Percent done: 8.2%; Mean loss: 3.9187
Iteration: 328; Percent done: 8.2%; Mean loss: 3.9155
Iteration: 329; Percent done: 8.2%; Mean loss: 3.9168
Iteration: 330; Percent done: 8.2%; Mean loss: 3.7888
Iteration: 331; Percent done: 8.3%; Mean loss: 3.9597
Iteration: 332; Percent done: 8.3%; Mean loss: 4.2119
Iteration: 333; Percent done: 8.3%; Mean loss: 4.1368
Iteration: 334; Percent done: 8.3%; Mean loss: 3.9325
Iteration: 335; Percent done: 8.4%; Mean loss: 3.8207
Iteration: 336; Percent done: 8.4%; Mean loss: 4.0235
Iteration: 337; Percent done: 8.4%; Mean loss: 3.8325
Iteration: 338; Percent done: 8.5%; Mean loss: 3.6836
Iteration: 339; Percent done: 8.5%; Mean loss: 3.7742
Iteration: 340; Percent done: 8.5%; Mean loss: 4.0457
Iteration: 341; Percent done: 8.5%; Mean loss: 4.0651
Iteration: 342; Percent done: 8.6%; Mean loss: 3.8359
Iteration: 343; Percent done: 8.6%; Mean loss: 4.1164
Iteration: 344; Percent done: 8.6%; Mean loss: 4.0475
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Iteration: 345; Percent done: 8.6%; Mean loss: 3.9010
Iteration: 346; Percent done: 8.6%; Mean loss: 3.8326
Iteration: 347; Percent done: 8.7%; Mean loss: 3.6905
Iteration: 348; Percent done: 8.7%; Mean loss: 3.7054
Iteration: 349; Percent done: 8.7%; Mean loss: 3.7454
Iteration: 350; Percent done: 8.8%; Mean loss: 3.8978
Iteration: 351; Percent done: 8.8%; Mean loss: 3.9342
Iteration: 352; Percent done: 8.8%; Mean loss: 3.8337
Iteration: 353; Percent done: 8.8%; Mean loss: 3.8641
Iteration: 354; Percent done: 8.8%; Mean loss: 3.6257
Iteration: 355; Percent done: 8.9%; Mean loss: 4.0362
Iteration: 356; Percent done: 8.9%; Mean loss: 3.9031
Iteration: 357; Percent done: 8.9%; Mean loss: 4.0716
Iteration: 358; Percent done: 8.9%; Mean loss: 4.1073
Iteration: 359; Percent done: 9.0%; Mean loss: 3.6994
Iteration: 360; Percent done: 9.0%; Mean loss: 3.5365
Iteration: 361; Percent done: 9.0%; Mean loss: 4.0334
Iteration: 362; Percent done: 9.0%; Mean loss: 4.0241
Iteration: 363; Percent done: 9.1%; Mean loss: 3.7659
Iteration: 364; Percent done: 9.1%; Mean loss: 3.7592
Iteration: 365; Percent done: 9.1%; Mean loss: 3.6308
Iteration: 366; Percent done: 9.2%; Mean loss: 3.8539
Iteration: 367; Percent done: 9.2%; Mean loss: 3.9624
Iteration: 368; Percent done: 9.2%; Mean loss: 4.1029
Iteration: 369; Percent done: 9.2%; Mean loss: 3.6273
Iteration: 370; Percent done: 9.2%; Mean loss: 4.0394
Iteration: 371; Percent done: 9.3%; Mean loss: 3.8379
Iteration: 372; Percent done: 9.3%; Mean loss: 3.8287
Iteration: 373; Percent done: 9.3%; Mean loss: 3.8664
Iteration: 374; Percent done: 9.3%; Mean loss: 3.6965
Iteration: 375; Percent done: 9.4%; Mean loss: 3.7863
Iteration: 376; Percent done: 9.4%; Mean loss: 3.8968
Iteration: 377; Percent done: 9.4%; Mean loss: 3.6687
Iteration: 378; Percent done: 9.4%; Mean loss: 3.6111
Iteration: 379; Percent done: 9.5%; Mean loss: 3.9934
Iteration: 380; Percent done: 9.5%; Mean loss: 3.6697
Iteration: 381; Percent done: 9.5%; Mean loss: 3.9784
Iteration: 382; Percent done: 9.6%; Mean loss: 4.1721
Iteration: 383; Percent done: 9.6%; Mean loss: 3.8224
Iteration: 384; Percent done: 9.6%; Mean loss: 3.6863
Iteration: 385; Percent done: 9.6%; Mean loss: 4.0469
Iteration: 386; Percent done: 9.7%; Mean loss: 3.8796
Iteration: 387; Percent done: 9.7%; Mean loss: 3.7375
Iteration: 388; Percent done: 9.7%; Mean loss: 4.0209
Iteration: 389; Percent done: 9.7%; Mean loss: 4.0123
Iteration: 390; Percent done: 9.8%; Mean loss: 3.6797
Iteration: 391; Percent done: 9.8%; Mean loss: 3.9099
Iteration: 392; Percent done: 9.8%; Mean loss: 3.8030
Iteration: 393; Percent done: 9.8%; Mean loss: 3.8762
Iteration: 394; Percent done: 9.8%; Mean loss: 3.8839
Iteration: 395; Percent done: 9.9%; Mean loss: 3.8451
Iteration: 396; Percent done: 9.9%; Mean loss: 3.6521
Iteration: 397; Percent done: 9.9%; Mean loss: 3.5569
Iteration: 398; Percent done: 10.0%; Mean loss: 3.7683
Iteration: 399; Percent done: 10.0%; Mean loss: 3.5782
Iteration: 400; Percent done: 10.0%; Mean loss: 3.6484
Iteration: 401; Percent done: 10.0%; Mean loss: 3.8872
Iteration: 402; Percent done: 10.1%; Mean loss: 3.7969
Iteration: 403; Percent done: 10.1%; Mean loss: 3.8056
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Iteration: 403; Percent done: 10.1%; Mean loss: 3.8058
Iteration: 404; Percent done: 10.1%; Mean loss: 3.9259
Iteration: 405; Percent done: 10.1%; Mean loss: 3.5966
Iteration: 406; Percent done: 10.2%; Mean loss: 4.0969
Iteration: 407; Percent done: 10.2%; Mean loss: 3.6875
Iteration: 408; Percent done: 10.2%; Mean loss: 3.9354
Iteration: 409; Percent done: 10.2%; Mean loss: 3.6399
Iteration: 410; Percent done: 10.2%; Mean loss: 3.9453
Iteration: 411; Percent done: 10.3%; Mean loss: 3.5313
Iteration: 412; Percent done: 10.3%; Mean loss: 3.8182
Iteration: 413; Percent done: 10.3%; Mean loss: 3.6825
Iteration: 414; Percent done: 10.3%; Mean loss: 3.7574
Iteration: 415; Percent done: 10.4%; Mean loss: 4.0673
Iteration: 416; Percent done: 10.4%; Mean loss: 4.0524
Iteration: 417; Percent done: 10.4%; Mean loss: 3.8578
Iteration: 418; Percent done: 10.4%; Mean loss: 3.6675
Iteration: 419; Percent done: 10.5%; Mean loss: 3.8015
Iteration: 420; Percent done: 10.5%; Mean loss: 3.9992
Iteration: 421; Percent done: 10.5%; Mean loss: 3.8474
Iteration: 422; Percent done: 10.5%; Mean loss: 3.7870
Iteration: 423; Percent done: 10.6%; Mean loss: 3.9279
Iteration: 424; Percent done: 10.6%; Mean loss: 3.7185
Iteration: 425; Percent done: 10.6%; Mean loss: 4.0894
Iteration: 426; Percent done: 10.7%; Mean loss: 4.0059
Iteration: 427; Percent done: 10.7%; Mean loss: 3.7912
Iteration: 428; Percent done: 10.7%; Mean loss: 3.7973
Iteration: 429; Percent done: 10.7%; Mean loss: 3.9774
Iteration: 430; Percent done: 10.8%; Mean loss: 3.6935
Iteration: 431; Percent done: 10.8%; Mean loss: 3.7559
Iteration: 432; Percent done: 10.8%; Mean loss: 3.8232
Iteration: 433; Percent done: 10.8%; Mean loss: 3.5374
Iteration: 434; Percent done: 10.8%; Mean loss: 3.9400
Iteration: 435; Percent done: 10.9%; Mean loss: 3.9438
Iteration: 436; Percent done: 10.9%; Mean loss: 3.5179
Iteration: 437; Percent done: 10.9%; Mean loss: 3.6189
Iteration: 438; Percent done: 10.9%; Mean loss: 3.9637
Iteration: 439; Percent done: 11.0%; Mean loss: 3.7364
Iteration: 440; Percent done: 11.0%; Mean loss: 3.5457
Iteration: 441; Percent done: 11.0%; Mean loss: 3.9009
Iteration: 442; Percent done: 11.1%; Mean loss: 3.9815
Iteration: 443; Percent done: 11.1%; Mean loss: 3.8848
Iteration: 444; Percent done: 11.1%; Mean loss: 4.2051
Iteration: 445; Percent done: 11.1%; Mean loss: 3.5478
Iteration: 446; Percent done: 11.2%; Mean loss: 3.6128
Iteration: 447; Percent done: 11.2%; Mean loss: 3.6932
Iteration: 448; Percent done: 11.2%; Mean loss: 3.6746
Iteration: 449; Percent done: 11.2%; Mean loss: 3.5565
Iteration: 450; Percent done: 11.2%; Mean loss: 3.6534
Iteration: 451; Percent done: 11.3%; Mean loss: 3.6692
Iteration: 452; Percent done: 11.3%; Mean loss: 3.8469
Iteration: 453; Percent done: 11.3%; Mean loss: 3.8279
Iteration: 454; Percent done: 11.3%; Mean loss: 3.8533
Iteration: 455; Percent done: 11.4%; Mean loss: 3.6978
Iteration: 456; Percent done: 11.4%; Mean loss: 3.7484
Iteration: 457; Percent done: 11.4%; Mean loss: 3.7004
Iteration: 458; Percent done: 11.5%; Mean loss: 3.8521
Iteration: 459; Percent done: 11.5%; Mean loss: 3.9485
Iteration: 460; Percent done: 11.5%; Mean loss: 3.8999
Iteration: 461; Percent done: 11.5%; Mean loss: 3.7163
```

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Iteration: 461; Percent done: 11.5%; Mean loss: 3.7103
Iteration: 462; Percent done: 11.6%; Mean loss: 3.8845
Iteration: 463; Percent done: 11.6%; Mean loss: 3.8284
Iteration: 464; Percent done: 11.6%; Mean loss: 3.8336
Iteration: 465; Percent done: 11.6%; Mean loss: 3.6761
Iteration: 466; Percent done: 11.7%; Mean loss: 3.8108
Iteration: 467; Percent done: 11.7%; Mean loss: 3.4691
Iteration: 468; Percent done: 11.7%; Mean loss: 3.6905
Iteration: 469; Percent done: 11.7%; Mean loss: 3.5863
Iteration: 470; Percent done: 11.8%; Mean loss: 3.5320
Iteration: 471; Percent done: 11.8%; Mean loss: 3.7384
Iteration: 472; Percent done: 11.8%; Mean loss: 3.6064
Iteration: 473; Percent done: 11.8%; Mean loss: 3.8836
Iteration: 474; Percent done: 11.8%; Mean loss: 3.8170
Iteration: 475; Percent done: 11.9%; Mean loss: 3.6994
Iteration: 476; Percent done: 11.9%; Mean loss: 3.8503
Iteration: 477; Percent done: 11.9%; Mean loss: 3.4631
Iteration: 478; Percent done: 11.9%; Mean loss: 3.8050
Iteration: 479; Percent done: 12.0%; Mean loss: 3.5723
Iteration: 480; Percent done: 12.0%; Mean loss: 3.7940
Iteration: 481; Percent done: 12.0%; Mean loss: 3.7656
Iteration: 482; Percent done: 12.0%; Mean loss: 3.5813
Iteration: 483; Percent done: 12.1%; Mean loss: 3.6685
Iteration: 484; Percent done: 12.1%; Mean loss: 3.8291
Iteration: 485; Percent done: 12.1%; Mean loss: 3.6747
Iteration: 486; Percent done: 12.2%; Mean loss: 3.9165
Iteration: 487; Percent done: 12.2%; Mean loss: 3.7222
Iteration: 488; Percent done: 12.2%; Mean loss: 3.8675
Iteration: 489; Percent done: 12.2%; Mean loss: 3.8782
Iteration: 490; Percent done: 12.2%; Mean loss: 3.8344
Iteration: 491; Percent done: 12.3%; Mean loss: 3.8513
Iteration: 492; Percent done: 12.3%; Mean loss: 3.6799
Iteration: 493; Percent done: 12.3%; Mean loss: 3.8198
Iteration: 494; Percent done: 12.3%; Mean loss: 3.7390
Iteration: 495; Percent done: 12.4%; Mean loss: 3.6048
Iteration: 496; Percent done: 12.4%; Mean loss: 3.7542
Iteration: 497; Percent done: 12.4%; Mean loss: 3.8692
Iteration: 498; Percent done: 12.4%; Mean loss: 3.5827
Iteration: 499; Percent done: 12.5%; Mean loss: 3.6677
Iteration: 500; Percent done: 12.5%; Mean loss: 3.9315
Iteration: 501; Percent done: 12.5%; Mean loss: 3.6286
Iteration: 502; Percent done: 12.6%; Mean loss: 3.6168
Iteration: 503; Percent done: 12.6%; Mean loss: 3.7709
Iteration: 504; Percent done: 12.6%; Mean loss: 3.7376
Iteration: 505; Percent done: 12.6%; Mean loss: 3.7313
Iteration: 506; Percent done: 12.7%; Mean loss: 3.6163
Iteration: 507; Percent done: 12.7%; Mean loss: 3.8688
Iteration: 508; Percent done: 12.7%; Mean loss: 3.7376
Iteration: 509; Percent done: 12.7%; Mean loss: 3.6873
Iteration: 510; Percent done: 12.8%; Mean loss: 3.9562
Iteration: 511; Percent done: 12.8%; Mean loss: 3.5601
Iteration: 512; Percent done: 12.8%; Mean loss: 3.8212
Iteration: 513; Percent done: 12.8%; Mean loss: 3.7005
Iteration: 514; Percent done: 12.8%; Mean loss: 3.6816
Iteration: 515; Percent done: 12.9%; Mean loss: 3.6659
Iteration: 516; Percent done: 12.9%; Mean loss: 3.8651
Iteration: 517; Percent done: 12.9%; Mean loss: 3.7142
Iteration: 518; Percent done: 13.0%; Mean loss: 3.7151
Iteration: 519; Percent done: 13.0%; Mean loss: 3.6591
```

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Iteration: 519; Percent done: 13.0%; Mean loss: 3.0591
Iteration: 520; Percent done: 13.0%; Mean loss: 3.7799
Iteration: 521; Percent done: 13.0%; Mean loss: 4.0083
Iteration: 522; Percent done: 13.1%; Mean loss: 3.8005
Iteration: 523; Percent done: 13.1%; Mean loss: 3.7018
Iteration: 524; Percent done: 13.1%; Mean loss: 3.9162
Iteration: 525; Percent done: 13.1%; Mean loss: 3.7183
Iteration: 526; Percent done: 13.2%; Mean loss: 3.7320
Iteration: 527; Percent done: 13.2%; Mean loss: 3.6448
Iteration: 528; Percent done: 13.2%; Mean loss: 3.8446
Iteration: 529; Percent done: 13.2%; Mean loss: 3.4055
Iteration: 530; Percent done: 13.2%; Mean loss: 3.6111
Iteration: 531; Percent done: 13.3%; Mean loss: 3.6622
Iteration: 532; Percent done: 13.3%; Mean loss: 3.8012
Iteration: 533; Percent done: 13.3%; Mean loss: 3.6352
Iteration: 534; Percent done: 13.4%; Mean loss: 3.6265
Iteration: 535; Percent done: 13.4%; Mean loss: 3.6819
Iteration: 536; Percent done: 13.4%; Mean loss: 3.7942
Iteration: 537; Percent done: 13.4%; Mean loss: 3.6413
Iteration: 538; Percent done: 13.5%; Mean loss: 3.9617
Iteration: 539; Percent done: 13.5%; Mean loss: 3.6538
Iteration: 540; Percent done: 13.5%; Mean loss: 3.6036
Iteration: 541; Percent done: 13.5%; Mean loss: 3.5888
Iteration: 542; Percent done: 13.6%; Mean loss: 3.6976
Iteration: 543; Percent done: 13.6%; Mean loss: 3.6347
Iteration: 544; Percent done: 13.6%; Mean loss: 3.9058
Iteration: 545; Percent done: 13.6%; Mean loss: 3.6277
Iteration: 546; Percent done: 13.7%; Mean loss: 3.5479
Iteration: 547; Percent done: 13.7%; Mean loss: 4.1700
Iteration: 548; Percent done: 13.7%; Mean loss: 3.6636
Iteration: 549; Percent done: 13.7%; Mean loss: 3.9026
Iteration: 550; Percent done: 13.8%; Mean loss: 3.6197
Iteration: 551; Percent done: 13.8%; Mean loss: 3.7943
Iteration: 552; Percent done: 13.8%; Mean loss: 3.7328
Iteration: 553; Percent done: 13.8%; Mean loss: 3.4776
Iteration: 554; Percent done: 13.9%; Mean loss: 3.7157
Iteration: 555; Percent done: 13.9%; Mean loss: 3.9049
Iteration: 556; Percent done: 13.9%; Mean loss: 3.7166
Iteration: 557; Percent done: 13.9%; Mean loss: 3.6482
Iteration: 558; Percent done: 14.0%; Mean loss: 3.8097
Iteration: 559; Percent done: 14.0%; Mean loss: 3.6763
Iteration: 560; Percent done: 14.0%; Mean loss: 3.5962
Iteration: 561; Percent done: 14.0%; Mean loss: 3.5996
Iteration: 562; Percent done: 14.1%; Mean loss: 3.6083
Iteration: 563; Percent done: 14.1%; Mean loss: 3.5651
Iteration: 564; Percent done: 14.1%; Mean loss: 3.6983
Iteration: 565; Percent done: 14.1%; Mean loss: 3.8580
Iteration: 566; Percent done: 14.1%; Mean loss: 3.6233
Iteration: 567; Percent done: 14.2%; Mean loss: 3.7780
Iteration: 568; Percent done: 14.2%; Mean loss: 3.9635
Iteration: 569; Percent done: 14.2%; Mean loss: 3.6043
Iteration: 570; Percent done: 14.2%; Mean loss: 3.5696
Iteration: 571; Percent done: 14.3%; Mean loss: 3.5032
Iteration: 572; Percent done: 14.3%; Mean loss: 3.5489
Iteration: 573; Percent done: 14.3%; Mean loss: 3.5475
Iteration: 574; Percent done: 14.3%; Mean loss: 3.6855
Iteration: 575; Percent done: 14.4%; Mean loss: 3.4944
Iteration: 576; Percent done: 14.4%; Mean loss: 3.5490
Iteration: 577; Percent done: 14.4%; Mean loss: 3.6671
```

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Iteration: 578; Percent done: 14.4%; Mean loss: 3.5596
Iteration: 579; Percent done: 14.5%; Mean loss: 3.7434
Iteration: 580; Percent done: 14.5%; Mean loss: 3.7963
Iteration: 581; Percent done: 14.5%; Mean loss: 3.6604
Iteration: 582; Percent done: 14.5%; Mean loss: 3.6050
Iteration: 583; Percent done: 14.6%; Mean loss: 3.4988
Iteration: 584; Percent done: 14.6%; Mean loss: 3.6785
Iteration: 585; Percent done: 14.6%; Mean loss: 3.7236
Iteration: 586; Percent done: 14.6%; Mean loss: 3.6618
Iteration: 587; Percent done: 14.7%; Mean loss: 3.4759
Iteration: 588; Percent done: 14.7%; Mean loss: 3.7808
Iteration: 589; Percent done: 14.7%; Mean loss: 3.6359
Iteration: 590; Percent done: 14.8%; Mean loss: 3.5844
Iteration: 591; Percent done: 14.8%; Mean loss: 3.7016
Iteration: 592; Percent done: 14.8%; Mean loss: 3.3504
Iteration: 593; Percent done: 14.8%; Mean loss: 3.4692
Iteration: 594; Percent done: 14.8%; Mean loss: 3.4350
Iteration: 595; Percent done: 14.9%; Mean loss: 3.4928
Iteration: 596; Percent done: 14.9%; Mean loss: 3.4483
Iteration: 597; Percent done: 14.9%; Mean loss: 3.7204
Iteration: 598; Percent done: 14.9%; Mean loss: 3.8093
Iteration: 599; Percent done: 15.0%; Mean loss: 3.6364
Iteration: 600; Percent done: 15.0%; Mean loss: 3.4843
Iteration: 601; Percent done: 15.0%; Mean loss: 3.7147
Iteration: 602; Percent done: 15.0%; Mean loss: 3.6687
Iteration: 603; Percent done: 15.1%; Mean loss: 3.7312
Iteration: 604; Percent done: 15.1%; Mean loss: 3.7212
Iteration: 605; Percent done: 15.1%; Mean loss: 3.5309
Iteration: 606; Percent done: 15.2%; Mean loss: 3.6084
Iteration: 607; Percent done: 15.2%; Mean loss: 3.6836
Iteration: 608; Percent done: 15.2%; Mean loss: 3.6712
Iteration: 609; Percent done: 15.2%; Mean loss: 3.5892
Iteration: 610; Percent done: 15.2%; Mean loss: 3.5464
Iteration: 611; Percent done: 15.3%; Mean loss: 3.7712
Iteration: 612; Percent done: 15.3%; Mean loss: 3.6051
Iteration: 613; Percent done: 15.3%; Mean loss: 3.7116
Iteration: 614; Percent done: 15.3%; Mean loss: 3.5855
Iteration: 615; Percent done: 15.4%; Mean loss: 3.6490
Iteration: 616; Percent done: 15.4%; Mean loss: 3.4761
Iteration: 617; Percent done: 15.4%; Mean loss: 3.7608
Iteration: 618; Percent done: 15.4%; Mean loss: 3.7044
Iteration: 619; Percent done: 15.5%; Mean loss: 3.6973
Iteration: 620; Percent done: 15.5%; Mean loss: 3.6199
Iteration: 621; Percent done: 15.5%; Mean loss: 3.9717
Iteration: 622; Percent done: 15.6%; Mean loss: 3.6698
Iteration: 623; Percent done: 15.6%; Mean loss: 3.6058
Iteration: 624; Percent done: 15.6%; Mean loss: 3.6373
Iteration: 625; Percent done: 15.6%; Mean loss: 3.4503
Iteration: 626; Percent done: 15.7%; Mean loss: 3.6091
Iteration: 627; Percent done: 15.7%; Mean loss: 3.7170
Iteration: 628; Percent done: 15.7%; Mean loss: 3.4678
Iteration: 629; Percent done: 15.7%; Mean loss: 3.4655
Iteration: 630; Percent done: 15.8%; Mean loss: 3.4431
Iteration: 631; Percent done: 15.8%; Mean loss: 3.9361
Iteration: 632; Percent done: 15.8%; Mean loss: 3.7163
Iteration: 633; Percent done: 15.8%; Mean loss: 3.8461
Iteration: 634; Percent done: 15.8%; Mean loss: 3.6853
Iteration: 635; Percent done: 15.9%; Mean loss: 3.5073
```

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Iteration: 636; Percent done: 15.9%; Mean loss: 3.8631
Iteration: 637; Percent done: 15.9%; Mean loss: 3.5635
Iteration: 638; Percent done: 16.0%; Mean loss: 3.6276
Iteration: 639; Percent done: 16.0%; Mean loss: 3.7438
Iteration: 640; Percent done: 16.0%; Mean loss: 3.4815
Iteration: 641; Percent done: 16.0%; Mean loss: 3.7351
Iteration: 642; Percent done: 16.1%; Mean loss: 3.6283
Iteration: 643; Percent done: 16.1%; Mean loss: 3.6245
Iteration: 644; Percent done: 16.1%; Mean loss: 3.6987
Iteration: 645; Percent done: 16.1%; Mean loss: 3.4031
Iteration: 646; Percent done: 16.2%; Mean loss: 3.7169
Iteration: 647; Percent done: 16.2%; Mean loss: 3.7217
Iteration: 648; Percent done: 16.2%; Mean loss: 3.8601
Iteration: 649; Percent done: 16.2%; Mean loss: 3.9022
Iteration: 650; Percent done: 16.2%; Mean loss: 3.3142
Iteration: 651; Percent done: 16.3%; Mean loss: 3.3592
Iteration: 652; Percent done: 16.3%; Mean loss: 3.8227
Iteration: 653; Percent done: 16.3%; Mean loss: 3.7752
Iteration: 654; Percent done: 16.4%; Mean loss: 3.4455
Iteration: 655; Percent done: 16.4%; Mean loss: 3.6350
Iteration: 656; Percent done: 16.4%; Mean loss: 3.6714
Iteration: 657; Percent done: 16.4%; Mean loss: 3.7967
Iteration: 658; Percent done: 16.4%; Mean loss: 3.8217
Iteration: 659; Percent done: 16.5%; Mean loss: 3.8143
Iteration: 660; Percent done: 16.5%; Mean loss: 3.7756
Iteration: 661; Percent done: 16.5%; Mean loss: 3.4865
Iteration: 662; Percent done: 16.6%; Mean loss: 3.5299
Iteration: 663; Percent done: 16.6%; Mean loss: 3.7127
Iteration: 664; Percent done: 16.6%; Mean loss: 3.3847
Iteration: 665; Percent done: 16.6%; Mean loss: 3.8047
Iteration: 666; Percent done: 16.7%; Mean loss: 3.6217
Iteration: 667; Percent done: 16.7%; Mean loss: 3.4490
Iteration: 668; Percent done: 16.7%; Mean loss: 3.6810
Iteration: 669; Percent done: 16.7%; Mean loss: 3.8385
Iteration: 670; Percent done: 16.8%; Mean loss: 3.9333
Iteration: 671; Percent done: 16.8%; Mean loss: 3.4392
Iteration: 672; Percent done: 16.8%; Mean loss: 3.5012
Iteration: 673; Percent done: 16.8%; Mean loss: 3.6458
Iteration: 674; Percent done: 16.9%; Mean loss: 3.8723
Iteration: 675; Percent done: 16.9%; Mean loss: 3.4236
Iteration: 676; Percent done: 16.9%; Mean loss: 3.6389
Iteration: 677; Percent done: 16.9%; Mean loss: 3.6187
Iteration: 678; Percent done: 17.0%; Mean loss: 3.2253
Iteration: 679; Percent done: 17.0%; Mean loss: 3.6042
Iteration: 680; Percent done: 17.0%; Mean loss: 3.8525
Iteration: 681; Percent done: 17.0%; Mean loss: 3.8559
Iteration: 682; Percent done: 17.1%; Mean loss: 3.6258
Iteration: 683; Percent done: 17.1%; Mean loss: 3.4908
Iteration: 684; Percent done: 17.1%; Mean loss: 3.4280
Iteration: 685; Percent done: 17.1%; Mean loss: 3.6004
Iteration: 686; Percent done: 17.2%; Mean loss: 3.3866
Iteration: 687; Percent done: 17.2%; Mean loss: 3.4003
Iteration: 688; Percent done: 17.2%; Mean loss: 3.8007
Iteration: 689; Percent done: 17.2%; Mean loss: 3.5351
Iteration: 690; Percent done: 17.2%; Mean loss: 3.5374
Iteration: 691; Percent done: 17.3%; Mean loss: 3.3139
Iteration: 692; Percent done: 17.3%; Mean loss: 3.7703
Iteration: 693; Percent done: 17.3%; Mean loss: 3.7179
```

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Iteration: 694; Percent done: 17.3%; Mean loss: 3.7317
Iteration: 695; Percent done: 17.4%; Mean loss: 3.6781
Iteration: 696; Percent done: 17.4%; Mean loss: 3.8323
Iteration: 697; Percent done: 17.4%; Mean loss: 3.5766
Iteration: 698; Percent done: 17.4%; Mean loss: 3.4832
Iteration: 699; Percent done: 17.5%; Mean loss: 3.7297
Iteration: 700; Percent done: 17.5%; Mean loss: 3.4939
Iteration: 701; Percent done: 17.5%; Mean loss: 3.5581
Iteration: 702; Percent done: 17.5%; Mean loss: 3.4541
Iteration: 703; Percent done: 17.6%; Mean loss: 3.7760
Iteration: 704; Percent done: 17.6%; Mean loss: 3.7117
Iteration: 705; Percent done: 17.6%; Mean loss: 3.4321
Iteration: 706; Percent done: 17.6%; Mean loss: 3.5402
Iteration: 707; Percent done: 17.7%; Mean loss: 3.7790
Iteration: 708; Percent done: 17.7%; Mean loss: 3.6285
Iteration: 709; Percent done: 17.7%; Mean loss: 3.5527
Iteration: 710; Percent done: 17.8%; Mean loss: 3.3204
Iteration: 711; Percent done: 17.8%; Mean loss: 3.5236
Iteration: 712; Percent done: 17.8%; Mean loss: 3.6698
Iteration: 713; Percent done: 17.8%; Mean loss: 3.5671
Iteration: 714; Percent done: 17.8%; Mean loss: 3.3363
Iteration: 715; Percent done: 17.9%; Mean loss: 3.6745
Iteration: 716; Percent done: 17.9%; Mean loss: 3.5460
Iteration: 717; Percent done: 17.9%; Mean loss: 3.7061
Iteration: 718; Percent done: 17.9%; Mean loss: 3.5619
Iteration: 719; Percent done: 18.0%; Mean loss: 3.7900
Iteration: 720; Percent done: 18.0%; Mean loss: 3.7855
Iteration: 721; Percent done: 18.0%; Mean loss: 3.5377
Iteration: 722; Percent done: 18.1%; Mean loss: 3.6492
Iteration: 723; Percent done: 18.1%; Mean loss: 3.2303
Iteration: 724; Percent done: 18.1%; Mean loss: 3.4497
Iteration: 725; Percent done: 18.1%; Mean loss: 3.5752
Iteration: 726; Percent done: 18.1%; Mean loss: 3.5038
Iteration: 727; Percent done: 18.2%; Mean loss: 3.4519
Iteration: 728; Percent done: 18.2%; Mean loss: 3.3893
Iteration: 729; Percent done: 18.2%; Mean loss: 3.5007
Iteration: 730; Percent done: 18.2%; Mean loss: 3.4738
Iteration: 731; Percent done: 18.3%; Mean loss: 3.6749
Iteration: 732; Percent done: 18.3%; Mean loss: 3.6271
Iteration: 733; Percent done: 18.3%; Mean loss: 3.5367
Iteration: 734; Percent done: 18.4%; Mean loss: 3.6034
Iteration: 735; Percent done: 18.4%; Mean loss: 3.4483
Iteration: 736; Percent done: 18.4%; Mean loss: 3.4399
Iteration: 737; Percent done: 18.4%; Mean loss: 3.5090
Iteration: 738; Percent done: 18.4%; Mean loss: 3.5867
Iteration: 739; Percent done: 18.5%; Mean loss: 3.3894
Iteration: 740; Percent done: 18.5%; Mean loss: 3.7376
Iteration: 741; Percent done: 18.5%; Mean loss: 3.7229
Iteration: 742; Percent done: 18.6%; Mean loss: 3.5696
Iteration: 743; Percent done: 18.6%; Mean loss: 3.7472
Iteration: 744; Percent done: 18.6%; Mean loss: 3.7201
Iteration: 745; Percent done: 18.6%; Mean loss: 3.7205
Iteration: 746; Percent done: 18.6%; Mean loss: 3.6589
Iteration: 747; Percent done: 18.7%; Mean loss: 3.6823
Iteration: 748; Percent done: 18.7%; Mean loss: 3.3645
Iteration: 749; Percent done: 18.7%; Mean loss: 3.3264
Iteration: 750; Percent done: 18.8%; Mean loss: 3.4611
Iteration: 751; Percent done: 18.8%; Mean loss: 3.6579
```

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Iteration: 752; Percent done: 18.8%; Mean loss: 3.5166
Iteration: 753; Percent done: 18.8%; Mean loss: 3.7998
Iteration: 754; Percent done: 18.9%; Mean loss: 3.5162
Iteration: 755; Percent done: 18.9%; Mean loss: 3.4059
Iteration: 756; Percent done: 18.9%; Mean loss: 3.5526
Iteration: 757; Percent done: 18.9%; Mean loss: 3.5286
Iteration: 758; Percent done: 18.9%; Mean loss: 3.5772
Iteration: 759; Percent done: 19.0%; Mean loss: 3.5685
Iteration: 760; Percent done: 19.0%; Mean loss: 3.9660
Iteration: 761; Percent done: 19.0%; Mean loss: 3.7053
Iteration: 762; Percent done: 19.1%; Mean loss: 3.5949
Iteration: 763; Percent done: 19.1%; Mean loss: 3.4098
Iteration: 764; Percent done: 19.1%; Mean loss: 3.5158
Iteration: 765; Percent done: 19.1%; Mean loss: 3.7817
Iteration: 766; Percent done: 19.1%; Mean loss: 3.3032
Iteration: 767; Percent done: 19.2%; Mean loss: 3.6255
Iteration: 768; Percent done: 19.2%; Mean loss: 3.7791
Iteration: 769; Percent done: 19.2%; Mean loss: 3.5570
Iteration: 770; Percent done: 19.2%; Mean loss: 3.3257
Iteration: 771; Percent done: 19.3%; Mean loss: 3.5963
Iteration: 772; Percent done: 19.3%; Mean loss: 3.9081
Iteration: 773; Percent done: 19.3%; Mean loss: 3.8292
Iteration: 774; Percent done: 19.4%; Mean loss: 3.4371
Iteration: 775; Percent done: 19.4%; Mean loss: 3.8556
Iteration: 776; Percent done: 19.4%; Mean loss: 3.6139
Iteration: 777; Percent done: 19.4%; Mean loss: 3.5929
Iteration: 778; Percent done: 19.4%; Mean loss: 3.6709
Iteration: 779; Percent done: 19.5%; Mean loss: 3.5746
Iteration: 780; Percent done: 19.5%; Mean loss: 3.9081
Iteration: 781; Percent done: 19.5%; Mean loss: 3.6948
Iteration: 782; Percent done: 19.6%; Mean loss: 3.3861
Iteration: 783; Percent done: 19.6%; Mean loss: 3.8054
Iteration: 784; Percent done: 19.6%; Mean loss: 3.8145
Iteration: 785; Percent done: 19.6%; Mean loss: 3.5419
Iteration: 786; Percent done: 19.7%; Mean loss: 3.6062
Iteration: 787; Percent done: 19.7%; Mean loss: 3.6224
Iteration: 788; Percent done: 19.7%; Mean loss: 3.3422
Iteration: 789; Percent done: 19.7%; Mean loss: 3.5997
Iteration: 790; Percent done: 19.8%; Mean loss: 3.5172
Iteration: 791; Percent done: 19.8%; Mean loss: 3.6491
Iteration: 792; Percent done: 19.8%; Mean loss: 3.6250
Iteration: 793; Percent done: 19.8%; Mean loss: 3.5749
Iteration: 794; Percent done: 19.9%; Mean loss: 3.4373
Iteration: 795; Percent done: 19.9%; Mean loss: 3.6384
Iteration: 796; Percent done: 19.9%; Mean loss: 3.6698
Iteration: 797; Percent done: 19.9%; Mean loss: 3.4297
Iteration: 798; Percent done: 20.0%; Mean loss: 3.6421
Iteration: 799; Percent done: 20.0%; Mean loss: 3.4209
Iteration: 800; Percent done: 20.0%; Mean loss: 3.5293
Iteration: 801; Percent done: 20.0%; Mean loss: 3.5621
Iteration: 802; Percent done: 20.1%; Mean loss: 3.7769
Iteration: 803; Percent done: 20.1%; Mean loss: 3.2688
Iteration: 804; Percent done: 20.1%; Mean loss: 3.6912
Iteration: 805; Percent done: 20.1%; Mean loss: 3.5728
Iteration: 806; Percent done: 20.2%; Mean loss: 3.5457
Iteration: 807; Percent done: 20.2%; Mean loss: 3.7087
Iteration: 808; Percent done: 20.2%; Mean loss: 3.4854
Iteration: 809; Percent done: 20.2%; Mean loss: 3.5542
```

```
Iteration: 810; Percent done: 20.2%; Mean loss: 3.3817
Iteration: 811; Percent done: 20.3%; Mean loss: 3.3552
Iteration: 812; Percent done: 20.3%; Mean loss: 3.4000
Iteration: 813; Percent done: 20.3%; Mean loss: 3.6590
Iteration: 814; Percent done: 20.3%; Mean loss: 3.4706
Iteration: 815; Percent done: 20.4%; Mean loss: 3.5353
Iteration: 816; Percent done: 20.4%; Mean loss: 3.4323
Iteration: 817; Percent done: 20.4%; Mean loss: 3.4391
Iteration: 818; Percent done: 20.4%; Mean loss: 3.4670
Iteration: 819; Percent done: 20.5%; Mean loss: 3.7222
Iteration: 820; Percent done: 20.5%; Mean loss: 3.6451
Iteration: 821; Percent done: 20.5%; Mean loss: 3.4427
Iteration: 822; Percent done: 20.5%; Mean loss: 3.7254
Iteration: 823; Percent done: 20.6%; Mean loss: 3.5994
Iteration: 824; Percent done: 20.6%; Mean loss: 3.6843
Iteration: 825; Percent done: 20.6%; Mean loss: 3.6821
Iteration: 826; Percent done: 20.6%; Mean loss: 3.6392
Iteration: 827; Percent done: 20.7%; Mean loss: 3.9047
Iteration: 828; Percent done: 20.7%; Mean loss: 3.5305
Iteration: 829; Percent done: 20.7%; Mean loss: 3.6837
Iteration: 830; Percent done: 20.8%; Mean loss: 3.8355
Iteration: 831; Percent done: 20.8%; Mean loss: 3.6165
Iteration: 832; Percent done: 20.8%; Mean loss: 3.2780
Iteration: 833; Percent done: 20.8%; Mean loss: 3.5117
Iteration: 834; Percent done: 20.8%; Mean loss: 3.5675
Iteration: 835; Percent done: 20.9%; Mean loss: 3.4860
Iteration: 836; Percent done: 20.9%; Mean loss: 3.6367
Iteration: 837; Percent done: 20.9%; Mean loss: 3.5376
Iteration: 838; Percent done: 20.9%; Mean loss: 3.5529
Iteration: 839; Percent done: 21.0%; Mean loss: 3.7127
Iteration: 840; Percent done: 21.0%; Mean loss: 3.4916
Iteration: 841; Percent done: 21.0%; Mean loss: 3.4445
Iteration: 842; Percent done: 21.1%; Mean loss: 3.6190
Iteration: 843; Percent done: 21.1%; Mean loss: 3.4757
Iteration: 844; Percent done: 21.1%; Mean loss: 3.4913
Iteration: 845; Percent done: 21.1%; Mean loss: 3.7081
Iteration: 846; Percent done: 21.1%; Mean loss: 3.6062
Iteration: 847; Percent done: 21.2%; Mean loss: 3.6374
Iteration: 848; Percent done: 21.2%; Mean loss: 3.5554
Iteration: 849; Percent done: 21.2%; Mean loss: 3.6903
Iteration: 850; Percent done: 21.2%; Mean loss: 3.7693
Iteration: 851; Percent done: 21.3%; Mean loss: 3.4718
Iteration: 852; Percent done: 21.3%; Mean loss: 3.4817
Iteration: 853; Percent done: 21.3%; Mean loss: 3.7128
Iteration: 854; Percent done: 21.3%; Mean loss: 3.6790
Iteration: 855; Percent done: 21.4%; Mean loss: 3.4555
Iteration: 856; Percent done: 21.4%; Mean loss: 3.5490
Iteration: 857; Percent done: 21.4%; Mean loss: 3.4208
Iteration: 858; Percent done: 21.4%; Mean loss: 3.2831
Iteration: 859; Percent done: 21.5%; Mean loss: 3.7808
Iteration: 860; Percent done: 21.5%; Mean loss: 3.3537
Iteration: 861; Percent done: 21.5%; Mean loss: 3.6129
Iteration: 862; Percent done: 21.6%; Mean loss: 3.5250
Iteration: 863; Percent done: 21.6%; Mean loss: 3.5722
Iteration: 864; Percent done: 21.6%; Mean loss: 3.2930
Iteration: 865; Percent done: 21.6%; Mean loss: 3.3048
Iteration: 866; Percent done: 21.6%; Mean loss: 3.4497
Iteration: 867; Percent done: 21.7%; Mean loss: 3.4970
Iteration: 868; Percent done: 21.7%; Mean loss: 3.6043
```

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Iteration: 868; Percent done: 21.7%; Mean loss: 3.6943
Iteration: 869; Percent done: 21.7%; Mean loss: 3.6799
Iteration: 870; Percent done: 21.8%; Mean loss: 3.1790
Iteration: 871; Percent done: 21.8%; Mean loss: 3.6073
Iteration: 872; Percent done: 21.8%; Mean loss: 3.6822
Iteration: 873; Percent done: 21.8%; Mean loss: 3.6481
Iteration: 874; Percent done: 21.9%; Mean loss: 3.6266
Iteration: 875; Percent done: 21.9%; Mean loss: 3.5600
Iteration: 876; Percent done: 21.9%; Mean loss: 3.4660
Iteration: 877; Percent done: 21.9%; Mean loss: 3.6673
Iteration: 878; Percent done: 21.9%; Mean loss: 3.4043
Iteration: 879; Percent done: 22.0%; Mean loss: 3.7818
Iteration: 880; Percent done: 22.0%; Mean loss: 3.4190
Iteration: 881; Percent done: 22.0%; Mean loss: 3.2884
Iteration: 882; Percent done: 22.1%; Mean loss: 3.5764
Iteration: 883; Percent done: 22.1%; Mean loss: 3.4154
Iteration: 884; Percent done: 22.1%; Mean loss: 3.2101
Iteration: 885; Percent done: 22.1%; Mean loss: 3.6517
Iteration: 886; Percent done: 22.1%; Mean loss: 3.5511
Iteration: 887; Percent done: 22.2%; Mean loss: 3.5090
Iteration: 888; Percent done: 22.2%; Mean loss: 3.6181
Iteration: 889; Percent done: 22.2%; Mean loss: 3.3935
Iteration: 890; Percent done: 22.2%; Mean loss: 3.3393
Iteration: 891; Percent done: 22.3%; Mean loss: 3.4895
Iteration: 892; Percent done: 22.3%; Mean loss: 3.6250
Iteration: 893; Percent done: 22.3%; Mean loss: 3.6552
Iteration: 894; Percent done: 22.4%; Mean loss: 3.7796
Iteration: 895; Percent done: 22.4%; Mean loss: 3.6772
Iteration: 896; Percent done: 22.4%; Mean loss: 3.5027
Iteration: 897; Percent done: 22.4%; Mean loss: 3.5079
Iteration: 898; Percent done: 22.4%; Mean loss: 3.5618
Iteration: 899; Percent done: 22.5%; Mean loss: 3.5209
Iteration: 900; Percent done: 22.5%; Mean loss: 3.8604
Iteration: 901; Percent done: 22.5%; Mean loss: 3.5173
Iteration: 902; Percent done: 22.6%; Mean loss: 3.6491
Iteration: 903; Percent done: 22.6%; Mean loss: 3.3358
Iteration: 904; Percent done: 22.6%; Mean loss: 3.4993
Iteration: 905; Percent done: 22.6%; Mean loss: 3.8316
Iteration: 906; Percent done: 22.7%; Mean loss: 3.4748
Iteration: 907; Percent done: 22.7%; Mean loss: 3.5179
Iteration: 908; Percent done: 22.7%; Mean loss: 3.5360
Iteration: 909; Percent done: 22.7%; Mean loss: 3.5919
Iteration: 910; Percent done: 22.8%; Mean loss: 3.7105
Iteration: 911; Percent done: 22.8%; Mean loss: 3.5778
Iteration: 912; Percent done: 22.8%; Mean loss: 3.5172
Iteration: 913; Percent done: 22.8%; Mean loss: 3.6986
Iteration: 914; Percent done: 22.9%; Mean loss: 3.6707
Iteration: 915; Percent done: 22.9%; Mean loss: 3.6694
Iteration: 916; Percent done: 22.9%; Mean loss: 3.5194
Iteration: 917; Percent done: 22.9%; Mean loss: 3.4120
Iteration: 918; Percent done: 22.9%; Mean loss: 3.4335
Iteration: 919; Percent done: 23.0%; Mean loss: 3.5976
Iteration: 920; Percent done: 23.0%; Mean loss: 3.8247
Iteration: 921; Percent done: 23.0%; Mean loss: 3.2697
Iteration: 922; Percent done: 23.1%; Mean loss: 3.7325
Iteration: 923; Percent done: 23.1%; Mean loss: 3.7166
Iteration: 924; Percent done: 23.1%; Mean loss: 3.5901
Iteration: 925; Percent done: 23.1%; Mean loss: 3.4645
Iteration: 926; Percent done: 23.2%; Mean loss: 3.7174
```

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Iteration: 926; Percent done: 23.2%; Mean loss: 3.7174
Iteration: 927; Percent done: 23.2%; Mean loss: 3.5083
Iteration: 928; Percent done: 23.2%; Mean loss: 3.4434
Iteration: 929; Percent done: 23.2%; Mean loss: 3.3550
Iteration: 930; Percent done: 23.2%; Mean loss: 3.4271
Iteration: 931; Percent done: 23.3%; Mean loss: 3.6257
Iteration: 932; Percent done: 23.3%; Mean loss: 3.5634
Iteration: 933; Percent done: 23.3%; Mean loss: 3.6618
Iteration: 934; Percent done: 23.4%; Mean loss: 3.2329
Iteration: 935; Percent done: 23.4%; Mean loss: 3.5487
Iteration: 936; Percent done: 23.4%; Mean loss: 3.4955
Iteration: 937; Percent done: 23.4%; Mean loss: 3.4095
Iteration: 938; Percent done: 23.4%; Mean loss: 3.6129
Iteration: 939; Percent done: 23.5%; Mean loss: 3.6670
Iteration: 940; Percent done: 23.5%; Mean loss: 3.6449
Iteration: 941; Percent done: 23.5%; Mean loss: 3.3351
Iteration: 942; Percent done: 23.5%; Mean loss: 3.3931
Iteration: 943; Percent done: 23.6%; Mean loss: 3.6200
Iteration: 944; Percent done: 23.6%; Mean loss: 3.4434
Iteration: 945; Percent done: 23.6%; Mean loss: 3.5683
Iteration: 946; Percent done: 23.6%; Mean loss: 3.5691
Iteration: 947; Percent done: 23.7%; Mean loss: 3.5196
Iteration: 948; Percent done: 23.7%; Mean loss: 3.4087
Iteration: 949; Percent done: 23.7%; Mean loss: 3.6645
Iteration: 950; Percent done: 23.8%; Mean loss: 3.8436
Iteration: 951; Percent done: 23.8%; Mean loss: 3.7559
Iteration: 952; Percent done: 23.8%; Mean loss: 3.6358
Iteration: 953; Percent done: 23.8%; Mean loss: 3.6457
Iteration: 954; Percent done: 23.8%; Mean loss: 3.3045
Iteration: 955; Percent done: 23.9%; Mean loss: 3.2716
Iteration: 956; Percent done: 23.9%; Mean loss: 3.4900
Iteration: 957; Percent done: 23.9%; Mean loss: 3.3720
Iteration: 958; Percent done: 23.9%; Mean loss: 3.5313
Iteration: 959; Percent done: 24.0%; Mean loss: 3.5442
Iteration: 960; Percent done: 24.0%; Mean loss: 3.6349
Iteration: 961; Percent done: 24.0%; Mean loss: 3.7413
Iteration: 962; Percent done: 24.1%; Mean loss: 3.6320
Iteration: 963; Percent done: 24.1%; Mean loss: 3.1793
Iteration: 964; Percent done: 24.1%; Mean loss: 3.4456
Iteration: 965; Percent done: 24.1%; Mean loss: 3.4778
Iteration: 966; Percent done: 24.1%; Mean loss: 3.3665
Iteration: 967; Percent done: 24.2%; Mean loss: 3.2830
Iteration: 968; Percent done: 24.2%; Mean loss: 3.5942
Iteration: 969; Percent done: 24.2%; Mean loss: 3.6226
Iteration: 970; Percent done: 24.2%; Mean loss: 3.1488
Iteration: 971; Percent done: 24.3%; Mean loss: 3.5271
Iteration: 972; Percent done: 24.3%; Mean loss: 3.5160
Iteration: 973; Percent done: 24.3%; Mean loss: 3.3342
Iteration: 974; Percent done: 24.3%; Mean loss: 3.5968
Iteration: 975; Percent done: 24.4%; Mean loss: 3.5670
Iteration: 976; Percent done: 24.4%; Mean loss: 3.4985
Iteration: 977; Percent done: 24.4%; Mean loss: 3.2746
Iteration: 978; Percent done: 24.4%; Mean loss: 3.4694
Iteration: 979; Percent done: 24.5%; Mean loss: 3.3721
Iteration: 980; Percent done: 24.5%; Mean loss: 3.5776
Iteration: 981; Percent done: 24.5%; Mean loss: 3.6110
Iteration: 982; Percent done: 24.6%; Mean loss: 3.2771
Iteration: 983; Percent done: 24.6%; Mean loss: 3.3129
Iteration: 984; Percent done: 24.6%; Mean loss: 3.5390
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Iteration: 984; Percent done: 24.6%; Mean loss: 3.5590
Iteration: 985; Percent done: 24.6%; Mean loss: 3.9138
Iteration: 986; Percent done: 24.6%; Mean loss: 3.5441
Iteration: 987; Percent done: 24.7%; Mean loss: 3.3450
Iteration: 988; Percent done: 24.7%; Mean loss: 3.6248
Iteration: 989; Percent done: 24.7%; Mean loss: 3.3967
Iteration: 990; Percent done: 24.8%; Mean loss: 3.3371
Iteration: 991; Percent done: 24.8%; Mean loss: 3.4073
Iteration: 992; Percent done: 24.8%; Mean loss: 3.4274
Iteration: 993; Percent done: 24.8%; Mean loss: 3.3708
Iteration: 994; Percent done: 24.9%; Mean loss: 3.4221
Iteration: 995; Percent done: 24.9%; Mean loss: 3.4641
Iteration: 996; Percent done: 24.9%; Mean loss: 3.9321
Iteration: 997; Percent done: 24.9%; Mean loss: 3.2123
Iteration: 998; Percent done: 24.9%; Mean loss: 3.3360
Iteration: 999; Percent done: 25.0%; Mean loss: 3.2744
Iteration: 1000; Percent done: 25.0%; Mean loss: 3.4421
Iteration: 1001; Percent done: 25.0%; Mean loss: 3.5052
Iteration: 1002; Percent done: 25.1%; Mean loss: 3.3999
Iteration: 1003; Percent done: 25.1%; Mean loss: 3.4979
Iteration: 1004; Percent done: 25.1%; Mean loss: 3.5006
Iteration: 1005; Percent done: 25.1%; Mean loss: 3.6858
Iteration: 1006; Percent done: 25.1%; Mean loss: 3.2835
Iteration: 1007; Percent done: 25.2%; Mean loss: 3.2404
Iteration: 1008; Percent done: 25.2%; Mean loss: 3.4948
Iteration: 1009; Percent done: 25.2%; Mean loss: 3.4974
Iteration: 1010; Percent done: 25.2%; Mean loss: 3.3022
Iteration: 1011; Percent done: 25.3%; Mean loss: 3.8993
Iteration: 1012; Percent done: 25.3%; Mean loss: 3.7519
Iteration: 1013; Percent done: 25.3%; Mean loss: 3.5169
Iteration: 1014; Percent done: 25.4%; Mean loss: 3.7169
Iteration: 1015; Percent done: 25.4%; Mean loss: 3.5530
Iteration: 1016; Percent done: 25.4%; Mean loss: 3.5755
Iteration: 1017; Percent done: 25.4%; Mean loss: 3.3503
Iteration: 1018; Percent done: 25.4%; Mean loss: 3.6625
Iteration: 1019; Percent done: 25.5%; Mean loss: 3.5798
Iteration: 1020; Percent done: 25.5%; Mean loss: 3.4113
Iteration: 1021; Percent done: 25.5%; Mean loss: 3.4500
Iteration: 1022; Percent done: 25.6%; Mean loss: 3.4405
Iteration: 1023; Percent done: 25.6%; Mean loss: 3.4307
Iteration: 1024; Percent done: 25.6%; Mean loss: 3.3895
Iteration: 1025; Percent done: 25.6%; Mean loss: 3.6146
Iteration: 1026; Percent done: 25.7%; Mean loss: 3.8025
Iteration: 1027; Percent done: 25.7%; Mean loss: 3.8156
Iteration: 1028; Percent done: 25.7%; Mean loss: 3.5015
Iteration: 1029; Percent done: 25.7%; Mean loss: 3.4394
Iteration: 1030; Percent done: 25.8%; Mean loss: 3.3921
Iteration: 1031; Percent done: 25.8%; Mean loss: 3.6913
Iteration: 1032; Percent done: 25.8%; Mean loss: 3.5712
Iteration: 1033; Percent done: 25.8%; Mean loss: 3.5540
Iteration: 1034; Percent done: 25.9%; Mean loss: 3.4385
Iteration: 1035; Percent done: 25.9%; Mean loss: 3.5356
Iteration: 1036; Percent done: 25.9%; Mean loss: 3.2488
Iteration: 1037; Percent done: 25.9%; Mean loss: 3.4683
Iteration: 1038; Percent done: 25.9%; Mean loss: 3.7139
Iteration: 1039; Percent done: 26.0%; Mean loss: 3.5307
Iteration: 1040; Percent done: 26.0%; Mean loss: 3.5039
Iteration: 1041; Percent done: 26.0%; Mean loss: 3.7099
Iteration: 1042; Percent done: 26.1%; Mean loss: 3.6530
```

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Iteration: 1043; Percent done: 26.1%; Mean loss: 3.2779
Iteration: 1044; Percent done: 26.1%; Mean loss: 3.5116
Iteration: 1045; Percent done: 26.1%; Mean loss: 3.3822
Iteration: 1046; Percent done: 26.2%; Mean loss: 3.6573
Iteration: 1047; Percent done: 26.2%; Mean loss: 3.5012
Iteration: 1048; Percent done: 26.2%; Mean loss: 3.2840
Iteration: 1049; Percent done: 26.2%; Mean loss: 3.5096
Iteration: 1050; Percent done: 26.2%; Mean loss: 3.6972
Iteration: 1051; Percent done: 26.3%; Mean loss: 3.5616
Iteration: 1052; Percent done: 26.3%; Mean loss: 3.5761
Iteration: 1053; Percent done: 26.3%; Mean loss: 3.2672
Iteration: 1054; Percent done: 26.4%; Mean loss: 3.3073
Iteration: 1055; Percent done: 26.4%; Mean loss: 3.5365
Iteration: 1056; Percent done: 26.4%; Mean loss: 3.3609
Iteration: 1057; Percent done: 26.4%; Mean loss: 3.5283
Iteration: 1058; Percent done: 26.5%; Mean loss: 3.6298
Iteration: 1059; Percent done: 26.5%; Mean loss: 3.6090
Iteration: 1060; Percent done: 26.5%; Mean loss: 3.2346
Iteration: 1061; Percent done: 26.5%; Mean loss: 3.4847
Iteration: 1062; Percent done: 26.6%; Mean loss: 3.4251
Iteration: 1063; Percent done: 26.6%; Mean loss: 3.5477
Iteration: 1064; Percent done: 26.6%; Mean loss: 3.7977
Iteration: 1065; Percent done: 26.6%; Mean loss: 3.2155
Iteration: 1066; Percent done: 26.7%; Mean loss: 3.4937
Iteration: 1067; Percent done: 26.7%; Mean loss: 3.7110
Iteration: 1068; Percent done: 26.7%; Mean loss: 3.5412
Iteration: 1069; Percent done: 26.7%; Mean loss: 3.3387
Iteration: 1070; Percent done: 26.8%; Mean loss: 3.5147
Iteration: 1071; Percent done: 26.8%; Mean loss: 3.6015
Iteration: 1072; Percent done: 26.8%; Mean loss: 3.6884
Iteration: 1073; Percent done: 26.8%; Mean loss: 3.2369
Iteration: 1074; Percent done: 26.9%; Mean loss: 3.6016
Iteration: 1075; Percent done: 26.9%; Mean loss: 3.1362
Iteration: 1076; Percent done: 26.9%; Mean loss: 3.2841
Iteration: 1077; Percent done: 26.9%; Mean loss: 3.1802
Iteration: 1078; Percent done: 27.0%; Mean loss: 3.7198
Iteration: 1079; Percent done: 27.0%; Mean loss: 3.3567
Iteration: 1080; Percent done: 27.0%; Mean loss: 3.4444
Iteration: 1081; Percent done: 27.0%; Mean loss: 3.3630
Iteration: 1082; Percent done: 27.1%; Mean loss: 3.5637
Iteration: 1083; Percent done: 27.1%; Mean loss: 3.3837
Iteration: 1084; Percent done: 27.1%; Mean loss: 3.4527
Iteration: 1085; Percent done: 27.1%; Mean loss: 3.4849
Iteration: 1086; Percent done: 27.2%; Mean loss: 3.4086
Iteration: 1087; Percent done: 27.2%; Mean loss: 3.3463
Iteration: 1088; Percent done: 27.2%; Mean loss: 3.3557
Iteration: 1089; Percent done: 27.2%; Mean loss: 3.4708
Iteration: 1090; Percent done: 27.3%; Mean loss: 3.4087
Iteration: 1091; Percent done: 27.3%; Mean loss: 3.4588
Iteration: 1092; Percent done: 27.3%; Mean loss: 3.2308
Iteration: 1093; Percent done: 27.3%; Mean loss: 3.5218
Iteration: 1094; Percent done: 27.4%; Mean loss: 3.2663
Iteration: 1095; Percent done: 27.4%; Mean loss: 3.5961
Iteration: 1096; Percent done: 27.4%; Mean loss: 3.5522
Iteration: 1097; Percent done: 27.4%; Mean loss: 3.4034
Iteration: 1098; Percent done: 27.5%; Mean loss: 3.5797
Iteration: 1099; Percent done: 27.5%; Mean loss: 3.2467
Iteration: 1100; Percent done: 27.5%; Mean loss: 3.4582
```

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Iteration: 1101; Percent done: 27.5%; Mean loss: 3.7073
Iteration: 1102; Percent done: 27.6%; Mean loss: 3.3069
Iteration: 1103; Percent done: 27.6%; Mean loss: 3.5916
Iteration: 1104; Percent done: 27.6%; Mean loss: 3.3627
Iteration: 1105; Percent done: 27.6%; Mean loss: 3.5461
Iteration: 1106; Percent done: 27.7%; Mean loss: 3.4994
Iteration: 1107; Percent done: 27.7%; Mean loss: 3.4467
Iteration: 1108; Percent done: 27.7%; Mean loss: 3.2454
Iteration: 1109; Percent done: 27.7%; Mean loss: 3.3911
Iteration: 1110; Percent done: 27.8%; Mean loss: 3.6236
Iteration: 1111; Percent done: 27.8%; Mean loss: 3.4854
Iteration: 1112; Percent done: 27.8%; Mean loss: 3.4101
Iteration: 1113; Percent done: 27.8%; Mean loss: 3.4711
Iteration: 1114; Percent done: 27.9%; Mean loss: 3.5437
Iteration: 1115; Percent done: 27.9%; Mean loss: 3.2870
Iteration: 1116; Percent done: 27.9%; Mean loss: 3.6056
Iteration: 1117; Percent done: 27.9%; Mean loss: 3.5769
Iteration: 1118; Percent done: 28.0%; Mean loss: 3.3639
Iteration: 1119; Percent done: 28.0%; Mean loss: 3.4278
Iteration: 1120; Percent done: 28.0%; Mean loss: 3.3483
Iteration: 1121; Percent done: 28.0%; Mean loss: 3.5611
Iteration: 1122; Percent done: 28.1%; Mean loss: 3.2376
Iteration: 1123; Percent done: 28.1%; Mean loss: 3.4517
Iteration: 1124; Percent done: 28.1%; Mean loss: 3.5425
Iteration: 1125; Percent done: 28.1%; Mean loss: 3.2081
Iteration: 1126; Percent done: 28.1%; Mean loss: 3.4015
Iteration: 1127; Percent done: 28.2%; Mean loss: 3.5011
Iteration: 1128; Percent done: 28.2%; Mean loss: 3.5283
Iteration: 1129; Percent done: 28.2%; Mean loss: 3.5940
Iteration: 1130; Percent done: 28.2%; Mean loss: 3.3096
Iteration: 1131; Percent done: 28.3%; Mean loss: 3.1379
Iteration: 1132; Percent done: 28.3%; Mean loss: 3.3167
Iteration: 1133; Percent done: 28.3%; Mean loss: 3.2150
Iteration: 1134; Percent done: 28.3%; Mean loss: 3.2931
Iteration: 1135; Percent done: 28.4%; Mean loss: 3.2673
Iteration: 1136; Percent done: 28.4%; Mean loss: 3.6039
Iteration: 1137; Percent done: 28.4%; Mean loss: 3.4940
Iteration: 1138; Percent done: 28.4%; Mean loss: 3.4682
Iteration: 1139; Percent done: 28.5%; Mean loss: 3.3493
Iteration: 1140; Percent done: 28.5%; Mean loss: 3.7198
Iteration: 1141; Percent done: 28.5%; Mean loss: 3.6724
Iteration: 1142; Percent done: 28.5%; Mean loss: 3.7021
Iteration: 1143; Percent done: 28.6%; Mean loss: 3.3868
Iteration: 1144; Percent done: 28.6%; Mean loss: 3.3551
Iteration: 1145; Percent done: 28.6%; Mean loss: 3.4057
Iteration: 1146; Percent done: 28.6%; Mean loss: 3.0411
Iteration: 1147; Percent done: 28.7%; Mean loss: 3.4299
Iteration: 1148; Percent done: 28.7%; Mean loss: 3.6049
Iteration: 1149; Percent done: 28.7%; Mean loss: 3.1958
Iteration: 1150; Percent done: 28.7%; Mean loss: 3.6715
Iteration: 1151; Percent done: 28.8%; Mean loss: 3.7098
Iteration: 1152; Percent done: 28.8%; Mean loss: 3.3955
Iteration: 1153; Percent done: 28.8%; Mean loss: 3.3607
Iteration: 1154; Percent done: 28.8%; Mean loss: 3.4738
Iteration: 1155; Percent done: 28.9%; Mean loss: 3.5058
Iteration: 1156; Percent done: 28.9%; Mean loss: 3.3495
Iteration: 1157; Percent done: 28.9%; Mean loss: 3.3575
Iteration: 1158; Percent done: 28.9%; Mean loss: 3.3210
```

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Iteration: 1159; Percent done: 29.0%; Mean loss: 3.3947
Iteration: 1160; Percent done: 29.0%; Mean loss: 3.4695
Iteration: 1161; Percent done: 29.0%; Mean loss: 3.0441
Iteration: 1162; Percent done: 29.0%; Mean loss: 3.4354
Iteration: 1163; Percent done: 29.1%; Mean loss: 3.7958
Iteration: 1164; Percent done: 29.1%; Mean loss: 3.1874
Iteration: 1165; Percent done: 29.1%; Mean loss: 3.2431
Iteration: 1166; Percent done: 29.1%; Mean loss: 3.5086
Iteration: 1167; Percent done: 29.2%; Mean loss: 3.4780
Iteration: 1168; Percent done: 29.2%; Mean loss: 3.4228
Iteration: 1169; Percent done: 29.2%; Mean loss: 3.3288
Iteration: 1170; Percent done: 29.2%; Mean loss: 3.1165
Iteration: 1171; Percent done: 29.3%; Mean loss: 3.6066
Iteration: 1172; Percent done: 29.3%; Mean loss: 3.4598
Iteration: 1173; Percent done: 29.3%; Mean loss: 3.4638
Iteration: 1174; Percent done: 29.3%; Mean loss: 3.4068
Iteration: 1175; Percent done: 29.4%; Mean loss: 3.4969
Iteration: 1176; Percent done: 29.4%; Mean loss: 3.3823
Iteration: 1177; Percent done: 29.4%; Mean loss: 3.2410
Iteration: 1178; Percent done: 29.4%; Mean loss: 3.4134
Iteration: 1179; Percent done: 29.5%; Mean loss: 3.2211
Iteration: 1180; Percent done: 29.5%; Mean loss: 3.2522
Iteration: 1181; Percent done: 29.5%; Mean loss: 3.4413
Iteration: 1182; Percent done: 29.5%; Mean loss: 3.5113
Iteration: 1183; Percent done: 29.6%; Mean loss: 3.2304
Iteration: 1184; Percent done: 29.6%; Mean loss: 3.2481
Iteration: 1185; Percent done: 29.6%; Mean loss: 3.2144
Iteration: 1186; Percent done: 29.6%; Mean loss: 3.4969
Iteration: 1187; Percent done: 29.7%; Mean loss: 3.5598
Iteration: 1188; Percent done: 29.7%; Mean loss: 3.5563
Iteration: 1189; Percent done: 29.7%; Mean loss: 3.5555
Iteration: 1190; Percent done: 29.8%; Mean loss: 3.4284
Iteration: 1191; Percent done: 29.8%; Mean loss: 3.4371
Iteration: 1192; Percent done: 29.8%; Mean loss: 3.4281
Iteration: 1193; Percent done: 29.8%; Mean loss: 3.5421
Iteration: 1194; Percent done: 29.8%; Mean loss: 3.0243
Iteration: 1195; Percent done: 29.9%; Mean loss: 3.3789
Iteration: 1196; Percent done: 29.9%; Mean loss: 3.4290
Iteration: 1197; Percent done: 29.9%; Mean loss: 3.3978
Iteration: 1198; Percent done: 29.9%; Mean loss: 3.2575
Iteration: 1199; Percent done: 30.0%; Mean loss: 3.6435
Iteration: 1200; Percent done: 30.0%; Mean loss: 3.3840
Iteration: 1201; Percent done: 30.0%; Mean loss: 3.5398
Iteration: 1202; Percent done: 30.0%; Mean loss: 3.4996
Iteration: 1203; Percent done: 30.1%; Mean loss: 3.5429
Iteration: 1204; Percent done: 30.1%; Mean loss: 3.3565
Iteration: 1205; Percent done: 30.1%; Mean loss: 3.5473
Iteration: 1206; Percent done: 30.1%; Mean loss: 3.5790
Iteration: 1207; Percent done: 30.2%; Mean loss: 3.4809
Iteration: 1208; Percent done: 30.2%; Mean loss: 3.2980
Iteration: 1209; Percent done: 30.2%; Mean loss: 3.6714
Iteration: 1210; Percent done: 30.2%; Mean loss: 3.2939
Iteration: 1211; Percent done: 30.3%; Mean loss: 3.3840
Iteration: 1212; Percent done: 30.3%; Mean loss: 3.3832
Iteration: 1213; Percent done: 30.3%; Mean loss: 3.5866
Iteration: 1214; Percent done: 30.3%; Mean loss: 3.3410
Iteration: 1215; Percent done: 30.4%; Mean loss: 3.2713
Iteration: 1216; Percent done: 30.4%; Mean loss: 3.3815
```

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Iteration: 1217; Percent done: 30.4%; Mean loss: 3.3486
Iteration: 1218; Percent done: 30.4%; Mean loss: 3.3157
Iteration: 1219; Percent done: 30.5%; Mean loss: 3.3171
Iteration: 1220; Percent done: 30.5%; Mean loss: 3.4414
Iteration: 1221; Percent done: 30.5%; Mean loss: 3.4863
Iteration: 1222; Percent done: 30.6%; Mean loss: 3.4642
Iteration: 1223; Percent done: 30.6%; Mean loss: 3.4855
Iteration: 1224; Percent done: 30.6%; Mean loss: 3.3549
Iteration: 1225; Percent done: 30.6%; Mean loss: 3.4524
Iteration: 1226; Percent done: 30.6%; Mean loss: 3.7742
Iteration: 1227; Percent done: 30.7%; Mean loss: 3.6152
Iteration: 1228; Percent done: 30.7%; Mean loss: 3.6665
Iteration: 1229; Percent done: 30.7%; Mean loss: 3.2422
Iteration: 1230; Percent done: 30.8%; Mean loss: 3.3427
Iteration: 1231; Percent done: 30.8%; Mean loss: 3.3581
Iteration: 1232; Percent done: 30.8%; Mean loss: 3.2468
Iteration: 1233; Percent done: 30.8%; Mean loss: 3.4737
Iteration: 1234; Percent done: 30.9%; Mean loss: 3.4460
Iteration: 1235; Percent done: 30.9%; Mean loss: 3.4587
Iteration: 1236; Percent done: 30.9%; Mean loss: 3.3435
Iteration: 1237; Percent done: 30.9%; Mean loss: 3.4633
Iteration: 1238; Percent done: 30.9%; Mean loss: 3.1233
Iteration: 1239; Percent done: 31.0%; Mean loss: 3.5019
Iteration: 1240; Percent done: 31.0%; Mean loss: 3.4418
Iteration: 1241; Percent done: 31.0%; Mean loss: 3.3372
Iteration: 1242; Percent done: 31.1%; Mean loss: 3.3728
Iteration: 1243; Percent done: 31.1%; Mean loss: 3.3752
Iteration: 1244; Percent done: 31.1%; Mean loss: 3.6072
Iteration: 1245; Percent done: 31.1%; Mean loss: 3.4643
Iteration: 1246; Percent done: 31.1%; Mean loss: 3.4168
Iteration: 1247; Percent done: 31.2%; Mean loss: 3.6433
Iteration: 1248; Percent done: 31.2%; Mean loss: 3.3819
Iteration: 1249; Percent done: 31.2%; Mean loss: 3.4369
Iteration: 1250; Percent done: 31.2%; Mean loss: 3.3991
Iteration: 1251; Percent done: 31.3%; Mean loss: 3.2041
Iteration: 1252; Percent done: 31.3%; Mean loss: 3.5206
Iteration: 1253; Percent done: 31.3%; Mean loss: 3.5137
Iteration: 1254; Percent done: 31.4%; Mean loss: 3.4699
Iteration: 1255; Percent done: 31.4%; Mean loss: 3.2629
Iteration: 1256; Percent done: 31.4%; Mean loss: 3.5425
Iteration: 1257; Percent done: 31.4%; Mean loss: 3.3376
Iteration: 1258; Percent done: 31.4%; Mean loss: 3.4851
Iteration: 1259; Percent done: 31.5%; Mean loss: 3.5159
Iteration: 1260; Percent done: 31.5%; Mean loss: 3.5202
Iteration: 1261; Percent done: 31.5%; Mean loss: 3.4139
Iteration: 1262; Percent done: 31.6%; Mean loss: 3.2725
Iteration: 1263; Percent done: 31.6%; Mean loss: 3.4015
Iteration: 1264; Percent done: 31.6%; Mean loss: 3.5903
Iteration: 1265; Percent done: 31.6%; Mean loss: 3.4905
Iteration: 1266; Percent done: 31.6%; Mean loss: 3.6030
Iteration: 1267; Percent done: 31.7%; Mean loss: 3.5723
Iteration: 1268; Percent done: 31.7%; Mean loss: 3.2903
Iteration: 1269; Percent done: 31.7%; Mean loss: 3.4252
Iteration: 1270; Percent done: 31.8%; Mean loss: 3.4613
Iteration: 1271; Percent done: 31.8%; Mean loss: 3.3928
Iteration: 1272; Percent done: 31.8%; Mean loss: 3.2817
Iteration: 1273; Percent done: 31.8%; Mean loss: 3.4618
Iteration: 1274; Percent done: 31.9%; Mean loss: 3.3958
```

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Iteration: 1275; Percent done: 31.9%; Mean loss: 3.5218
Iteration: 1276; Percent done: 31.9%; Mean loss: 3.4611
Iteration: 1277; Percent done: 31.9%; Mean loss: 3.3929
Iteration: 1278; Percent done: 31.9%; Mean loss: 3.6183
Iteration: 1279; Percent done: 32.0%; Mean loss: 3.5150
Iteration: 1280; Percent done: 32.0%; Mean loss: 3.6028
Iteration: 1281; Percent done: 32.0%; Mean loss: 3.3148
Iteration: 1282; Percent done: 32.0%; Mean loss: 3.2263
Iteration: 1283; Percent done: 32.1%; Mean loss: 3.2982
Iteration: 1284; Percent done: 32.1%; Mean loss: 3.6393
Iteration: 1285; Percent done: 32.1%; Mean loss: 3.3943
Iteration: 1286; Percent done: 32.1%; Mean loss: 3.4527
Iteration: 1287; Percent done: 32.2%; Mean loss: 3.3176
Iteration: 1288; Percent done: 32.2%; Mean loss: 3.5285
Iteration: 1289; Percent done: 32.2%; Mean loss: 3.4411
Iteration: 1290; Percent done: 32.2%; Mean loss: 3.4478
Iteration: 1291; Percent done: 32.3%; Mean loss: 3.5717
Iteration: 1292; Percent done: 32.3%; Mean loss: 3.4744
Iteration: 1293; Percent done: 32.3%; Mean loss: 3.5496
Iteration: 1294; Percent done: 32.4%; Mean loss: 3.2792
Iteration: 1295; Percent done: 32.4%; Mean loss: 3.4708
Iteration: 1296; Percent done: 32.4%; Mean loss: 3.3007
Iteration: 1297; Percent done: 32.4%; Mean loss: 3.4063
Iteration: 1298; Percent done: 32.5%; Mean loss: 3.4962
Iteration: 1299; Percent done: 32.5%; Mean loss: 3.4507
Iteration: 1300; Percent done: 32.5%; Mean loss: 3.4136
Iteration: 1301; Percent done: 32.5%; Mean loss: 3.2518
Iteration: 1302; Percent done: 32.6%; Mean loss: 3.1345
Iteration: 1303; Percent done: 32.6%; Mean loss: 3.4374
Iteration: 1304; Percent done: 32.6%; Mean loss: 3.3392
Iteration: 1305; Percent done: 32.6%; Mean loss: 3.2170
Iteration: 1306; Percent done: 32.6%; Mean loss: 3.4523
Iteration: 1307; Percent done: 32.7%; Mean loss: 3.6356
Iteration: 1308; Percent done: 32.7%; Mean loss: 3.2401
Iteration: 1309; Percent done: 32.7%; Mean loss: 3.0823
Iteration: 1310; Percent done: 32.8%; Mean loss: 3.3005
Iteration: 1311; Percent done: 32.8%; Mean loss: 3.3466
Iteration: 1312; Percent done: 32.8%; Mean loss: 3.4910
Iteration: 1313; Percent done: 32.8%; Mean loss: 3.4214
Iteration: 1314; Percent done: 32.9%; Mean loss: 3.2613
Iteration: 1315; Percent done: 32.9%; Mean loss: 3.2872
Iteration: 1316; Percent done: 32.9%; Mean loss: 3.4975
Iteration: 1317; Percent done: 32.9%; Mean loss: 3.7034
Iteration: 1318; Percent done: 33.0%; Mean loss: 3.6802
Iteration: 1319; Percent done: 33.0%; Mean loss: 3.2144
Iteration: 1320; Percent done: 33.0%; Mean loss: 3.3442
Iteration: 1321; Percent done: 33.0%; Mean loss: 3.3450
Iteration: 1322; Percent done: 33.1%; Mean loss: 3.0901
Iteration: 1323; Percent done: 33.1%; Mean loss: 3.6515
Iteration: 1324; Percent done: 33.1%; Mean loss: 3.5332
Iteration: 1325; Percent done: 33.1%; Mean loss: 3.3594
Iteration: 1326; Percent done: 33.1%; Mean loss: 3.4992
Iteration: 1327; Percent done: 33.2%; Mean loss: 3.3534
Iteration: 1328; Percent done: 33.2%; Mean loss: 3.3972
Iteration: 1329; Percent done: 33.2%; Mean loss: 3.3975
Iteration: 1330; Percent done: 33.2%; Mean loss: 3.3915
Iteration: 1331; Percent done: 33.3%; Mean loss: 3.2515
Iteration: 1332; Percent done: 33.3%; Mean loss: 3.4543
```

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Iteration: 1333; Percent done: 33.3%; Mean loss: 3.4322
Iteration: 1334; Percent done: 33.4%; Mean loss: 3.4430
Iteration: 1335; Percent done: 33.4%; Mean loss: 3.4274
Iteration: 1336; Percent done: 33.4%; Mean loss: 3.3282
Iteration: 1337; Percent done: 33.4%; Mean loss: 3.3305
Iteration: 1338; Percent done: 33.5%; Mean loss: 3.6282
Iteration: 1339; Percent done: 33.5%; Mean loss: 3.4756
Iteration: 1340; Percent done: 33.5%; Mean loss: 3.6179
Iteration: 1341; Percent done: 33.5%; Mean loss: 3.5059
Iteration: 1342; Percent done: 33.6%; Mean loss: 3.2829
Iteration: 1343; Percent done: 33.6%; Mean loss: 3.4411
Iteration: 1344; Percent done: 33.6%; Mean loss: 3.3884
Iteration: 1345; Percent done: 33.6%; Mean loss: 3.3963
Iteration: 1346; Percent done: 33.7%; Mean loss: 3.2893
Iteration: 1347; Percent done: 33.7%; Mean loss: 3.3582
Iteration: 1348; Percent done: 33.7%; Mean loss: 3.5846
Iteration: 1349; Percent done: 33.7%; Mean loss: 3.5111
Iteration: 1350; Percent done: 33.8%; Mean loss: 3.3777
Iteration: 1351; Percent done: 33.8%; Mean loss: 3.5594
Iteration: 1352; Percent done: 33.8%; Mean loss: 3.2241
Iteration: 1353; Percent done: 33.8%; Mean loss: 3.4582
Iteration: 1354; Percent done: 33.9%; Mean loss: 3.5872
Iteration: 1355; Percent done: 33.9%; Mean loss: 3.2445
Iteration: 1356; Percent done: 33.9%; Mean loss: 3.3533
Iteration: 1357; Percent done: 33.9%; Mean loss: 3.3999
Iteration: 1358; Percent done: 34.0%; Mean loss: 3.4119
Iteration: 1359; Percent done: 34.0%; Mean loss: 3.2277
Iteration: 1360; Percent done: 34.0%; Mean loss: 3.4089
Iteration: 1361; Percent done: 34.0%; Mean loss: 3.5363
Iteration: 1362; Percent done: 34.1%; Mean loss: 3.1157
Iteration: 1363; Percent done: 34.1%; Mean loss: 3.2720
Iteration: 1364; Percent done: 34.1%; Mean loss: 3.5121
Iteration: 1365; Percent done: 34.1%; Mean loss: 3.5358
Iteration: 1366; Percent done: 34.2%; Mean loss: 3.4947
Iteration: 1367; Percent done: 34.2%; Mean loss: 3.2584
Iteration: 1368; Percent done: 34.2%; Mean loss: 3.3994
Iteration: 1369; Percent done: 34.2%; Mean loss: 3.1517
Iteration: 1370; Percent done: 34.2%; Mean loss: 3.2806
Iteration: 1371; Percent done: 34.3%; Mean loss: 3.5303
Iteration: 1372; Percent done: 34.3%; Mean loss: 3.2002
Iteration: 1373; Percent done: 34.3%; Mean loss: 3.4230
Iteration: 1374; Percent done: 34.4%; Mean loss: 3.2800
Iteration: 1375; Percent done: 34.4%; Mean loss: 3.4643
Iteration: 1376; Percent done: 34.4%; Mean loss: 3.2497
Iteration: 1377; Percent done: 34.4%; Mean loss: 3.0655
Iteration: 1378; Percent done: 34.4%; Mean loss: 3.2185
Iteration: 1379; Percent done: 34.5%; Mean loss: 3.4253
Iteration: 1380; Percent done: 34.5%; Mean loss: 3.4863
Iteration: 1381; Percent done: 34.5%; Mean loss: 3.1711
Iteration: 1382; Percent done: 34.5%; Mean loss: 3.4021
Iteration: 1383; Percent done: 34.6%; Mean loss: 3.6093
Iteration: 1384; Percent done: 34.6%; Mean loss: 3.0343
Iteration: 1385; Percent done: 34.6%; Mean loss: 3.3448
Iteration: 1386; Percent done: 34.6%; Mean loss: 3.4746
Iteration: 1387; Percent done: 34.7%; Mean loss: 3.2130
Iteration: 1388; Percent done: 34.7%; Mean loss: 3.3664
Iteration: 1389; Percent done: 34.7%; Mean loss: 3.1561
Iteration: 1390; Percent done: 34.8%; Mean loss: 3.5415
Iteration: 1391; Percent done: 34.8%; Mean loss: 3.2433
```

```
Iteration: 1391; Percent done: 34.8%; Mean loss: 3.2433
Iteration: 1392; Percent done: 34.8%; Mean loss: 3.6279
Iteration: 1393; Percent done: 34.8%; Mean loss: 3.1276
Iteration: 1394; Percent done: 34.8%; Mean loss: 3.4115
Iteration: 1395; Percent done: 34.9%; Mean loss: 3.4339
Iteration: 1396; Percent done: 34.9%; Mean loss: 3.2804
Iteration: 1397; Percent done: 34.9%; Mean loss: 3.3495
Iteration: 1398; Percent done: 34.9%; Mean loss: 3.3430
Iteration: 1399; Percent done: 35.0%; Mean loss: 3.1019
Iteration: 1400; Percent done: 35.0%; Mean loss: 3.1282
Iteration: 1401; Percent done: 35.0%; Mean loss: 3.4178
Iteration: 1402; Percent done: 35.0%; Mean loss: 3.7234
Iteration: 1403; Percent done: 35.1%; Mean loss: 3.2338
Iteration: 1404; Percent done: 35.1%; Mean loss: 3.3910
Iteration: 1405; Percent done: 35.1%; Mean loss: 3.3803
Iteration: 1406; Percent done: 35.1%; Mean loss: 3.2789
Iteration: 1407; Percent done: 35.2%; Mean loss: 3.2586
Iteration: 1408; Percent done: 35.2%; Mean loss: 3.3560
Iteration: 1409; Percent done: 35.2%; Mean loss: 3.3542
Iteration: 1410; Percent done: 35.2%; Mean loss: 3.4409
Iteration: 1411; Percent done: 35.3%; Mean loss: 3.2458
Iteration: 1412; Percent done: 35.3%; Mean loss: 3.2442
Iteration: 1413; Percent done: 35.3%; Mean loss: 3.3176
Iteration: 1414; Percent done: 35.4%; Mean loss: 3.0408
Iteration: 1415; Percent done: 35.4%; Mean loss: 3.4197
Iteration: 1416; Percent done: 35.4%; Mean loss: 3.4789
Iteration: 1417; Percent done: 35.4%; Mean loss: 3.5304
Iteration: 1418; Percent done: 35.4%; Mean loss: 3.4487
Iteration: 1419; Percent done: 35.5%; Mean loss: 3.3967
Iteration: 1420; Percent done: 35.5%; Mean loss: 3.5218
Iteration: 1421; Percent done: 35.5%; Mean loss: 3.3060
Iteration: 1422; Percent done: 35.5%; Mean loss: 3.2765
Iteration: 1423; Percent done: 35.6%; Mean loss: 3.4193
Iteration: 1424; Percent done: 35.6%; Mean loss: 3.3792
Iteration: 1425; Percent done: 35.6%; Mean loss: 3.3785
Iteration: 1426; Percent done: 35.6%; Mean loss: 3.3586
Iteration: 1427; Percent done: 35.7%; Mean loss: 3.2330
Iteration: 1428; Percent done: 35.7%; Mean loss: 3.3666
Iteration: 1429; Percent done: 35.7%; Mean loss: 3.1772
Iteration: 1430; Percent done: 35.8%; Mean loss: 3.3929
Iteration: 1431; Percent done: 35.8%; Mean loss: 3.3708
Iteration: 1432; Percent done: 35.8%; Mean loss: 3.3485
Iteration: 1433; Percent done: 35.8%; Mean loss: 3.3955
Iteration: 1434; Percent done: 35.9%; Mean loss: 3.5911
Iteration: 1435; Percent done: 35.9%; Mean loss: 3.3482
Iteration: 1436; Percent done: 35.9%; Mean loss: 3.4472
Iteration: 1437; Percent done: 35.9%; Mean loss: 3.5372
Iteration: 1438; Percent done: 35.9%; Mean loss: 3.3413
Iteration: 1439; Percent done: 36.0%; Mean loss: 3.5283
Iteration: 1440; Percent done: 36.0%; Mean loss: 3.1072
Iteration: 1441; Percent done: 36.0%; Mean loss: 3.0903
Iteration: 1442; Percent done: 36.0%; Mean loss: 3.3294
Iteration: 1443; Percent done: 36.1%; Mean loss: 3.2928
Iteration: 1444; Percent done: 36.1%; Mean loss: 3.4273
Iteration: 1445; Percent done: 36.1%; Mean loss: 3.3310
Iteration: 1446; Percent done: 36.1%; Mean loss: 3.3283
Iteration: 1447; Percent done: 36.2%; Mean loss: 3.4250
Iteration: 1448; Percent done: 36.2%; Mean loss: 3.1807
Iteration: 1449; Percent done: 36.2%; Mean loss: 3.5580
```

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Iteration: 1449; Percent done: 36.2%; Mean loss: 3.3580
Iteration: 1450; Percent done: 36.2%; Mean loss: 3.1636
Iteration: 1451; Percent done: 36.3%; Mean loss: 3.1194
Iteration: 1452; Percent done: 36.3%; Mean loss: 3.4445
Iteration: 1453; Percent done: 36.3%; Mean loss: 3.1278
Iteration: 1454; Percent done: 36.4%; Mean loss: 3.3685
Iteration: 1455; Percent done: 36.4%; Mean loss: 3.2913
Iteration: 1456; Percent done: 36.4%; Mean loss: 3.2065
Iteration: 1457; Percent done: 36.4%; Mean loss: 3.5775
Iteration: 1458; Percent done: 36.4%; Mean loss: 3.3395
Iteration: 1459; Percent done: 36.5%; Mean loss: 3.1108
Iteration: 1460; Percent done: 36.5%; Mean loss: 3.1843
Iteration: 1461; Percent done: 36.5%; Mean loss: 3.1701
Iteration: 1462; Percent done: 36.5%; Mean loss: 3.1675
Iteration: 1463; Percent done: 36.6%; Mean loss: 3.4121
Iteration: 1464; Percent done: 36.6%; Mean loss: 3.3986
Iteration: 1465; Percent done: 36.6%; Mean loss: 3.3809
Iteration: 1466; Percent done: 36.6%; Mean loss: 3.5880
Iteration: 1467; Percent done: 36.7%; Mean loss: 3.0971
Iteration: 1468; Percent done: 36.7%; Mean loss: 3.1099
Iteration: 1469; Percent done: 36.7%; Mean loss: 3.1953
Iteration: 1470; Percent done: 36.8%; Mean loss: 2.9501
Iteration: 1471; Percent done: 36.8%; Mean loss: 3.2578
Iteration: 1472; Percent done: 36.8%; Mean loss: 3.2540
Iteration: 1473; Percent done: 36.8%; Mean loss: 3.3765
Iteration: 1474; Percent done: 36.9%; Mean loss: 2.9855
Iteration: 1475; Percent done: 36.9%; Mean loss: 3.2526
Iteration: 1476; Percent done: 36.9%; Mean loss: 3.2905
Iteration: 1477; Percent done: 36.9%; Mean loss: 3.3322
Iteration: 1478; Percent done: 37.0%; Mean loss: 3.4482
Iteration: 1479; Percent done: 37.0%; Mean loss: 3.5454
Iteration: 1480; Percent done: 37.0%; Mean loss: 3.0904
Iteration: 1481; Percent done: 37.0%; Mean loss: 3.3599
Iteration: 1482; Percent done: 37.0%; Mean loss: 3.5496
Iteration: 1483; Percent done: 37.1%; Mean loss: 3.5432
Iteration: 1484; Percent done: 37.1%; Mean loss: 3.2603
Iteration: 1485; Percent done: 37.1%; Mean loss: 3.3456
Iteration: 1486; Percent done: 37.1%; Mean loss: 3.6084
Iteration: 1487; Percent done: 37.2%; Mean loss: 3.4666
Iteration: 1488; Percent done: 37.2%; Mean loss: 3.1104
Iteration: 1489; Percent done: 37.2%; Mean loss: 3.3082
Iteration: 1490; Percent done: 37.2%; Mean loss: 3.1112
Iteration: 1491; Percent done: 37.3%; Mean loss: 3.1538
Iteration: 1492; Percent done: 37.3%; Mean loss: 3.4156
Iteration: 1493; Percent done: 37.3%; Mean loss: 3.3507
Iteration: 1494; Percent done: 37.4%; Mean loss: 3.3338
Iteration: 1495; Percent done: 37.4%; Mean loss: 3.5805
Iteration: 1496; Percent done: 37.4%; Mean loss: 3.6554
Iteration: 1497; Percent done: 37.4%; Mean loss: 3.3891
Iteration: 1498; Percent done: 37.5%; Mean loss: 3.1445
Iteration: 1499; Percent done: 37.5%; Mean loss: 3.2215
Iteration: 1500; Percent done: 37.5%; Mean loss: 3.2028
Iteration: 1501; Percent done: 37.5%; Mean loss: 3.1318
Iteration: 1502; Percent done: 37.5%; Mean loss: 3.3408
Iteration: 1503; Percent done: 37.6%; Mean loss: 3.1967
Iteration: 1504; Percent done: 37.6%; Mean loss: 3.0334
Iteration: 1505; Percent done: 37.6%; Mean loss: 3.4688
Iteration: 1506; Percent done: 37.6%; Mean loss: 3.8345
Iteration: 1507; Percent done: 37.7%; Mean loss: 3.1603
```

```
Iteration: 1507; Percent done: 37.7%; Mean loss: 3.1603
Iteration: 1508; Percent done: 37.7%; Mean loss: 3.5332
Iteration: 1509; Percent done: 37.7%; Mean loss: 3.2764
Iteration: 1510; Percent done: 37.8%; Mean loss: 3.2733
Iteration: 1511; Percent done: 37.8%; Mean loss: 3.2121
Iteration: 1512; Percent done: 37.8%; Mean loss: 3.3514
Iteration: 1513; Percent done: 37.8%; Mean loss: 3.3569
Iteration: 1514; Percent done: 37.9%; Mean loss: 3.2076
Iteration: 1515; Percent done: 37.9%; Mean loss: 3.5397
Iteration: 1516; Percent done: 37.9%; Mean loss: 3.2481
Iteration: 1517; Percent done: 37.9%; Mean loss: 3.3830
Iteration: 1518; Percent done: 38.0%; Mean loss: 3.3551
Iteration: 1519; Percent done: 38.0%; Mean loss: 3.2878
Iteration: 1520; Percent done: 38.0%; Mean loss: 3.2179
Iteration: 1521; Percent done: 38.0%; Mean loss: 3.2855
Iteration: 1522; Percent done: 38.0%; Mean loss: 3.2254
Iteration: 1523; Percent done: 38.1%; Mean loss: 3.5389
Iteration: 1524; Percent done: 38.1%; Mean loss: 3.1818
Iteration: 1525; Percent done: 38.1%; Mean loss: 3.2018
Iteration: 1526; Percent done: 38.1%; Mean loss: 3.3879
Iteration: 1527; Percent done: 38.2%; Mean loss: 3.4291
Iteration: 1528; Percent done: 38.2%; Mean loss: 3.4490
Iteration: 1529; Percent done: 38.2%; Mean loss: 3.3309
Iteration: 1530; Percent done: 38.2%; Mean loss: 3.4132
Iteration: 1531; Percent done: 38.3%; Mean loss: 3.2546
Iteration: 1532; Percent done: 38.3%; Mean loss: 3.0671
Iteration: 1533; Percent done: 38.3%; Mean loss: 3.4540
Iteration: 1534; Percent done: 38.4%; Mean loss: 3.2789
Iteration: 1535; Percent done: 38.4%; Mean loss: 3.3335
Iteration: 1536; Percent done: 38.4%; Mean loss: 3.2826
Iteration: 1537; Percent done: 38.4%; Mean loss: 3.1234
Iteration: 1538; Percent done: 38.5%; Mean loss: 3.3333
Iteration: 1539; Percent done: 38.5%; Mean loss: 3.3677
Iteration: 1540; Percent done: 38.5%; Mean loss: 3.1197
Iteration: 1541; Percent done: 38.5%; Mean loss: 3.2064
Iteration: 1542; Percent done: 38.6%; Mean loss: 3.4164
Iteration: 1543; Percent done: 38.6%; Mean loss: 3.1053
Iteration: 1544; Percent done: 38.6%; Mean loss: 3.4715
Iteration: 1545; Percent done: 38.6%; Mean loss: 3.4786
Iteration: 1546; Percent done: 38.6%; Mean loss: 3.4504
Iteration: 1547; Percent done: 38.7%; Mean loss: 3.4537
Iteration: 1548; Percent done: 38.7%; Mean loss: 3.5119
Iteration: 1549; Percent done: 38.7%; Mean loss: 3.0610
Iteration: 1550; Percent done: 38.8%; Mean loss: 3.3347
Iteration: 1551; Percent done: 38.8%; Mean loss: 3.3498
Iteration: 1552; Percent done: 38.8%; Mean loss: 3.5559
Iteration: 1553; Percent done: 38.8%; Mean loss: 3.5539
Iteration: 1554; Percent done: 38.9%; Mean loss: 3.5365
Iteration: 1555; Percent done: 38.9%; Mean loss: 2.9068
Iteration: 1556; Percent done: 38.9%; Mean loss: 3.3677
Iteration: 1557; Percent done: 38.9%; Mean loss: 3.2600
Iteration: 1558; Percent done: 39.0%; Mean loss: 3.1425
Iteration: 1559; Percent done: 39.0%; Mean loss: 3.4006
Iteration: 1560; Percent done: 39.0%; Mean loss: 3.2177
Iteration: 1561; Percent done: 39.0%; Mean loss: 3.4625
Iteration: 1562; Percent done: 39.1%; Mean loss: 3.1893
Iteration: 1563; Percent done: 39.1%; Mean loss: 3.2633
Iteration: 1564; Percent done: 39.1%; Mean loss: 3.1563
Iteration: 1565; Percent done: 39.1%; Mean loss: 3.2968
```

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Iteration: 1566; Percent done: 39.1%; Mean loss: 3.4009
Iteration: 1567; Percent done: 39.2%; Mean loss: 3.2648
Iteration: 1568; Percent done: 39.2%; Mean loss: 3.2476
Iteration: 1569; Percent done: 39.2%; Mean loss: 3.3077
Iteration: 1570; Percent done: 39.2%; Mean loss: 3.2338
Iteration: 1571; Percent done: 39.3%; Mean loss: 3.4667
Iteration: 1572; Percent done: 39.3%; Mean loss: 3.3441
Iteration: 1573; Percent done: 39.3%; Mean loss: 3.3518
Iteration: 1574; Percent done: 39.4%; Mean loss: 3.4341
Iteration: 1575; Percent done: 39.4%; Mean loss: 3.2175
Iteration: 1576; Percent done: 39.4%; Mean loss: 3.3628
Iteration: 1577; Percent done: 39.4%; Mean loss: 2.9685
Iteration: 1578; Percent done: 39.5%; Mean loss: 2.9882
Iteration: 1579; Percent done: 39.5%; Mean loss: 3.1046
Iteration: 1580; Percent done: 39.5%; Mean loss: 3.3020
Iteration: 1581; Percent done: 39.5%; Mean loss: 3.2090
Iteration: 1582; Percent done: 39.6%; Mean loss: 3.2181
Iteration: 1583; Percent done: 39.6%; Mean loss: 3.1833
Iteration: 1584; Percent done: 39.6%; Mean loss: 3.3830
Iteration: 1585; Percent done: 39.6%; Mean loss: 3.0807
Iteration: 1586; Percent done: 39.6%; Mean loss: 3.3015
Iteration: 1587; Percent done: 39.7%; Mean loss: 3.2712
Iteration: 1588; Percent done: 39.7%; Mean loss: 3.2244
Iteration: 1589; Percent done: 39.7%; Mean loss: 2.9904
Iteration: 1590; Percent done: 39.8%; Mean loss: 3.2255
Iteration: 1591; Percent done: 39.8%; Mean loss: 3.4061
Iteration: 1592; Percent done: 39.8%; Mean loss: 3.0346
Iteration: 1593; Percent done: 39.8%; Mean loss: 3.5925
Iteration: 1594; Percent done: 39.9%; Mean loss: 3.3628
Iteration: 1595; Percent done: 39.9%; Mean loss: 3.3581
Iteration: 1596; Percent done: 39.9%; Mean loss: 3.3367
Iteration: 1597; Percent done: 39.9%; Mean loss: 3.1801
Iteration: 1598; Percent done: 40.0%; Mean loss: 3.4547
Iteration: 1599; Percent done: 40.0%; Mean loss: 3.1263
Iteration: 1600; Percent done: 40.0%; Mean loss: 3.2077
Iteration: 1601; Percent done: 40.0%; Mean loss: 3.1662
Iteration: 1602; Percent done: 40.1%; Mean loss: 3.6581
Iteration: 1603; Percent done: 40.1%; Mean loss: 3.3085
Iteration: 1604; Percent done: 40.1%; Mean loss: 3.2437
Iteration: 1605; Percent done: 40.1%; Mean loss: 3.2756
Iteration: 1606; Percent done: 40.2%; Mean loss: 3.4018
Iteration: 1607; Percent done: 40.2%; Mean loss: 3.2604
Iteration: 1608; Percent done: 40.2%; Mean loss: 3.1332
Iteration: 1609; Percent done: 40.2%; Mean loss: 3.2324
Iteration: 1610; Percent done: 40.2%; Mean loss: 3.3849
Iteration: 1611; Percent done: 40.3%; Mean loss: 3.4262
Iteration: 1612; Percent done: 40.3%; Mean loss: 3.4118
Iteration: 1613; Percent done: 40.3%; Mean loss: 3.2719
Iteration: 1614; Percent done: 40.4%; Mean loss: 3.4259
Iteration: 1615; Percent done: 40.4%; Mean loss: 3.3026
Iteration: 1616; Percent done: 40.4%; Mean loss: 3.2508
Iteration: 1617; Percent done: 40.4%; Mean loss: 3.4719
Iteration: 1618; Percent done: 40.5%; Mean loss: 3.2173
Iteration: 1619; Percent done: 40.5%; Mean loss: 3.1602
Iteration: 1620; Percent done: 40.5%; Mean loss: 3.1933
Iteration: 1621; Percent done: 40.5%; Mean loss: 3.1745
Iteration: 1622; Percent done: 40.6%; Mean loss: 3.2800
Iteration: 1623; Percent done: 40.6%; Mean loss: 3.5650
```

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Iteration: 1624; Percent done: 40.6%; Mean loss: 3.3122
Iteration: 1625; Percent done: 40.6%; Mean loss: 3.0433
Iteration: 1626; Percent done: 40.6%; Mean loss: 3.2838
Iteration: 1627; Percent done: 40.7%; Mean loss: 3.1773
Iteration: 1628; Percent done: 40.7%; Mean loss: 2.9217
Iteration: 1629; Percent done: 40.7%; Mean loss: 3.2889
Iteration: 1630; Percent done: 40.8%; Mean loss: 3.1053
Iteration: 1631; Percent done: 40.8%; Mean loss: 3.4509
Iteration: 1632; Percent done: 40.8%; Mean loss: 3.2058
Iteration: 1633; Percent done: 40.8%; Mean loss: 3.4636
Iteration: 1634; Percent done: 40.8%; Mean loss: 3.1984
Iteration: 1635; Percent done: 40.9%; Mean loss: 3.4713
Iteration: 1636; Percent done: 40.9%; Mean loss: 3.3790
Iteration: 1637; Percent done: 40.9%; Mean loss: 3.3539
Iteration: 1638; Percent done: 40.9%; Mean loss: 3.3708
Iteration: 1639; Percent done: 41.0%; Mean loss: 3.1945
Iteration: 1640; Percent done: 41.0%; Mean loss: 3.0869
Iteration: 1641; Percent done: 41.0%; Mean loss: 3.1592
Iteration: 1642; Percent done: 41.0%; Mean loss: 3.2442
Iteration: 1643; Percent done: 41.1%; Mean loss: 3.5689
Iteration: 1644; Percent done: 41.1%; Mean loss: 3.1900
Iteration: 1645; Percent done: 41.1%; Mean loss: 3.3477
Iteration: 1646; Percent done: 41.1%; Mean loss: 3.6216
Iteration: 1647; Percent done: 41.2%; Mean loss: 3.2131
Iteration: 1648; Percent done: 41.2%; Mean loss: 3.2700
Iteration: 1649; Percent done: 41.2%; Mean loss: 3.2516
Iteration: 1650; Percent done: 41.2%; Mean loss: 3.1455
Iteration: 1651; Percent done: 41.3%; Mean loss: 3.3389
Iteration: 1652; Percent done: 41.3%; Mean loss: 3.5853
Iteration: 1653; Percent done: 41.3%; Mean loss: 3.2060
Iteration: 1654; Percent done: 41.3%; Mean loss: 3.0496
Iteration: 1655; Percent done: 41.4%; Mean loss: 2.9921
Iteration: 1656; Percent done: 41.4%; Mean loss: 3.1570
Iteration: 1657; Percent done: 41.4%; Mean loss: 3.1325
Iteration: 1658; Percent done: 41.4%; Mean loss: 3.2462
Iteration: 1659; Percent done: 41.5%; Mean loss: 3.5177
Iteration: 1660; Percent done: 41.5%; Mean loss: 3.2862
Iteration: 1661; Percent done: 41.5%; Mean loss: 3.3296
Iteration: 1662; Percent done: 41.5%; Mean loss: 3.1929
Iteration: 1663; Percent done: 41.6%; Mean loss: 3.3399
Iteration: 1664; Percent done: 41.6%; Mean loss: 3.2805
Iteration: 1665; Percent done: 41.6%; Mean loss: 3.2924
Iteration: 1666; Percent done: 41.6%; Mean loss: 2.9594
Iteration: 1667; Percent done: 41.7%; Mean loss: 3.2894
Iteration: 1668; Percent done: 41.7%; Mean loss: 3.2802
Iteration: 1669; Percent done: 41.7%; Mean loss: 3.1784
Iteration: 1670; Percent done: 41.8%; Mean loss: 3.1308
Iteration: 1671; Percent done: 41.8%; Mean loss: 3.2783
Iteration: 1672; Percent done: 41.8%; Mean loss: 2.9705
Iteration: 1673; Percent done: 41.8%; Mean loss: 3.3106
Iteration: 1674; Percent done: 41.9%; Mean loss: 3.5096
Iteration: 1675; Percent done: 41.9%; Mean loss: 3.3845
Iteration: 1676; Percent done: 41.9%; Mean loss: 3.1334
Iteration: 1677; Percent done: 41.9%; Mean loss: 3.0324
Iteration: 1678; Percent done: 41.9%; Mean loss: 3.4166
Iteration: 1679; Percent done: 42.0%; Mean loss: 3.3579
Iteration: 1680; Percent done: 42.0%; Mean loss: 3.0618
Iteration: 1681; Percent done: 42.0%; Mean loss: 2.9842
```

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Iteration: 1682; Percent done: 42.0%; Mean loss: 3.3074
Iteration: 1683; Percent done: 42.1%; Mean loss: 2.9515
Iteration: 1684; Percent done: 42.1%; Mean loss: 3.5609
Iteration: 1685; Percent done: 42.1%; Mean loss: 3.1578
Iteration: 1686; Percent done: 42.1%; Mean loss: 3.3146
Iteration: 1687; Percent done: 42.2%; Mean loss: 3.0759
Iteration: 1688; Percent done: 42.2%; Mean loss: 3.2993
Iteration: 1689; Percent done: 42.2%; Mean loss: 3.0999
Iteration: 1690; Percent done: 42.2%; Mean loss: 3.3156
Iteration: 1691; Percent done: 42.3%; Mean loss: 3.0186
Iteration: 1692; Percent done: 42.3%; Mean loss: 3.3051
Iteration: 1693; Percent done: 42.3%; Mean loss: 3.1129
Iteration: 1694; Percent done: 42.4%; Mean loss: 3.3642
Iteration: 1695; Percent done: 42.4%; Mean loss: 3.3512
Iteration: 1696; Percent done: 42.4%; Mean loss: 3.1711
Iteration: 1697; Percent done: 42.4%; Mean loss: 3.2326
Iteration: 1698; Percent done: 42.4%; Mean loss: 3.1226
Iteration: 1699; Percent done: 42.5%; Mean loss: 3.2601
Iteration: 1700; Percent done: 42.5%; Mean loss: 3.5002
Iteration: 1701; Percent done: 42.5%; Mean loss: 2.9373
Iteration: 1702; Percent done: 42.5%; Mean loss: 3.1902
Iteration: 1703; Percent done: 42.6%; Mean loss: 3.4429
Iteration: 1704; Percent done: 42.6%; Mean loss: 3.4549
Iteration: 1705; Percent done: 42.6%; Mean loss: 3.3767
Iteration: 1706; Percent done: 42.6%; Mean loss: 3.1043
Iteration: 1707; Percent done: 42.7%; Mean loss: 3.4263
Iteration: 1708; Percent done: 42.7%; Mean loss: 3.1408
Iteration: 1709; Percent done: 42.7%; Mean loss: 3.2894
Iteration: 1710; Percent done: 42.8%; Mean loss: 3.1620
Iteration: 1711; Percent done: 42.8%; Mean loss: 3.1006
Iteration: 1712; Percent done: 42.8%; Mean loss: 3.2038
Iteration: 1713; Percent done: 42.8%; Mean loss: 2.9753
Iteration: 1714; Percent done: 42.9%; Mean loss: 3.0691
Iteration: 1715; Percent done: 42.9%; Mean loss: 3.1473
Iteration: 1716; Percent done: 42.9%; Mean loss: 3.2774
Iteration: 1717; Percent done: 42.9%; Mean loss: 3.2563
Iteration: 1718; Percent done: 43.0%; Mean loss: 3.3798
Iteration: 1719; Percent done: 43.0%; Mean loss: 3.6598
Iteration: 1720; Percent done: 43.0%; Mean loss: 3.0277
Iteration: 1721; Percent done: 43.0%; Mean loss: 3.2664
Iteration: 1722; Percent done: 43.0%; Mean loss: 3.0199
Iteration: 1723; Percent done: 43.1%; Mean loss: 3.0177
Iteration: 1724; Percent done: 43.1%; Mean loss: 3.1699
Iteration: 1725; Percent done: 43.1%; Mean loss: 3.2018
Iteration: 1726; Percent done: 43.1%; Mean loss: 3.2067
Iteration: 1727; Percent done: 43.2%; Mean loss: 3.2307
Iteration: 1728; Percent done: 43.2%; Mean loss: 3.0925
Iteration: 1729; Percent done: 43.2%; Mean loss: 3.4466
Iteration: 1730; Percent done: 43.2%; Mean loss: 3.3196
Iteration: 1731; Percent done: 43.3%; Mean loss: 3.2180
Iteration: 1732; Percent done: 43.3%; Mean loss: 3.4700
Iteration: 1733; Percent done: 43.3%; Mean loss: 3.4291
Iteration: 1734; Percent done: 43.4%; Mean loss: 3.0928
Iteration: 1735; Percent done: 43.4%; Mean loss: 3.1422
Iteration: 1736; Percent done: 43.4%; Mean loss: 3.4104
Iteration: 1737; Percent done: 43.4%; Mean loss: 3.3301
Iteration: 1738; Percent done: 43.5%; Mean loss: 3.2885
Iteration: 1739; Percent done: 43.5%; Mean loss: 3.2619
```

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Iteration: 1740; Percent done: 43.5%; Mean loss: 3.1958
Iteration: 1741; Percent done: 43.5%; Mean loss: 3.2703
Iteration: 1742; Percent done: 43.5%; Mean loss: 3.2603
Iteration: 1743; Percent done: 43.6%; Mean loss: 3.0231
Iteration: 1744; Percent done: 43.6%; Mean loss: 3.2272
Iteration: 1745; Percent done: 43.6%; Mean loss: 3.4664
Iteration: 1746; Percent done: 43.6%; Mean loss: 3.3998
Iteration: 1747; Percent done: 43.7%; Mean loss: 3.3996
Iteration: 1748; Percent done: 43.7%; Mean loss: 3.1169
Iteration: 1749; Percent done: 43.7%; Mean loss: 3.1605
Iteration: 1750; Percent done: 43.8%; Mean loss: 3.6208
Iteration: 1751; Percent done: 43.8%; Mean loss: 3.1490
Iteration: 1752; Percent done: 43.8%; Mean loss: 3.2441
Iteration: 1753; Percent done: 43.8%; Mean loss: 3.4336
Iteration: 1754; Percent done: 43.9%; Mean loss: 3.1393
Iteration: 1755; Percent done: 43.9%; Mean loss: 3.0772
Iteration: 1756; Percent done: 43.9%; Mean loss: 3.4260
Iteration: 1757; Percent done: 43.9%; Mean loss: 3.2846
Iteration: 1758; Percent done: 44.0%; Mean loss: 2.9897
Iteration: 1759; Percent done: 44.0%; Mean loss: 3.2924
Iteration: 1760; Percent done: 44.0%; Mean loss: 3.5196
Iteration: 1761; Percent done: 44.0%; Mean loss: 3.2541
Iteration: 1762; Percent done: 44.0%; Mean loss: 3.3083
Iteration: 1763; Percent done: 44.1%; Mean loss: 3.3585
Iteration: 1764; Percent done: 44.1%; Mean loss: 3.1644
Iteration: 1765; Percent done: 44.1%; Mean loss: 2.9464
Iteration: 1766; Percent done: 44.1%; Mean loss: 3.4604
Iteration: 1767; Percent done: 44.2%; Mean loss: 3.3909
Iteration: 1768; Percent done: 44.2%; Mean loss: 3.0609
Iteration: 1769; Percent done: 44.2%; Mean loss: 3.2249
Iteration: 1770; Percent done: 44.2%; Mean loss: 3.0777
Iteration: 1771; Percent done: 44.3%; Mean loss: 3.1048
Iteration: 1772; Percent done: 44.3%; Mean loss: 3.3374
Iteration: 1773; Percent done: 44.3%; Mean loss: 3.2349
Iteration: 1774; Percent done: 44.4%; Mean loss: 3.2050
Iteration: 1775; Percent done: 44.4%; Mean loss: 3.2056
Iteration: 1776; Percent done: 44.4%; Mean loss: 3.2351
Iteration: 1777; Percent done: 44.4%; Mean loss: 3.3858
Iteration: 1778; Percent done: 44.5%; Mean loss: 3.1532
Iteration: 1779; Percent done: 44.5%; Mean loss: 3.1080
Iteration: 1780; Percent done: 44.5%; Mean loss: 3.0943
Iteration: 1781; Percent done: 44.5%; Mean loss: 3.1475
Iteration: 1782; Percent done: 44.5%; Mean loss: 3.2907
Iteration: 1783; Percent done: 44.6%; Mean loss: 3.2592
Iteration: 1784; Percent done: 44.6%; Mean loss: 3.5774
Iteration: 1785; Percent done: 44.6%; Mean loss: 3.4638
Iteration: 1786; Percent done: 44.6%; Mean loss: 3.3981
Iteration: 1787; Percent done: 44.7%; Mean loss: 3.3660
Iteration: 1788; Percent done: 44.7%; Mean loss: 3.3117
Iteration: 1789; Percent done: 44.7%; Mean loss: 3.3814
Iteration: 1790; Percent done: 44.8%; Mean loss: 3.1356
Iteration: 1791; Percent done: 44.8%; Mean loss: 3.3036
Iteration: 1792; Percent done: 44.8%; Mean loss: 3.1328
Iteration: 1793; Percent done: 44.8%; Mean loss: 3.1984
Iteration: 1794; Percent done: 44.9%; Mean loss: 3.1927
Iteration: 1795; Percent done: 44.9%; Mean loss: 3.1747
Iteration: 1796; Percent done: 44.9%; Mean loss: 3.1483
Iteration: 1797; Percent done: 44.9%; Mean loss: 3.0484
```

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Iteration: 1798; Percent done: 45.0%; Mean loss: 3.3168
Iteration: 1799; Percent done: 45.0%; Mean loss: 3.2833
Iteration: 1800; Percent done: 45.0%; Mean loss: 3.2790
Iteration: 1801; Percent done: 45.0%; Mean loss: 3.1684
Iteration: 1802; Percent done: 45.1%; Mean loss: 3.1272
Iteration: 1803; Percent done: 45.1%; Mean loss: 3.2351
Iteration: 1804; Percent done: 45.1%; Mean loss: 3.2353
Iteration: 1805; Percent done: 45.1%; Mean loss: 3.1679
Iteration: 1806; Percent done: 45.1%; Mean loss: 3.0080
Iteration: 1807; Percent done: 45.2%; Mean loss: 3.0477
Iteration: 1808; Percent done: 45.2%; Mean loss: 3.1596
Iteration: 1809; Percent done: 45.2%; Mean loss: 3.3819
Iteration: 1810; Percent done: 45.2%; Mean loss: 3.1115
Iteration: 1811; Percent done: 45.3%; Mean loss: 3.2694
Iteration: 1812; Percent done: 45.3%; Mean loss: 3.3271
Iteration: 1813; Percent done: 45.3%; Mean loss: 3.3283
Iteration: 1814; Percent done: 45.4%; Mean loss: 3.3763
Iteration: 1815; Percent done: 45.4%; Mean loss: 3.0048
Iteration: 1816; Percent done: 45.4%; Mean loss: 3.2242
Iteration: 1817; Percent done: 45.4%; Mean loss: 3.4186
Iteration: 1818; Percent done: 45.5%; Mean loss: 3.2257
Iteration: 1819; Percent done: 45.5%; Mean loss: 3.3625
Iteration: 1820; Percent done: 45.5%; Mean loss: 3.3219
Iteration: 1821; Percent done: 45.5%; Mean loss: 3.2192
Iteration: 1822; Percent done: 45.6%; Mean loss: 3.5445
Iteration: 1823; Percent done: 45.6%; Mean loss: 2.9735
Iteration: 1824; Percent done: 45.6%; Mean loss: 3.0614
Iteration: 1825; Percent done: 45.6%; Mean loss: 3.1539
Iteration: 1826; Percent done: 45.6%; Mean loss: 3.2117
Iteration: 1827; Percent done: 45.7%; Mean loss: 3.1808
Iteration: 1828; Percent done: 45.7%; Mean loss: 3.0243
Iteration: 1829; Percent done: 45.7%; Mean loss: 3.0878
Iteration: 1830; Percent done: 45.8%; Mean loss: 3.4138
Iteration: 1831; Percent done: 45.8%; Mean loss: 3.3309
Iteration: 1832; Percent done: 45.8%; Mean loss: 3.3153
Iteration: 1833; Percent done: 45.8%; Mean loss: 3.2462
Iteration: 1834; Percent done: 45.9%; Mean loss: 3.0292
Iteration: 1835; Percent done: 45.9%; Mean loss: 3.4818
Iteration: 1836; Percent done: 45.9%; Mean loss: 3.1316
Iteration: 1837; Percent done: 45.9%; Mean loss: 3.2154
Iteration: 1838; Percent done: 46.0%; Mean loss: 3.5876
Iteration: 1839; Percent done: 46.0%; Mean loss: 3.2703
Iteration: 1840; Percent done: 46.0%; Mean loss: 3.0888
Iteration: 1841; Percent done: 46.0%; Mean loss: 3.4519
Iteration: 1842; Percent done: 46.1%; Mean loss: 3.1347
Iteration: 1843; Percent done: 46.1%; Mean loss: 3.1957
Iteration: 1844; Percent done: 46.1%; Mean loss: 3.4353
Iteration: 1845; Percent done: 46.1%; Mean loss: 3.2616
Iteration: 1846; Percent done: 46.2%; Mean loss: 3.2369
Iteration: 1847; Percent done: 46.2%; Mean loss: 3.2109
Iteration: 1848; Percent done: 46.2%; Mean loss: 3.0780
Iteration: 1849; Percent done: 46.2%; Mean loss: 3.4671
Iteration: 1850; Percent done: 46.2%; Mean loss: 3.3129
Iteration: 1851; Percent done: 46.3%; Mean loss: 3.2482
Iteration: 1852; Percent done: 46.3%; Mean loss: 3.1303
Iteration: 1853; Percent done: 46.3%; Mean loss: 3.0590
Iteration: 1854; Percent done: 46.4%; Mean loss: 3.0032
Iteration: 1855; Percent done: 46.4%; Mean loss: 3.2342
```

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Iteration: 1856; Percent done: 46.4%; Mean loss: 3.1819
Iteration: 1857; Percent done: 46.4%; Mean loss: 3.4835
Iteration: 1858; Percent done: 46.5%; Mean loss: 3.3700
Iteration: 1859; Percent done: 46.5%; Mean loss: 3.1716
Iteration: 1860; Percent done: 46.5%; Mean loss: 3.1662
Iteration: 1861; Percent done: 46.5%; Mean loss: 3.3274
Iteration: 1862; Percent done: 46.6%; Mean loss: 3.3390
Iteration: 1863; Percent done: 46.6%; Mean loss: 3.3178
Iteration: 1864; Percent done: 46.6%; Mean loss: 3.3284
Iteration: 1865; Percent done: 46.6%; Mean loss: 3.3102
Iteration: 1866; Percent done: 46.7%; Mean loss: 3.2224
Iteration: 1867; Percent done: 46.7%; Mean loss: 3.2698
Iteration: 1868; Percent done: 46.7%; Mean loss: 3.1619
Iteration: 1869; Percent done: 46.7%; Mean loss: 3.2361
Iteration: 1870; Percent done: 46.8%; Mean loss: 3.1286
Iteration: 1871; Percent done: 46.8%; Mean loss: 3.4217
Iteration: 1872; Percent done: 46.8%; Mean loss: 3.2899
Iteration: 1873; Percent done: 46.8%; Mean loss: 2.9094
Iteration: 1874; Percent done: 46.9%; Mean loss: 3.0587
Iteration: 1875; Percent done: 46.9%; Mean loss: 3.1458
Iteration: 1876; Percent done: 46.9%; Mean loss: 3.0752
Iteration: 1877; Percent done: 46.9%; Mean loss: 3.0154
Iteration: 1878; Percent done: 46.9%; Mean loss: 3.3961
Iteration: 1879; Percent done: 47.0%; Mean loss: 3.2689
Iteration: 1880; Percent done: 47.0%; Mean loss: 3.2332
Iteration: 1881; Percent done: 47.0%; Mean loss: 3.1012
Iteration: 1882; Percent done: 47.0%; Mean loss: 3.0252
Iteration: 1883; Percent done: 47.1%; Mean loss: 3.1559
Iteration: 1884; Percent done: 47.1%; Mean loss: 3.3659
Iteration: 1885; Percent done: 47.1%; Mean loss: 3.1535
Iteration: 1886; Percent done: 47.1%; Mean loss: 3.0893
Iteration: 1887; Percent done: 47.2%; Mean loss: 3.1149
Iteration: 1888; Percent done: 47.2%; Mean loss: 3.3370
Iteration: 1889; Percent done: 47.2%; Mean loss: 3.2081
Iteration: 1890; Percent done: 47.2%; Mean loss: 3.3235
Iteration: 1891; Percent done: 47.3%; Mean loss: 3.3557
Iteration: 1892; Percent done: 47.3%; Mean loss: 3.3293
Iteration: 1893; Percent done: 47.3%; Mean loss: 3.2992
Iteration: 1894; Percent done: 47.3%; Mean loss: 3.4018
Iteration: 1895; Percent done: 47.4%; Mean loss: 3.1179
Iteration: 1896; Percent done: 47.4%; Mean loss: 3.2583
Iteration: 1897; Percent done: 47.4%; Mean loss: 3.0859
Iteration: 1898; Percent done: 47.4%; Mean loss: 3.3234
Iteration: 1899; Percent done: 47.5%; Mean loss: 3.1667
Iteration: 1900; Percent done: 47.5%; Mean loss: 3.2373
Iteration: 1901; Percent done: 47.5%; Mean loss: 2.9867
Iteration: 1902; Percent done: 47.5%; Mean loss: 3.2995
Iteration: 1903; Percent done: 47.6%; Mean loss: 3.0895
Iteration: 1904; Percent done: 47.6%; Mean loss: 3.0740
Iteration: 1905; Percent done: 47.6%; Mean loss: 3.1262
Iteration: 1906; Percent done: 47.6%; Mean loss: 3.3902
Iteration: 1907; Percent done: 47.7%; Mean loss: 3.2394
Iteration: 1908; Percent done: 47.7%; Mean loss: 3.2531
Iteration: 1909; Percent done: 47.7%; Mean loss: 3.1511
Iteration: 1910; Percent done: 47.8%; Mean loss: 3.5195
Iteration: 1911; Percent done: 47.8%; Mean loss: 3.2437
Iteration: 1912; Percent done: 47.8%; Mean loss: 3.2951
Iteration: 1913; Percent done: 47.8%; Mean loss: 3.3656
Iteration: 1914; Percent done: 47.9%; Mean loss: 3.2130
```

```
Iteration: 1914; Percent done: 47.9%; Mean loss: 3.2120
Iteration: 1915; Percent done: 47.9%; Mean loss: 3.2221
Iteration: 1916; Percent done: 47.9%; Mean loss: 3.2778
Iteration: 1917; Percent done: 47.9%; Mean loss: 3.0314
Iteration: 1918; Percent done: 47.9%; Mean loss: 3.0895
Iteration: 1919; Percent done: 48.0%; Mean loss: 3.3278
Iteration: 1920; Percent done: 48.0%; Mean loss: 3.1870
Iteration: 1921; Percent done: 48.0%; Mean loss: 3.3825
Iteration: 1922; Percent done: 48.0%; Mean loss: 3.2028
Iteration: 1923; Percent done: 48.1%; Mean loss: 3.2221
Iteration: 1924; Percent done: 48.1%; Mean loss: 3.2444
Iteration: 1925; Percent done: 48.1%; Mean loss: 3.3539
Iteration: 1926; Percent done: 48.1%; Mean loss: 2.9959
Iteration: 1927; Percent done: 48.2%; Mean loss: 3.2416
Iteration: 1928; Percent done: 48.2%; Mean loss: 3.1916
Iteration: 1929; Percent done: 48.2%; Mean loss: 3.2943
Iteration: 1930; Percent done: 48.2%; Mean loss: 3.2780
Iteration: 1931; Percent done: 48.3%; Mean loss: 3.3224
Iteration: 1932; Percent done: 48.3%; Mean loss: 3.3226
Iteration: 1933; Percent done: 48.3%; Mean loss: 3.2685
Iteration: 1934; Percent done: 48.4%; Mean loss: 3.0201
Iteration: 1935; Percent done: 48.4%; Mean loss: 3.3948
Iteration: 1936; Percent done: 48.4%; Mean loss: 3.0538
Iteration: 1937; Percent done: 48.4%; Mean loss: 3.4377
Iteration: 1938; Percent done: 48.4%; Mean loss: 3.2613
Iteration: 1939; Percent done: 48.5%; Mean loss: 3.0148
Iteration: 1940; Percent done: 48.5%; Mean loss: 3.1574
Iteration: 1941; Percent done: 48.5%; Mean loss: 3.4606
Iteration: 1942; Percent done: 48.5%; Mean loss: 3.1309
Iteration: 1943; Percent done: 48.6%; Mean loss: 2.9463
Iteration: 1944; Percent done: 48.6%; Mean loss: 3.1005
Iteration: 1945; Percent done: 48.6%; Mean loss: 2.9949
Iteration: 1946; Percent done: 48.6%; Mean loss: 3.2065
Iteration: 1947; Percent done: 48.7%; Mean loss: 3.1120
Iteration: 1948; Percent done: 48.7%; Mean loss: 3.3554
Iteration: 1949; Percent done: 48.7%; Mean loss: 3.0168
Iteration: 1950; Percent done: 48.8%; Mean loss: 3.3498
Iteration: 1951; Percent done: 48.8%; Mean loss: 3.3505
Iteration: 1952; Percent done: 48.8%; Mean loss: 3.3931
Iteration: 1953; Percent done: 48.8%; Mean loss: 3.3628
Iteration: 1954; Percent done: 48.9%; Mean loss: 3.3243
Iteration: 1955; Percent done: 48.9%; Mean loss: 3.3412
Iteration: 1956; Percent done: 48.9%; Mean loss: 2.9316
Iteration: 1957; Percent done: 48.9%; Mean loss: 3.3298
Iteration: 1958; Percent done: 48.9%; Mean loss: 3.2777
Iteration: 1959; Percent done: 49.0%; Mean loss: 3.2180
Iteration: 1960; Percent done: 49.0%; Mean loss: 3.5471
Iteration: 1961; Percent done: 49.0%; Mean loss: 3.0710
Iteration: 1962; Percent done: 49.0%; Mean loss: 2.9257
Iteration: 1963; Percent done: 49.1%; Mean loss: 2.9646
Iteration: 1964; Percent done: 49.1%; Mean loss: 3.1792
Iteration: 1965; Percent done: 49.1%; Mean loss: 3.0138
Iteration: 1966; Percent done: 49.1%; Mean loss: 3.1733
Iteration: 1967; Percent done: 49.2%; Mean loss: 3.0507
Iteration: 1968; Percent done: 49.2%; Mean loss: 3.3254
Iteration: 1969; Percent done: 49.2%; Mean loss: 3.1379
Iteration: 1970; Percent done: 49.2%; Mean loss: 3.2856
Iteration: 1971; Percent done: 49.3%; Mean loss: 3.3213
Iteration: 1972; Percent done: 49.3%; Mean loss: 3.4683
```

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Iteration: 1972; Percent done: 49.3%; Mean loss: 3.4683
Iteration: 1973; Percent done: 49.3%; Mean loss: 3.1569
Iteration: 1974; Percent done: 49.4%; Mean loss: 3.2542
Iteration: 1975; Percent done: 49.4%; Mean loss: 3.3044
Iteration: 1976; Percent done: 49.4%; Mean loss: 3.1159
Iteration: 1977; Percent done: 49.4%; Mean loss: 3.1143
Iteration: 1978; Percent done: 49.5%; Mean loss: 3.1891
Iteration: 1979; Percent done: 49.5%; Mean loss: 3.1023
Iteration: 1980; Percent done: 49.5%; Mean loss: 3.0621
Iteration: 1981; Percent done: 49.5%; Mean loss: 3.2760
Iteration: 1982; Percent done: 49.5%; Mean loss: 3.2036
Iteration: 1983; Percent done: 49.6%; Mean loss: 3.0950
Iteration: 1984; Percent done: 49.6%; Mean loss: 3.2035
Iteration: 1985; Percent done: 49.6%; Mean loss: 3.1532
Iteration: 1986; Percent done: 49.6%; Mean loss: 3.1833
Iteration: 1987; Percent done: 49.7%; Mean loss: 3.2061
Iteration: 1988; Percent done: 49.7%; Mean loss: 3.1043
Iteration: 1989; Percent done: 49.7%; Mean loss: 2.9069
Iteration: 1990; Percent done: 49.8%; Mean loss: 3.0826
Iteration: 1991; Percent done: 49.8%; Mean loss: 3.3267
Iteration: 1992; Percent done: 49.8%; Mean loss: 3.3577
Iteration: 1993; Percent done: 49.8%; Mean loss: 3.1788
Iteration: 1994; Percent done: 49.9%; Mean loss: 3.1373
Iteration: 1995; Percent done: 49.9%; Mean loss: 3.1241
Iteration: 1996; Percent done: 49.9%; Mean loss: 3.1482
Iteration: 1997; Percent done: 49.9%; Mean loss: 3.1955
Iteration: 1998; Percent done: 50.0%; Mean loss: 3.2386
Iteration: 1999; Percent done: 50.0%; Mean loss: 3.2737
Iteration: 2000; Percent done: 50.0%; Mean loss: 3.3735
Iteration: 2001; Percent done: 50.0%; Mean loss: 2.9397
Iteration: 2002; Percent done: 50.0%; Mean loss: 3.0111
Iteration: 2003; Percent done: 50.1%; Mean loss: 3.2226
Iteration: 2004; Percent done: 50.1%; Mean loss: 2.8050
Iteration: 2005; Percent done: 50.1%; Mean loss: 3.1846
Iteration: 2006; Percent done: 50.1%; Mean loss: 3.0391
Iteration: 2007; Percent done: 50.2%; Mean loss: 3.3109
Iteration: 2008; Percent done: 50.2%; Mean loss: 2.8029
Iteration: 2009; Percent done: 50.2%; Mean loss: 3.1386
Iteration: 2010; Percent done: 50.2%; Mean loss: 3.1550
Iteration: 2011; Percent done: 50.3%; Mean loss: 3.1943
Iteration: 2012; Percent done: 50.3%; Mean loss: 3.2878
Iteration: 2013; Percent done: 50.3%; Mean loss: 3.2169
Iteration: 2014; Percent done: 50.3%; Mean loss: 3.3822
Iteration: 2015; Percent done: 50.4%; Mean loss: 2.8653
Iteration: 2016; Percent done: 50.4%; Mean loss: 3.5133
Iteration: 2017; Percent done: 50.4%; Mean loss: 3.1814
Iteration: 2018; Percent done: 50.4%; Mean loss: 3.0678
Iteration: 2019; Percent done: 50.5%; Mean loss: 3.2102
Iteration: 2020; Percent done: 50.5%; Mean loss: 3.2692
Iteration: 2021; Percent done: 50.5%; Mean loss: 3.2506
Iteration: 2022; Percent done: 50.5%; Mean loss: 3.0128
Iteration: 2023; Percent done: 50.6%; Mean loss: 3.2792
Iteration: 2024; Percent done: 50.6%; Mean loss: 3.1403
Iteration: 2025; Percent done: 50.6%; Mean loss: 2.9580
Iteration: 2026; Percent done: 50.6%; Mean loss: 3.2485
Iteration: 2027; Percent done: 50.7%; Mean loss: 3.2382
Iteration: 2028; Percent done: 50.7%; Mean loss: 3.1550
Iteration: 2029; Percent done: 50.7%; Mean loss: 3.0287
Iteration: 2030; Percent done: 50.7%; Mean loss: 2.9804
```

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Iteration: 2030; Percent done: 50.7%; Mean loss: 2.9804
Iteration: 2031; Percent done: 50.8%; Mean loss: 3.3426
Iteration: 2032; Percent done: 50.8%; Mean loss: 3.2712
Iteration: 2033; Percent done: 50.8%; Mean loss: 3.1534
Iteration: 2034; Percent done: 50.8%; Mean loss: 3.1412
Iteration: 2035; Percent done: 50.9%; Mean loss: 3.1994
Iteration: 2036; Percent done: 50.9%; Mean loss: 3.2981
Iteration: 2037; Percent done: 50.9%; Mean loss: 3.1288
Iteration: 2038; Percent done: 50.9%; Mean loss: 3.1434
Iteration: 2039; Percent done: 51.0%; Mean loss: 3.2531
Iteration: 2040; Percent done: 51.0%; Mean loss: 3.0278
Iteration: 2041; Percent done: 51.0%; Mean loss: 3.2849
Iteration: 2042; Percent done: 51.0%; Mean loss: 3.1832
Iteration: 2043; Percent done: 51.1%; Mean loss: 3.3777
Iteration: 2044; Percent done: 51.1%; Mean loss: 3.3237
Iteration: 2045; Percent done: 51.1%; Mean loss: 3.0336
Iteration: 2046; Percent done: 51.1%; Mean loss: 3.0942
Iteration: 2047; Percent done: 51.2%; Mean loss: 3.1043
Iteration: 2048; Percent done: 51.2%; Mean loss: 3.2727
Iteration: 2049; Percent done: 51.2%; Mean loss: 2.9645
Iteration: 2050; Percent done: 51.2%; Mean loss: 3.0535
Iteration: 2051; Percent done: 51.3%; Mean loss: 3.3818
Iteration: 2052; Percent done: 51.3%; Mean loss: 3.2121
Iteration: 2053; Percent done: 51.3%; Mean loss: 3.4983
Iteration: 2054; Percent done: 51.3%; Mean loss: 3.2632
Iteration: 2055; Percent done: 51.4%; Mean loss: 3.2103
Iteration: 2056; Percent done: 51.4%; Mean loss: 3.3822
Iteration: 2057; Percent done: 51.4%; Mean loss: 3.2364
Iteration: 2058; Percent done: 51.4%; Mean loss: 3.0963
Iteration: 2059; Percent done: 51.5%; Mean loss: 3.4211
Iteration: 2060; Percent done: 51.5%; Mean loss: 3.0255
Iteration: 2061; Percent done: 51.5%; Mean loss: 3.2489
Iteration: 2062; Percent done: 51.5%; Mean loss: 3.1763
Iteration: 2063; Percent done: 51.6%; Mean loss: 3.2218
Iteration: 2064; Percent done: 51.6%; Mean loss: 3.0612
Iteration: 2065; Percent done: 51.6%; Mean loss: 3.0179
Iteration: 2066; Percent done: 51.6%; Mean loss: 3.3266
Iteration: 2067; Percent done: 51.7%; Mean loss: 3.1958
Iteration: 2068; Percent done: 51.7%; Mean loss: 3.2157
Iteration: 2069; Percent done: 51.7%; Mean loss: 3.3190
Iteration: 2070; Percent done: 51.7%; Mean loss: 3.1336
Iteration: 2071; Percent done: 51.8%; Mean loss: 3.4023
Iteration: 2072; Percent done: 51.8%; Mean loss: 3.1956
Iteration: 2073; Percent done: 51.8%; Mean loss: 3.4219
Iteration: 2074; Percent done: 51.8%; Mean loss: 3.1687
Iteration: 2075; Percent done: 51.9%; Mean loss: 3.3490
Iteration: 2076; Percent done: 51.9%; Mean loss: 3.0066
Iteration: 2077; Percent done: 51.9%; Mean loss: 3.3350
Iteration: 2078; Percent done: 51.9%; Mean loss: 2.9712
Iteration: 2079; Percent done: 52.0%; Mean loss: 3.4459
Iteration: 2080; Percent done: 52.0%; Mean loss: 3.2183
Iteration: 2081; Percent done: 52.0%; Mean loss: 3.2161
Iteration: 2082; Percent done: 52.0%; Mean loss: 2.9112
Iteration: 2083; Percent done: 52.1%; Mean loss: 3.0391
Iteration: 2084; Percent done: 52.1%; Mean loss: 3.1826
Iteration: 2085; Percent done: 52.1%; Mean loss: 2.8660
Iteration: 2086; Percent done: 52.1%; Mean loss: 3.0348
Iteration: 2087; Percent done: 52.2%; Mean loss: 3.0460
Iteration: 2088; Percent done: 52.2%; Mean loss: 3.0971
```

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Iteration: 2089; Percent done: 52.2%; Mean loss: 3.2123
Iteration: 2090; Percent done: 52.2%; Mean loss: 3.1321
Iteration: 2091; Percent done: 52.3%; Mean loss: 2.9332
Iteration: 2092; Percent done: 52.3%; Mean loss: 3.4611
Iteration: 2093; Percent done: 52.3%; Mean loss: 3.3357
Iteration: 2094; Percent done: 52.3%; Mean loss: 3.0199
Iteration: 2095; Percent done: 52.4%; Mean loss: 3.1945
Iteration: 2096; Percent done: 52.4%; Mean loss: 3.1376
Iteration: 2097; Percent done: 52.4%; Mean loss: 3.0298
Iteration: 2098; Percent done: 52.4%; Mean loss: 2.8526
Iteration: 2099; Percent done: 52.5%; Mean loss: 3.1534
Iteration: 2100; Percent done: 52.5%; Mean loss: 3.1960
Iteration: 2101; Percent done: 52.5%; Mean loss: 3.0537
Iteration: 2102; Percent done: 52.5%; Mean loss: 3.3027
Iteration: 2103; Percent done: 52.6%; Mean loss: 3.3536
Iteration: 2104; Percent done: 52.6%; Mean loss: 3.2617
Iteration: 2105; Percent done: 52.6%; Mean loss: 3.3996
Iteration: 2106; Percent done: 52.6%; Mean loss: 3.0658
Iteration: 2107; Percent done: 52.7%; Mean loss: 3.0735
Iteration: 2108; Percent done: 52.7%; Mean loss: 2.9232
Iteration: 2109; Percent done: 52.7%; Mean loss: 3.2105
Iteration: 2110; Percent done: 52.8%; Mean loss: 3.2755
Iteration: 2111; Percent done: 52.8%; Mean loss: 3.3840
Iteration: 2112; Percent done: 52.8%; Mean loss: 3.1741
Iteration: 2113; Percent done: 52.8%; Mean loss: 3.1838
Iteration: 2114; Percent done: 52.8%; Mean loss: 3.0873
Iteration: 2115; Percent done: 52.9%; Mean loss: 3.1200
Iteration: 2116; Percent done: 52.9%; Mean loss: 3.3835
Iteration: 2117; Percent done: 52.9%; Mean loss: 3.1748
Iteration: 2118; Percent done: 52.9%; Mean loss: 3.1110
Iteration: 2119; Percent done: 53.0%; Mean loss: 3.1295
Iteration: 2120; Percent done: 53.0%; Mean loss: 3.1473
Iteration: 2121; Percent done: 53.0%; Mean loss: 3.0849
Iteration: 2122; Percent done: 53.0%; Mean loss: 2.8363
Iteration: 2123; Percent done: 53.1%; Mean loss: 2.9242
Iteration: 2124; Percent done: 53.1%; Mean loss: 2.9348
Iteration: 2125; Percent done: 53.1%; Mean loss: 3.0968
Iteration: 2126; Percent done: 53.1%; Mean loss: 3.1429
Iteration: 2127; Percent done: 53.2%; Mean loss: 3.3317
Iteration: 2128; Percent done: 53.2%; Mean loss: 3.3370
Iteration: 2129; Percent done: 53.2%; Mean loss: 2.9616
Iteration: 2130; Percent done: 53.2%; Mean loss: 3.3619
Iteration: 2131; Percent done: 53.3%; Mean loss: 3.2235
Iteration: 2132; Percent done: 53.3%; Mean loss: 2.9873
Iteration: 2133; Percent done: 53.3%; Mean loss: 3.2635
Iteration: 2134; Percent done: 53.3%; Mean loss: 3.0123
Iteration: 2135; Percent done: 53.4%; Mean loss: 3.0901
Iteration: 2136; Percent done: 53.4%; Mean loss: 3.2045
Iteration: 2137; Percent done: 53.4%; Mean loss: 2.9735
Iteration: 2138; Percent done: 53.4%; Mean loss: 3.4143
Iteration: 2139; Percent done: 53.5%; Mean loss: 3.2911
Iteration: 2140; Percent done: 53.5%; Mean loss: 2.9599
Iteration: 2141; Percent done: 53.5%; Mean loss: 3.3820
Iteration: 2142; Percent done: 53.5%; Mean loss: 2.8892
Iteration: 2143; Percent done: 53.6%; Mean loss: 3.0851
Iteration: 2144; Percent done: 53.6%; Mean loss: 3.1049
Iteration: 2145; Percent done: 53.6%; Mean loss: 3.0596
Iteration: 2146; Percent done: 53.6%; Mean loss: 2.9199
```

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Iteration: 2147; Percent done: 53.7%; Mean loss: 3.0179
Iteration: 2148; Percent done: 53.7%; Mean loss: 3.2662
Iteration: 2149; Percent done: 53.7%; Mean loss: 2.9421
Iteration: 2150; Percent done: 53.8%; Mean loss: 3.2916
Iteration: 2151; Percent done: 53.8%; Mean loss: 3.2817
Iteration: 2152; Percent done: 53.8%; Mean loss: 3.1180
Iteration: 2153; Percent done: 53.8%; Mean loss: 3.0953
Iteration: 2154; Percent done: 53.8%; Mean loss: 3.1246
Iteration: 2155; Percent done: 53.9%; Mean loss: 2.9468
Iteration: 2156; Percent done: 53.9%; Mean loss: 3.2513
Iteration: 2157; Percent done: 53.9%; Mean loss: 3.1070
Iteration: 2158; Percent done: 53.9%; Mean loss: 3.2761
Iteration: 2159; Percent done: 54.0%; Mean loss: 3.2211
Iteration: 2160; Percent done: 54.0%; Mean loss: 3.1683
Iteration: 2161; Percent done: 54.0%; Mean loss: 3.2571
Iteration: 2162; Percent done: 54.0%; Mean loss: 3.0653
Iteration: 2163; Percent done: 54.1%; Mean loss: 3.1321
Iteration: 2164; Percent done: 54.1%; Mean loss: 3.1668
Iteration: 2165; Percent done: 54.1%; Mean loss: 3.2974
Iteration: 2166; Percent done: 54.1%; Mean loss: 3.1329
Iteration: 2167; Percent done: 54.2%; Mean loss: 3.3188
Iteration: 2168; Percent done: 54.2%; Mean loss: 3.1366
Iteration: 2169; Percent done: 54.2%; Mean loss: 3.2161
Iteration: 2170; Percent done: 54.2%; Mean loss: 3.1189
Iteration: 2171; Percent done: 54.3%; Mean loss: 2.9953
Iteration: 2172; Percent done: 54.3%; Mean loss: 3.4041
Iteration: 2173; Percent done: 54.3%; Mean loss: 2.9451
Iteration: 2174; Percent done: 54.4%; Mean loss: 3.2417
Iteration: 2175; Percent done: 54.4%; Mean loss: 3.1027
Iteration: 2176; Percent done: 54.4%; Mean loss: 2.8691
Iteration: 2177; Percent done: 54.4%; Mean loss: 3.3056
Iteration: 2178; Percent done: 54.4%; Mean loss: 3.2586
Iteration: 2179; Percent done: 54.5%; Mean loss: 3.2967
Iteration: 2180; Percent done: 54.5%; Mean loss: 3.1358
Iteration: 2181; Percent done: 54.5%; Mean loss: 3.0304
Iteration: 2182; Percent done: 54.5%; Mean loss: 3.0570
Iteration: 2183; Percent done: 54.6%; Mean loss: 2.9736
Iteration: 2184; Percent done: 54.6%; Mean loss: 3.3319
Iteration: 2185; Percent done: 54.6%; Mean loss: 3.1129
Iteration: 2186; Percent done: 54.6%; Mean loss: 3.0295
Iteration: 2187; Percent done: 54.7%; Mean loss: 3.1584
Iteration: 2188; Percent done: 54.7%; Mean loss: 3.0579
Iteration: 2189; Percent done: 54.7%; Mean loss: 3.3610
Iteration: 2190; Percent done: 54.8%; Mean loss: 3.0495
Iteration: 2191; Percent done: 54.8%; Mean loss: 3.2688
Iteration: 2192; Percent done: 54.8%; Mean loss: 3.2481
Iteration: 2193; Percent done: 54.8%; Mean loss: 3.0000
Iteration: 2194; Percent done: 54.9%; Mean loss: 3.2786
Iteration: 2195; Percent done: 54.9%; Mean loss: 3.1324
Iteration: 2196; Percent done: 54.9%; Mean loss: 3.2744
Iteration: 2197; Percent done: 54.9%; Mean loss: 3.2786
Iteration: 2198; Percent done: 54.9%; Mean loss: 3.1672
Iteration: 2199; Percent done: 55.0%; Mean loss: 3.0367
Iteration: 2200; Percent done: 55.0%; Mean loss: 3.2175
Iteration: 2201; Percent done: 55.0%; Mean loss: 3.5635
Iteration: 2202; Percent done: 55.0%; Mean loss: 3.2432
Iteration: 2203; Percent done: 55.1%; Mean loss: 3.0533
Iteration: 2204; Percent done: 55.1%; Mean loss: 2.9406
```

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Iteration: 2205; Percent done: 55.1%; Mean loss: 2.9967
Iteration: 2206; Percent done: 55.1%; Mean loss: 3.1826
Iteration: 2207; Percent done: 55.2%; Mean loss: 3.1067
Iteration: 2208; Percent done: 55.2%; Mean loss: 3.0350
Iteration: 2209; Percent done: 55.2%; Mean loss: 3.1062
Iteration: 2210; Percent done: 55.2%; Mean loss: 3.0310
Iteration: 2211; Percent done: 55.3%; Mean loss: 3.0344
Iteration: 2212; Percent done: 55.3%; Mean loss: 3.1799
Iteration: 2213; Percent done: 55.3%; Mean loss: 2.9876
Iteration: 2214; Percent done: 55.4%; Mean loss: 3.3797
Iteration: 2215; Percent done: 55.4%; Mean loss: 3.0541
Iteration: 2216; Percent done: 55.4%; Mean loss: 3.1646
Iteration: 2217; Percent done: 55.4%; Mean loss: 3.5189
Iteration: 2218; Percent done: 55.5%; Mean loss: 3.1140
Iteration: 2219; Percent done: 55.5%; Mean loss: 3.0050
Iteration: 2220; Percent done: 55.5%; Mean loss: 3.2696
Iteration: 2221; Percent done: 55.5%; Mean loss: 3.1427
Iteration: 2222; Percent done: 55.5%; Mean loss: 3.0850
Iteration: 2223; Percent done: 55.6%; Mean loss: 3.1140
Iteration: 2224; Percent done: 55.6%; Mean loss: 3.1574
Iteration: 2225; Percent done: 55.6%; Mean loss: 3.0792
Iteration: 2226; Percent done: 55.6%; Mean loss: 3.1574
Iteration: 2227; Percent done: 55.7%; Mean loss: 3.1769
Iteration: 2228; Percent done: 55.7%; Mean loss: 3.0512
Iteration: 2229; Percent done: 55.7%; Mean loss: 3.2675
Iteration: 2230; Percent done: 55.8%; Mean loss: 3.2439
Iteration: 2231; Percent done: 55.8%; Mean loss: 3.0875
Iteration: 2232; Percent done: 55.8%; Mean loss: 3.2566
Iteration: 2233; Percent done: 55.8%; Mean loss: 3.2929
Iteration: 2234; Percent done: 55.9%; Mean loss: 3.1146
Iteration: 2235; Percent done: 55.9%; Mean loss: 3.0493
Iteration: 2236; Percent done: 55.9%; Mean loss: 3.2050
Iteration: 2237; Percent done: 55.9%; Mean loss: 3.2478
Iteration: 2238; Percent done: 56.0%; Mean loss: 3.2683
Iteration: 2239; Percent done: 56.0%; Mean loss: 3.2982
Iteration: 2240; Percent done: 56.0%; Mean loss: 3.0145
Iteration: 2241; Percent done: 56.0%; Mean loss: 2.9028
Iteration: 2242; Percent done: 56.0%; Mean loss: 3.4129
Iteration: 2243; Percent done: 56.1%; Mean loss: 3.2237
Iteration: 2244; Percent done: 56.1%; Mean loss: 2.9758
Iteration: 2245; Percent done: 56.1%; Mean loss: 3.3038
Iteration: 2246; Percent done: 56.1%; Mean loss: 3.3080
Iteration: 2247; Percent done: 56.2%; Mean loss: 3.2587
Iteration: 2248; Percent done: 56.2%; Mean loss: 3.0411
Iteration: 2249; Percent done: 56.2%; Mean loss: 3.1583
Iteration: 2250; Percent done: 56.2%; Mean loss: 3.1864
Iteration: 2251; Percent done: 56.3%; Mean loss: 2.8748
Iteration: 2252; Percent done: 56.3%; Mean loss: 3.2407
Iteration: 2253; Percent done: 56.3%; Mean loss: 3.4890
Iteration: 2254; Percent done: 56.4%; Mean loss: 3.2976
Iteration: 2255; Percent done: 56.4%; Mean loss: 2.8604
Iteration: 2256; Percent done: 56.4%; Mean loss: 3.2479
Iteration: 2257; Percent done: 56.4%; Mean loss: 3.2073
Iteration: 2258; Percent done: 56.5%; Mean loss: 3.2601
Iteration: 2259; Percent done: 56.5%; Mean loss: 3.0269
Iteration: 2260; Percent done: 56.5%; Mean loss: 3.1908
Iteration: 2261; Percent done: 56.5%; Mean loss: 2.9784
Iteration: 2262; Percent done: 56.5%; Mean loss: 3.0268
```

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Iteration: 2263; Percent done: 56.6%; Mean loss: 3.1315
Iteration: 2264; Percent done: 56.6%; Mean loss: 3.0041
Iteration: 2265; Percent done: 56.6%; Mean loss: 3.0098
Iteration: 2266; Percent done: 56.6%; Mean loss: 3.1701
Iteration: 2267; Percent done: 56.7%; Mean loss: 3.1992
Iteration: 2268; Percent done: 56.7%; Mean loss: 3.0242
Iteration: 2269; Percent done: 56.7%; Mean loss: 3.0687
Iteration: 2270; Percent done: 56.8%; Mean loss: 3.0297
Iteration: 2271; Percent done: 56.8%; Mean loss: 3.2290
Iteration: 2272; Percent done: 56.8%; Mean loss: 3.2750
Iteration: 2273; Percent done: 56.8%; Mean loss: 3.0009
Iteration: 2274; Percent done: 56.9%; Mean loss: 2.9124
Iteration: 2275; Percent done: 56.9%; Mean loss: 3.0879
Iteration: 2276; Percent done: 56.9%; Mean loss: 3.2929
Iteration: 2277; Percent done: 56.9%; Mean loss: 3.0543
Iteration: 2278; Percent done: 57.0%; Mean loss: 2.9138
Iteration: 2279; Percent done: 57.0%; Mean loss: 3.3284
Iteration: 2280; Percent done: 57.0%; Mean loss: 3.0122
Iteration: 2281; Percent done: 57.0%; Mean loss: 3.0068
Iteration: 2282; Percent done: 57.0%; Mean loss: 3.1489
Iteration: 2283; Percent done: 57.1%; Mean loss: 3.1808
Iteration: 2284; Percent done: 57.1%; Mean loss: 3.2170
Iteration: 2285; Percent done: 57.1%; Mean loss: 3.0710
Iteration: 2286; Percent done: 57.1%; Mean loss: 2.9117
Iteration: 2287; Percent done: 57.2%; Mean loss: 3.1409
Iteration: 2288; Percent done: 57.2%; Mean loss: 2.9622
Iteration: 2289; Percent done: 57.2%; Mean loss: 3.1078
Iteration: 2290; Percent done: 57.2%; Mean loss: 3.0049
Iteration: 2291; Percent done: 57.3%; Mean loss: 3.1420
Iteration: 2292; Percent done: 57.3%; Mean loss: 3.1349
Iteration: 2293; Percent done: 57.3%; Mean loss: 3.1286
Iteration: 2294; Percent done: 57.4%; Mean loss: 3.3374
Iteration: 2295; Percent done: 57.4%; Mean loss: 3.0217
Iteration: 2296; Percent done: 57.4%; Mean loss: 3.2956
Iteration: 2297; Percent done: 57.4%; Mean loss: 3.0647
Iteration: 2298; Percent done: 57.5%; Mean loss: 3.0145
Iteration: 2299; Percent done: 57.5%; Mean loss: 3.2419
Iteration: 2300; Percent done: 57.5%; Mean loss: 3.0711
Iteration: 2301; Percent done: 57.5%; Mean loss: 3.3673
Iteration: 2302; Percent done: 57.6%; Mean loss: 3.0062
Iteration: 2303; Percent done: 57.6%; Mean loss: 2.9185
Iteration: 2304; Percent done: 57.6%; Mean loss: 2.8613
Iteration: 2305; Percent done: 57.6%; Mean loss: 3.4020
Iteration: 2306; Percent done: 57.6%; Mean loss: 3.2013
Iteration: 2307; Percent done: 57.7%; Mean loss: 3.0365
Iteration: 2308; Percent done: 57.7%; Mean loss: 2.9083
Iteration: 2309; Percent done: 57.7%; Mean loss: 3.2138
Iteration: 2310; Percent done: 57.8%; Mean loss: 2.7596
Iteration: 2311; Percent done: 57.8%; Mean loss: 3.1581
Iteration: 2312; Percent done: 57.8%; Mean loss: 3.2343
Iteration: 2313; Percent done: 57.8%; Mean loss: 2.7828
Iteration: 2314; Percent done: 57.9%; Mean loss: 2.9668
Iteration: 2315; Percent done: 57.9%; Mean loss: 3.3322
Iteration: 2316; Percent done: 57.9%; Mean loss: 3.3792
Iteration: 2317; Percent done: 57.9%; Mean loss: 3.0014
Iteration: 2318; Percent done: 58.0%; Mean loss: 3.2332
Iteration: 2319; Percent done: 58.0%; Mean loss: 3.2375
Iteration: 2320; Percent done: 58.0%; Mean loss: 2.9514
```

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Iteration: 2321; Percent done: 58.0%; Mean loss: 3.0882
Iteration: 2322; Percent done: 58.1%; Mean loss: 3.2652
Iteration: 2323; Percent done: 58.1%; Mean loss: 2.9232
Iteration: 2324; Percent done: 58.1%; Mean loss: 3.2247
Iteration: 2325; Percent done: 58.1%; Mean loss: 3.2535
Iteration: 2326; Percent done: 58.1%; Mean loss: 3.1372
Iteration: 2327; Percent done: 58.2%; Mean loss: 3.3387
Iteration: 2328; Percent done: 58.2%; Mean loss: 2.9601
Iteration: 2329; Percent done: 58.2%; Mean loss: 3.0509
Iteration: 2330; Percent done: 58.2%; Mean loss: 3.1076
Iteration: 2331; Percent done: 58.3%; Mean loss: 3.2277
Iteration: 2332; Percent done: 58.3%; Mean loss: 2.9566
Iteration: 2333; Percent done: 58.3%; Mean loss: 3.3763
Iteration: 2334; Percent done: 58.4%; Mean loss: 3.1741
Iteration: 2335; Percent done: 58.4%; Mean loss: 3.1589
Iteration: 2336; Percent done: 58.4%; Mean loss: 3.0709
Iteration: 2337; Percent done: 58.4%; Mean loss: 2.9358
Iteration: 2338; Percent done: 58.5%; Mean loss: 3.0717
Iteration: 2339; Percent done: 58.5%; Mean loss: 3.0009
Iteration: 2340; Percent done: 58.5%; Mean loss: 3.0527
Iteration: 2341; Percent done: 58.5%; Mean loss: 3.2629
Iteration: 2342; Percent done: 58.6%; Mean loss: 3.2253
Iteration: 2343; Percent done: 58.6%; Mean loss: 2.9375
Iteration: 2344; Percent done: 58.6%; Mean loss: 3.1724
Iteration: 2345; Percent done: 58.6%; Mean loss: 3.0950
Iteration: 2346; Percent done: 58.7%; Mean loss: 3.0544
Iteration: 2347; Percent done: 58.7%; Mean loss: 3.3334
Iteration: 2348; Percent done: 58.7%; Mean loss: 3.2488
Iteration: 2349; Percent done: 58.7%; Mean loss: 2.9292
Iteration: 2350; Percent done: 58.8%; Mean loss: 3.1867
Iteration: 2351; Percent done: 58.8%; Mean loss: 2.9730
Iteration: 2352; Percent done: 58.8%; Mean loss: 2.9842
Iteration: 2353; Percent done: 58.8%; Mean loss: 3.0002
Iteration: 2354; Percent done: 58.9%; Mean loss: 3.0384
Iteration: 2355; Percent done: 58.9%; Mean loss: 3.1798
Iteration: 2356; Percent done: 58.9%; Mean loss: 3.0679
Iteration: 2357; Percent done: 58.9%; Mean loss: 3.3064
Iteration: 2358; Percent done: 59.0%; Mean loss: 3.0293
Iteration: 2359; Percent done: 59.0%; Mean loss: 3.2094
Iteration: 2360; Percent done: 59.0%; Mean loss: 3.1491
Iteration: 2361; Percent done: 59.0%; Mean loss: 3.1093
Iteration: 2362; Percent done: 59.1%; Mean loss: 3.0160
Iteration: 2363; Percent done: 59.1%; Mean loss: 3.3357
Iteration: 2364; Percent done: 59.1%; Mean loss: 3.1135
Iteration: 2365; Percent done: 59.1%; Mean loss: 3.0224
Iteration: 2366; Percent done: 59.2%; Mean loss: 2.9632
Iteration: 2367; Percent done: 59.2%; Mean loss: 3.1012
Iteration: 2368; Percent done: 59.2%; Mean loss: 3.1229
Iteration: 2369; Percent done: 59.2%; Mean loss: 3.1822
Iteration: 2370; Percent done: 59.2%; Mean loss: 3.1750
Iteration: 2371; Percent done: 59.3%; Mean loss: 3.3199
Iteration: 2372; Percent done: 59.3%; Mean loss: 3.2894
Iteration: 2373; Percent done: 59.3%; Mean loss: 2.8682
Iteration: 2374; Percent done: 59.4%; Mean loss: 3.2309
Iteration: 2375; Percent done: 59.4%; Mean loss: 3.1800
Iteration: 2376; Percent done: 59.4%; Mean loss: 2.9892
Iteration: 2377; Percent done: 59.4%; Mean loss: 3.2656
Iteration: 2378; Percent done: 59.5%; Mean loss: 3.1720
```

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Iteration: 2379; Percent done: 59.5%; Mean loss: 2.9171
Iteration: 2380; Percent done: 59.5%; Mean loss: 3.2352
Iteration: 2381; Percent done: 59.5%; Mean loss: 3.2503
Iteration: 2382; Percent done: 59.6%; Mean loss: 3.0323
Iteration: 2383; Percent done: 59.6%; Mean loss: 3.3190
Iteration: 2384; Percent done: 59.6%; Mean loss: 3.0965
Iteration: 2385; Percent done: 59.6%; Mean loss: 3.1467
Iteration: 2386; Percent done: 59.7%; Mean loss: 2.7409
Iteration: 2387; Percent done: 59.7%; Mean loss: 3.0957
Iteration: 2388; Percent done: 59.7%; Mean loss: 3.3542
Iteration: 2389; Percent done: 59.7%; Mean loss: 2.9250
Iteration: 2390; Percent done: 59.8%; Mean loss: 2.9602
Iteration: 2391; Percent done: 59.8%; Mean loss: 3.0082
Iteration: 2392; Percent done: 59.8%; Mean loss: 2.9716
Iteration: 2393; Percent done: 59.8%; Mean loss: 3.0335
Iteration: 2394; Percent done: 59.9%; Mean loss: 2.9548
Iteration: 2395; Percent done: 59.9%; Mean loss: 2.9539
Iteration: 2396; Percent done: 59.9%; Mean loss: 3.1445
Iteration: 2397; Percent done: 59.9%; Mean loss: 3.1548
Iteration: 2398; Percent done: 60.0%; Mean loss: 2.9502
Iteration: 2399; Percent done: 60.0%; Mean loss: 3.0513
Iteration: 2400; Percent done: 60.0%; Mean loss: 2.9880
Iteration: 2401; Percent done: 60.0%; Mean loss: 2.9363
Iteration: 2402; Percent done: 60.1%; Mean loss: 3.1797
Iteration: 2403; Percent done: 60.1%; Mean loss: 2.9823
Iteration: 2404; Percent done: 60.1%; Mean loss: 3.0855
Iteration: 2405; Percent done: 60.1%; Mean loss: 3.1983
Iteration: 2406; Percent done: 60.2%; Mean loss: 3.1217
Iteration: 2407; Percent done: 60.2%; Mean loss: 3.2731
Iteration: 2408; Percent done: 60.2%; Mean loss: 3.1385
Iteration: 2409; Percent done: 60.2%; Mean loss: 3.1509
Iteration: 2410; Percent done: 60.2%; Mean loss: 3.1728
Iteration: 2411; Percent done: 60.3%; Mean loss: 3.0466
Iteration: 2412; Percent done: 60.3%; Mean loss: 2.9831
Iteration: 2413; Percent done: 60.3%; Mean loss: 3.3026
Iteration: 2414; Percent done: 60.4%; Mean loss: 2.9672
Iteration: 2415; Percent done: 60.4%; Mean loss: 2.9262
Iteration: 2416; Percent done: 60.4%; Mean loss: 3.2402
Iteration: 2417; Percent done: 60.4%; Mean loss: 3.0292
Iteration: 2418; Percent done: 60.5%; Mean loss: 3.0907
Iteration: 2419; Percent done: 60.5%; Mean loss: 2.9727
Iteration: 2420; Percent done: 60.5%; Mean loss: 3.2203
Iteration: 2421; Percent done: 60.5%; Mean loss: 3.1309
Iteration: 2422; Percent done: 60.6%; Mean loss: 3.0005
Iteration: 2423; Percent done: 60.6%; Mean loss: 2.8043
Iteration: 2424; Percent done: 60.6%; Mean loss: 3.3286
Iteration: 2425; Percent done: 60.6%; Mean loss: 2.9699
Iteration: 2426; Percent done: 60.7%; Mean loss: 2.9983
Iteration: 2427; Percent done: 60.7%; Mean loss: 2.9792
Iteration: 2428; Percent done: 60.7%; Mean loss: 2.9388
Iteration: 2429; Percent done: 60.7%; Mean loss: 2.8943
Iteration: 2430; Percent done: 60.8%; Mean loss: 2.8179
Iteration: 2431; Percent done: 60.8%; Mean loss: 3.0864
Iteration: 2432; Percent done: 60.8%; Mean loss: 3.1612
Iteration: 2433; Percent done: 60.8%; Mean loss: 3.3273
Iteration: 2434; Percent done: 60.9%; Mean loss: 3.3007
Iteration: 2435; Percent done: 60.9%; Mean loss: 2.8134
Iteration: 2436; Percent done: 60.9%; Mean loss: 3.1538
Iteration: 2437; Percent done: 60.9%; Mean loss: 3.1461
```

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Iteration: 2437; Percent done: 60.9%; Mean loss: 3.1461
Iteration: 2438; Percent done: 61.0%; Mean loss: 3.0851
Iteration: 2439; Percent done: 61.0%; Mean loss: 3.0937
Iteration: 2440; Percent done: 61.0%; Mean loss: 2.9621
Iteration: 2441; Percent done: 61.0%; Mean loss: 3.2806
Iteration: 2442; Percent done: 61.1%; Mean loss: 3.0752
Iteration: 2443; Percent done: 61.1%; Mean loss: 3.0543
Iteration: 2444; Percent done: 61.1%; Mean loss: 3.1562
Iteration: 2445; Percent done: 61.1%; Mean loss: 3.1156
Iteration: 2446; Percent done: 61.2%; Mean loss: 3.1344
Iteration: 2447; Percent done: 61.2%; Mean loss: 3.2783
Iteration: 2448; Percent done: 61.2%; Mean loss: 3.3022
Iteration: 2449; Percent done: 61.2%; Mean loss: 3.0955
Iteration: 2450; Percent done: 61.3%; Mean loss: 3.0252
Iteration: 2451; Percent done: 61.3%; Mean loss: 2.9460
Iteration: 2452; Percent done: 61.3%; Mean loss: 3.1424
Iteration: 2453; Percent done: 61.3%; Mean loss: 3.0221
Iteration: 2454; Percent done: 61.4%; Mean loss: 2.9362
Iteration: 2455; Percent done: 61.4%; Mean loss: 3.2828
Iteration: 2456; Percent done: 61.4%; Mean loss: 2.9026
Iteration: 2457; Percent done: 61.4%; Mean loss: 3.1411
Iteration: 2458; Percent done: 61.5%; Mean loss: 3.1996
Iteration: 2459; Percent done: 61.5%; Mean loss: 2.9132
Iteration: 2460; Percent done: 61.5%; Mean loss: 3.0481
Iteration: 2461; Percent done: 61.5%; Mean loss: 3.1331
Iteration: 2462; Percent done: 61.6%; Mean loss: 3.1364
Iteration: 2463; Percent done: 61.6%; Mean loss: 3.0281
Iteration: 2464; Percent done: 61.6%; Mean loss: 3.0998
Iteration: 2465; Percent done: 61.6%; Mean loss: 3.2655
Iteration: 2466; Percent done: 61.7%; Mean loss: 3.1420
Iteration: 2467; Percent done: 61.7%; Mean loss: 2.9345
Iteration: 2468; Percent done: 61.7%; Mean loss: 3.0817
Iteration: 2469; Percent done: 61.7%; Mean loss: 3.1103
Iteration: 2470; Percent done: 61.8%; Mean loss: 3.2445
Iteration: 2471; Percent done: 61.8%; Mean loss: 3.1886
Iteration: 2472; Percent done: 61.8%; Mean loss: 3.2336
Iteration: 2473; Percent done: 61.8%; Mean loss: 2.7832
Iteration: 2474; Percent done: 61.9%; Mean loss: 3.0172
Iteration: 2475; Percent done: 61.9%; Mean loss: 3.1035
Iteration: 2476; Percent done: 61.9%; Mean loss: 3.1008
Iteration: 2477; Percent done: 61.9%; Mean loss: 3.2215
Iteration: 2478; Percent done: 62.0%; Mean loss: 3.0916
Iteration: 2479; Percent done: 62.0%; Mean loss: 3.0501
Iteration: 2480; Percent done: 62.0%; Mean loss: 3.1432
Iteration: 2481; Percent done: 62.0%; Mean loss: 2.8785
Iteration: 2482; Percent done: 62.1%; Mean loss: 3.0911
Iteration: 2483; Percent done: 62.1%; Mean loss: 3.1285
Iteration: 2484; Percent done: 62.1%; Mean loss: 3.2368
Iteration: 2485; Percent done: 62.1%; Mean loss: 3.0898
Iteration: 2486; Percent done: 62.2%; Mean loss: 2.9876
Iteration: 2487; Percent done: 62.2%; Mean loss: 2.9672
Iteration: 2488; Percent done: 62.2%; Mean loss: 3.1952
Iteration: 2489; Percent done: 62.2%; Mean loss: 2.8025
Iteration: 2490; Percent done: 62.3%; Mean loss: 3.2637
Iteration: 2491; Percent done: 62.3%; Mean loss: 3.0178
Iteration: 2492; Percent done: 62.3%; Mean loss: 3.2071
Iteration: 2493; Percent done: 62.3%; Mean loss: 3.1777
Iteration: 2494; Percent done: 62.4%; Mean loss: 3.1478
Iteration: 2495; Percent done: 62.4%; Mean loss: 2.9790
```

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Iteration: 2495; Percent done: 62.4%; Mean loss: 2.9790
Iteration: 2496; Percent done: 62.4%; Mean loss: 3.1683
Iteration: 2497; Percent done: 62.4%; Mean loss: 2.8922
Iteration: 2498; Percent done: 62.5%; Mean loss: 2.7901
Iteration: 2499; Percent done: 62.5%; Mean loss: 2.8812
Iteration: 2500; Percent done: 62.5%; Mean loss: 3.0346
Iteration: 2501; Percent done: 62.5%; Mean loss: 3.0565
Iteration: 2502; Percent done: 62.5%; Mean loss: 3.2272
Iteration: 2503; Percent done: 62.6%; Mean loss: 3.1931
Iteration: 2504; Percent done: 62.6%; Mean loss: 2.7912
Iteration: 2505; Percent done: 62.6%; Mean loss: 3.0760
Iteration: 2506; Percent done: 62.6%; Mean loss: 2.9639
Iteration: 2507; Percent done: 62.7%; Mean loss: 3.0332
Iteration: 2508; Percent done: 62.7%; Mean loss: 3.2056
Iteration: 2509; Percent done: 62.7%; Mean loss: 3.2788
Iteration: 2510; Percent done: 62.7%; Mean loss: 3.0251
Iteration: 2511; Percent done: 62.8%; Mean loss: 2.8461
Iteration: 2512; Percent done: 62.8%; Mean loss: 3.0301
Iteration: 2513; Percent done: 62.8%; Mean loss: 3.2727
Iteration: 2514; Percent done: 62.8%; Mean loss: 2.9241
Iteration: 2515; Percent done: 62.9%; Mean loss: 3.0527
Iteration: 2516; Percent done: 62.9%; Mean loss: 3.2203
Iteration: 2517; Percent done: 62.9%; Mean loss: 3.1465
Iteration: 2518; Percent done: 62.9%; Mean loss: 2.9161
Iteration: 2519; Percent done: 63.0%; Mean loss: 3.1431
Iteration: 2520; Percent done: 63.0%; Mean loss: 3.1123
Iteration: 2521; Percent done: 63.0%; Mean loss: 2.9897
Iteration: 2522; Percent done: 63.0%; Mean loss: 2.9987
Iteration: 2523; Percent done: 63.1%; Mean loss: 2.8838
Iteration: 2524; Percent done: 63.1%; Mean loss: 3.2689
Iteration: 2525; Percent done: 63.1%; Mean loss: 2.8801
Iteration: 2526; Percent done: 63.1%; Mean loss: 3.1190
Iteration: 2527; Percent done: 63.2%; Mean loss: 3.0989
Iteration: 2528; Percent done: 63.2%; Mean loss: 2.8892
Iteration: 2529; Percent done: 63.2%; Mean loss: 3.0317
Iteration: 2530; Percent done: 63.2%; Mean loss: 3.0787
Iteration: 2531; Percent done: 63.3%; Mean loss: 2.7868
Iteration: 2532; Percent done: 63.3%; Mean loss: 3.1299
Iteration: 2533; Percent done: 63.3%; Mean loss: 2.8357
Iteration: 2534; Percent done: 63.3%; Mean loss: 2.9270
Iteration: 2535; Percent done: 63.4%; Mean loss: 3.1611
Iteration: 2536; Percent done: 63.4%; Mean loss: 2.9361
Iteration: 2537; Percent done: 63.4%; Mean loss: 3.0990
Iteration: 2538; Percent done: 63.4%; Mean loss: 2.7946
Iteration: 2539; Percent done: 63.5%; Mean loss: 2.9313
Iteration: 2540; Percent done: 63.5%; Mean loss: 3.1149
Iteration: 2541; Percent done: 63.5%; Mean loss: 3.1378
Iteration: 2542; Percent done: 63.5%; Mean loss: 3.1460
Iteration: 2543; Percent done: 63.6%; Mean loss: 2.8782
Iteration: 2544; Percent done: 63.6%; Mean loss: 3.0897
Iteration: 2545; Percent done: 63.6%; Mean loss: 3.1283
Iteration: 2546; Percent done: 63.6%; Mean loss: 2.9614
Iteration: 2547; Percent done: 63.7%; Mean loss: 3.1188
Iteration: 2548; Percent done: 63.7%; Mean loss: 3.1722
Iteration: 2549; Percent done: 63.7%; Mean loss: 2.7629
Iteration: 2550; Percent done: 63.7%; Mean loss: 3.1224
Iteration: 2551; Percent done: 63.8%; Mean loss: 3.4461
Iteration: 2552; Percent done: 63.8%; Mean loss: 3.0568
Iteration: 2553; Percent done: 63.8%; Mean loss: 2.9679
```

```
Iteration: 2553; Percent done: 63.8%; Mean loss: 2.9079
Iteration: 2554; Percent done: 63.8%; Mean loss: 2.9280
Iteration: 2555; Percent done: 63.9%; Mean loss: 3.0259
Iteration: 2556; Percent done: 63.9%; Mean loss: 3.1180
Iteration: 2557; Percent done: 63.9%; Mean loss: 3.2256
Iteration: 2558; Percent done: 63.9%; Mean loss: 3.0885
Iteration: 2559; Percent done: 64.0%; Mean loss: 2.9008
Iteration: 2560; Percent done: 64.0%; Mean loss: 3.2028
Iteration: 2561; Percent done: 64.0%; Mean loss: 2.9614
Iteration: 2562; Percent done: 64.0%; Mean loss: 3.0704
Iteration: 2563; Percent done: 64.1%; Mean loss: 2.9624
Iteration: 2564; Percent done: 64.1%; Mean loss: 3.2973
Iteration: 2565; Percent done: 64.1%; Mean loss: 3.1096
Iteration: 2566; Percent done: 64.1%; Mean loss: 3.2355
Iteration: 2567; Percent done: 64.2%; Mean loss: 2.9494
Iteration: 2568; Percent done: 64.2%; Mean loss: 2.8995
Iteration: 2569; Percent done: 64.2%; Mean loss: 2.6944
Iteration: 2570; Percent done: 64.2%; Mean loss: 3.1289
Iteration: 2571; Percent done: 64.3%; Mean loss: 3.0726
Iteration: 2572; Percent done: 64.3%; Mean loss: 3.0411
Iteration: 2573; Percent done: 64.3%; Mean loss: 2.9318
Iteration: 2574; Percent done: 64.3%; Mean loss: 3.0160
Iteration: 2575; Percent done: 64.4%; Mean loss: 3.1588
Iteration: 2576; Percent done: 64.4%; Mean loss: 3.1121
Iteration: 2577; Percent done: 64.4%; Mean loss: 2.7951
Iteration: 2578; Percent done: 64.5%; Mean loss: 2.9673
Iteration: 2579; Percent done: 64.5%; Mean loss: 2.9136
Iteration: 2580; Percent done: 64.5%; Mean loss: 3.1184
Iteration: 2581; Percent done: 64.5%; Mean loss: 3.1168
Iteration: 2582; Percent done: 64.5%; Mean loss: 2.9409
Iteration: 2583; Percent done: 64.6%; Mean loss: 2.9088
Iteration: 2584; Percent done: 64.6%; Mean loss: 3.0020
Iteration: 2585; Percent done: 64.6%; Mean loss: 3.3749
Iteration: 2586; Percent done: 64.6%; Mean loss: 2.8382
Iteration: 2587; Percent done: 64.7%; Mean loss: 3.0916
Iteration: 2588; Percent done: 64.7%; Mean loss: 3.2289
Iteration: 2589; Percent done: 64.7%; Mean loss: 3.0963
Iteration: 2590; Percent done: 64.8%; Mean loss: 3.1481
Iteration: 2591; Percent done: 64.8%; Mean loss: 2.8449
Iteration: 2592; Percent done: 64.8%; Mean loss: 3.0536
Iteration: 2593; Percent done: 64.8%; Mean loss: 3.0267
Iteration: 2594; Percent done: 64.8%; Mean loss: 2.8878
Iteration: 2595; Percent done: 64.9%; Mean loss: 3.0845
Iteration: 2596; Percent done: 64.9%; Mean loss: 3.1263
Iteration: 2597; Percent done: 64.9%; Mean loss: 3.0629
Iteration: 2598; Percent done: 65.0%; Mean loss: 2.9604
Iteration: 2599; Percent done: 65.0%; Mean loss: 2.9099
Iteration: 2600; Percent done: 65.0%; Mean loss: 2.7937
Iteration: 2601; Percent done: 65.0%; Mean loss: 3.0273
Iteration: 2602; Percent done: 65.0%; Mean loss: 2.9818
Iteration: 2603; Percent done: 65.1%; Mean loss: 3.1631
Iteration: 2604; Percent done: 65.1%; Mean loss: 3.0975
Iteration: 2605; Percent done: 65.1%; Mean loss: 3.2305
Iteration: 2606; Percent done: 65.1%; Mean loss: 2.8574
Iteration: 2607; Percent done: 65.2%; Mean loss: 3.0768
Iteration: 2608; Percent done: 65.2%; Mean loss: 3.0659
Iteration: 2609; Percent done: 65.2%; Mean loss: 2.8086
Iteration: 2610; Percent done: 65.2%; Mean loss: 2.9613
Iteration: 2611; Percent done: 65.3%; Mean loss: 2.9630
```

```
Iteration: 2611; Percent done: 65.3%; Mean loss: 2.9650
Iteration: 2612; Percent done: 65.3%; Mean loss: 2.9649
Iteration: 2613; Percent done: 65.3%; Mean loss: 2.9908
Iteration: 2614; Percent done: 65.3%; Mean loss: 3.1311
Iteration: 2615; Percent done: 65.4%; Mean loss: 2.8815
Iteration: 2616; Percent done: 65.4%; Mean loss: 2.9591
Iteration: 2617; Percent done: 65.4%; Mean loss: 2.9560
Iteration: 2618; Percent done: 65.5%; Mean loss: 2.7672
Iteration: 2619; Percent done: 65.5%; Mean loss: 2.9151
Iteration: 2620; Percent done: 65.5%; Mean loss: 2.8412
Iteration: 2621; Percent done: 65.5%; Mean loss: 3.0504
Iteration: 2622; Percent done: 65.5%; Mean loss: 2.9844
Iteration: 2623; Percent done: 65.6%; Mean loss: 2.9155
Iteration: 2624; Percent done: 65.6%; Mean loss: 2.9860
Iteration: 2625; Percent done: 65.6%; Mean loss: 3.2895
Iteration: 2626; Percent done: 65.6%; Mean loss: 3.1732
Iteration: 2627; Percent done: 65.7%; Mean loss: 2.8490
Iteration: 2628; Percent done: 65.7%; Mean loss: 3.1103
Iteration: 2629; Percent done: 65.7%; Mean loss: 3.0042
Iteration: 2630; Percent done: 65.8%; Mean loss: 3.1871
Iteration: 2631; Percent done: 65.8%; Mean loss: 2.8972
Iteration: 2632; Percent done: 65.8%; Mean loss: 3.0014
Iteration: 2633; Percent done: 65.8%; Mean loss: 3.1783
Iteration: 2634; Percent done: 65.8%; Mean loss: 3.2585
Iteration: 2635; Percent done: 65.9%; Mean loss: 3.2606
Iteration: 2636; Percent done: 65.9%; Mean loss: 2.8430
Iteration: 2637; Percent done: 65.9%; Mean loss: 3.1199
Iteration: 2638; Percent done: 66.0%; Mean loss: 3.1422
Iteration: 2639; Percent done: 66.0%; Mean loss: 3.2094
Iteration: 2640; Percent done: 66.0%; Mean loss: 2.8054
Iteration: 2641; Percent done: 66.0%; Mean loss: 2.9927
Iteration: 2642; Percent done: 66.0%; Mean loss: 2.9048
Iteration: 2643; Percent done: 66.1%; Mean loss: 2.6813
Iteration: 2644; Percent done: 66.1%; Mean loss: 3.0045
Iteration: 2645; Percent done: 66.1%; Mean loss: 2.9506
Iteration: 2646; Percent done: 66.1%; Mean loss: 2.9472
Iteration: 2647; Percent done: 66.2%; Mean loss: 2.9653
Iteration: 2648; Percent done: 66.2%; Mean loss: 2.9941
Iteration: 2649; Percent done: 66.2%; Mean loss: 2.9287
Iteration: 2650; Percent done: 66.2%; Mean loss: 2.8657
Iteration: 2651; Percent done: 66.3%; Mean loss: 2.8847
Iteration: 2652; Percent done: 66.3%; Mean loss: 3.0651
Iteration: 2653; Percent done: 66.3%; Mean loss: 3.2810
Iteration: 2654; Percent done: 66.3%; Mean loss: 2.9959
Iteration: 2655; Percent done: 66.4%; Mean loss: 3.1331
Iteration: 2656; Percent done: 66.4%; Mean loss: 2.7723
Iteration: 2657; Percent done: 66.4%; Mean loss: 3.0053
Iteration: 2658; Percent done: 66.5%; Mean loss: 2.9300
Iteration: 2659; Percent done: 66.5%; Mean loss: 2.8869
Iteration: 2660; Percent done: 66.5%; Mean loss: 3.1188
Iteration: 2661; Percent done: 66.5%; Mean loss: 3.3062
Iteration: 2662; Percent done: 66.5%; Mean loss: 3.0707
Iteration: 2663; Percent done: 66.6%; Mean loss: 2.7865
Iteration: 2664; Percent done: 66.6%; Mean loss: 3.0157
Iteration: 2665; Percent done: 66.6%; Mean loss: 2.8604
Iteration: 2666; Percent done: 66.6%; Mean loss: 2.9222
Iteration: 2667; Percent done: 66.7%; Mean loss: 2.9133
Iteration: 2668; Percent done: 66.7%; Mean loss: 2.7202
Iteration: 2669; Percent done: 66.7%; Mean loss: 2.8869
```

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Iteration: 2670; Percent done: 66.8%; Mean loss: 2.9461
Iteration: 2671; Percent done: 66.8%; Mean loss: 2.9125
Iteration: 2672; Percent done: 66.8%; Mean loss: 2.9886
Iteration: 2673; Percent done: 66.8%; Mean loss: 2.9114
Iteration: 2674; Percent done: 66.8%; Mean loss: 3.0134
Iteration: 2675; Percent done: 66.9%; Mean loss: 2.9105
Iteration: 2676; Percent done: 66.9%; Mean loss: 3.0928
Iteration: 2677; Percent done: 66.9%; Mean loss: 2.9045
Iteration: 2678; Percent done: 67.0%; Mean loss: 2.9339
Iteration: 2679; Percent done: 67.0%; Mean loss: 2.9139
Iteration: 2680; Percent done: 67.0%; Mean loss: 3.0171
Iteration: 2681; Percent done: 67.0%; Mean loss: 3.0554
Iteration: 2682; Percent done: 67.0%; Mean loss: 3.0085
Iteration: 2683; Percent done: 67.1%; Mean loss: 2.7037
Iteration: 2684; Percent done: 67.1%; Mean loss: 3.0576
Iteration: 2685; Percent done: 67.1%; Mean loss: 3.0061
Iteration: 2686; Percent done: 67.2%; Mean loss: 2.9568
Iteration: 2687; Percent done: 67.2%; Mean loss: 2.9587
Iteration: 2688; Percent done: 67.2%; Mean loss: 2.9849
Iteration: 2689; Percent done: 67.2%; Mean loss: 2.8505
Iteration: 2690; Percent done: 67.2%; Mean loss: 3.1025
Iteration: 2691; Percent done: 67.3%; Mean loss: 2.8480
Iteration: 2692; Percent done: 67.3%; Mean loss: 3.0551
Iteration: 2693; Percent done: 67.3%; Mean loss: 2.8834
Iteration: 2694; Percent done: 67.3%; Mean loss: 3.0251
Iteration: 2695; Percent done: 67.4%; Mean loss: 2.8149
Iteration: 2696; Percent done: 67.4%; Mean loss: 2.9017
Iteration: 2697; Percent done: 67.4%; Mean loss: 3.0648
Iteration: 2698; Percent done: 67.5%; Mean loss: 3.0161
Iteration: 2699; Percent done: 67.5%; Mean loss: 3.1000
Iteration: 2700; Percent done: 67.5%; Mean loss: 2.8471
Iteration: 2701; Percent done: 67.5%; Mean loss: 2.8017
Iteration: 2702; Percent done: 67.5%; Mean loss: 3.0365
Iteration: 2703; Percent done: 67.6%; Mean loss: 2.9860
Iteration: 2704; Percent done: 67.6%; Mean loss: 2.9891
Iteration: 2705; Percent done: 67.6%; Mean loss: 3.0958
Iteration: 2706; Percent done: 67.7%; Mean loss: 3.0920
Iteration: 2707; Percent done: 67.7%; Mean loss: 3.0307
Iteration: 2708; Percent done: 67.7%; Mean loss: 2.9864
Iteration: 2709; Percent done: 67.7%; Mean loss: 2.7936
Iteration: 2710; Percent done: 67.8%; Mean loss: 3.0722
Iteration: 2711; Percent done: 67.8%; Mean loss: 3.0632
Iteration: 2712; Percent done: 67.8%; Mean loss: 2.8441
Iteration: 2713; Percent done: 67.8%; Mean loss: 3.0142
Iteration: 2714; Percent done: 67.8%; Mean loss: 2.9890
Iteration: 2715; Percent done: 67.9%; Mean loss: 3.0728
Iteration: 2716; Percent done: 67.9%; Mean loss: 3.0377
Iteration: 2717; Percent done: 67.9%; Mean loss: 2.9144
Iteration: 2718; Percent done: 68.0%; Mean loss: 2.9472
Iteration: 2719; Percent done: 68.0%; Mean loss: 2.8361
Iteration: 2720; Percent done: 68.0%; Mean loss: 3.1761
Iteration: 2721; Percent done: 68.0%; Mean loss: 2.7745
Iteration: 2722; Percent done: 68.0%; Mean loss: 2.8967
Iteration: 2723; Percent done: 68.1%; Mean loss: 2.8512
Iteration: 2724; Percent done: 68.1%; Mean loss: 2.9590
Iteration: 2725; Percent done: 68.1%; Mean loss: 3.0237
Iteration: 2726; Percent done: 68.2%; Mean loss: 3.0097
Iteration: 2727; Percent done: 68.2%; Mean loss: 2.8066
```

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Iteration: 2728; Percent done: 68.2%; Mean loss: 2.9485
Iteration: 2729; Percent done: 68.2%; Mean loss: 2.9488
Iteration: 2730; Percent done: 68.2%; Mean loss: 2.8548
Iteration: 2731; Percent done: 68.3%; Mean loss: 3.1616
Iteration: 2732; Percent done: 68.3%; Mean loss: 2.9817
Iteration: 2733; Percent done: 68.3%; Mean loss: 3.0260
Iteration: 2734; Percent done: 68.3%; Mean loss: 3.1099
Iteration: 2735; Percent done: 68.4%; Mean loss: 2.7616
Iteration: 2736; Percent done: 68.4%; Mean loss: 2.8687
Iteration: 2737; Percent done: 68.4%; Mean loss: 3.0795
Iteration: 2738; Percent done: 68.5%; Mean loss: 3.0785
Iteration: 2739; Percent done: 68.5%; Mean loss: 2.9967
Iteration: 2740; Percent done: 68.5%; Mean loss: 2.9780
Iteration: 2741; Percent done: 68.5%; Mean loss: 3.1006
Iteration: 2742; Percent done: 68.5%; Mean loss: 2.8828
Iteration: 2743; Percent done: 68.6%; Mean loss: 3.1154
Iteration: 2744; Percent done: 68.6%; Mean loss: 2.9733
Iteration: 2745; Percent done: 68.6%; Mean loss: 3.1781
Iteration: 2746; Percent done: 68.7%; Mean loss: 3.1025
Iteration: 2747; Percent done: 68.7%; Mean loss: 2.8762
Iteration: 2748; Percent done: 68.7%; Mean loss: 3.0291
Iteration: 2749; Percent done: 68.7%; Mean loss: 2.9216
Iteration: 2750; Percent done: 68.8%; Mean loss: 3.2740
Iteration: 2751; Percent done: 68.8%; Mean loss: 2.9390
Iteration: 2752; Percent done: 68.8%; Mean loss: 2.9584
Iteration: 2753; Percent done: 68.8%; Mean loss: 2.8633
Iteration: 2754; Percent done: 68.8%; Mean loss: 3.0427
Iteration: 2755; Percent done: 68.9%; Mean loss: 3.2058
Iteration: 2756; Percent done: 68.9%; Mean loss: 2.9206
Iteration: 2757; Percent done: 68.9%; Mean loss: 2.9470
Iteration: 2758; Percent done: 69.0%; Mean loss: 3.0112
Iteration: 2759; Percent done: 69.0%; Mean loss: 3.0783
Iteration: 2760; Percent done: 69.0%; Mean loss: 3.0424
Iteration: 2761; Percent done: 69.0%; Mean loss: 2.9468
Iteration: 2762; Percent done: 69.0%; Mean loss: 2.9988
Iteration: 2763; Percent done: 69.1%; Mean loss: 3.0220
Iteration: 2764; Percent done: 69.1%; Mean loss: 2.8852
Iteration: 2765; Percent done: 69.1%; Mean loss: 2.8181
Iteration: 2766; Percent done: 69.2%; Mean loss: 2.9398
Iteration: 2767; Percent done: 69.2%; Mean loss: 2.5995
Iteration: 2768; Percent done: 69.2%; Mean loss: 3.0480
Iteration: 2769; Percent done: 69.2%; Mean loss: 3.0329
Iteration: 2770; Percent done: 69.2%; Mean loss: 2.7564
Iteration: 2771; Percent done: 69.3%; Mean loss: 2.9045
Iteration: 2772; Percent done: 69.3%; Mean loss: 3.1065
Iteration: 2773; Percent done: 69.3%; Mean loss: 2.9068
Iteration: 2774; Percent done: 69.3%; Mean loss: 2.9001
Iteration: 2775; Percent done: 69.4%; Mean loss: 2.9865
Iteration: 2776; Percent done: 69.4%; Mean loss: 2.8230
Iteration: 2777; Percent done: 69.4%; Mean loss: 3.0964
Iteration: 2778; Percent done: 69.5%; Mean loss: 2.8933
Iteration: 2779; Percent done: 69.5%; Mean loss: 2.9541
Iteration: 2780; Percent done: 69.5%; Mean loss: 2.8580
Iteration: 2781; Percent done: 69.5%; Mean loss: 2.8777
Iteration: 2782; Percent done: 69.5%; Mean loss: 3.0291
Iteration: 2783; Percent done: 69.6%; Mean loss: 2.9874
Iteration: 2784; Percent done: 69.6%; Mean loss: 2.9828
Iteration: 2785; Percent done: 69.6%; Mean loss: 2.9526
```

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Iteration: 2786; Percent done: 69.7%; Mean loss: 2.9565
Iteration: 2787; Percent done: 69.7%; Mean loss: 2.7553
Iteration: 2788; Percent done: 69.7%; Mean loss: 3.1432
Iteration: 2789; Percent done: 69.7%; Mean loss: 3.0962
Iteration: 2790; Percent done: 69.8%; Mean loss: 3.2502
Iteration: 2791; Percent done: 69.8%; Mean loss: 2.8620
Iteration: 2792; Percent done: 69.8%; Mean loss: 2.9385
Iteration: 2793; Percent done: 69.8%; Mean loss: 2.7411
Iteration: 2794; Percent done: 69.8%; Mean loss: 3.0994
Iteration: 2795; Percent done: 69.9%; Mean loss: 2.9630
Iteration: 2796; Percent done: 69.9%; Mean loss: 2.9485
Iteration: 2797; Percent done: 69.9%; Mean loss: 3.0620
Iteration: 2798; Percent done: 70.0%; Mean loss: 2.9318
Iteration: 2799; Percent done: 70.0%; Mean loss: 3.0341
Iteration: 2800; Percent done: 70.0%; Mean loss: 2.9964
Iteration: 2801; Percent done: 70.0%; Mean loss: 2.9737
Iteration: 2802; Percent done: 70.0%; Mean loss: 3.0609
Iteration: 2803; Percent done: 70.1%; Mean loss: 2.8238
Iteration: 2804; Percent done: 70.1%; Mean loss: 3.1877
Iteration: 2805; Percent done: 70.1%; Mean loss: 3.0852
Iteration: 2806; Percent done: 70.2%; Mean loss: 2.6398
Iteration: 2807; Percent done: 70.2%; Mean loss: 3.0733
Iteration: 2808; Percent done: 70.2%; Mean loss: 2.9081
Iteration: 2809; Percent done: 70.2%; Mean loss: 3.0849
Iteration: 2810; Percent done: 70.2%; Mean loss: 2.9071
Iteration: 2811; Percent done: 70.3%; Mean loss: 2.9413
Iteration: 2812; Percent done: 70.3%; Mean loss: 2.7731
Iteration: 2813; Percent done: 70.3%; Mean loss: 3.1466
Iteration: 2814; Percent done: 70.3%; Mean loss: 2.9997
Iteration: 2815; Percent done: 70.4%; Mean loss: 2.8372
Iteration: 2816; Percent done: 70.4%; Mean loss: 2.9266
Iteration: 2817; Percent done: 70.4%; Mean loss: 3.0825
Iteration: 2818; Percent done: 70.5%; Mean loss: 3.2491
Iteration: 2819; Percent done: 70.5%; Mean loss: 2.9446
Iteration: 2820; Percent done: 70.5%; Mean loss: 2.8869
Iteration: 2821; Percent done: 70.5%; Mean loss: 2.7952
Iteration: 2822; Percent done: 70.5%; Mean loss: 3.0632
Iteration: 2823; Percent done: 70.6%; Mean loss: 3.1092
Iteration: 2824; Percent done: 70.6%; Mean loss: 3.0793
Iteration: 2825; Percent done: 70.6%; Mean loss: 2.8750
Iteration: 2826; Percent done: 70.7%; Mean loss: 3.1810
Iteration: 2827; Percent done: 70.7%; Mean loss: 2.9170
Iteration: 2828; Percent done: 70.7%; Mean loss: 2.9160
Iteration: 2829; Percent done: 70.7%; Mean loss: 2.9584
Iteration: 2830; Percent done: 70.8%; Mean loss: 2.8753
Iteration: 2831; Percent done: 70.8%; Mean loss: 2.7928
Iteration: 2832; Percent done: 70.8%; Mean loss: 3.0214
Iteration: 2833; Percent done: 70.8%; Mean loss: 2.8627
Iteration: 2834; Percent done: 70.9%; Mean loss: 3.0590
Iteration: 2835; Percent done: 70.9%; Mean loss: 2.8838
Iteration: 2836; Percent done: 70.9%; Mean loss: 3.0445
Iteration: 2837; Percent done: 70.9%; Mean loss: 3.2378
Iteration: 2838; Percent done: 71.0%; Mean loss: 2.9116
Iteration: 2839; Percent done: 71.0%; Mean loss: 2.9152
Iteration: 2840; Percent done: 71.0%; Mean loss: 2.8463
Iteration: 2841; Percent done: 71.0%; Mean loss: 3.0726
Iteration: 2842; Percent done: 71.0%; Mean loss: 2.9725
Iteration: 2843; Percent done: 71.1%; Mean loss: 2.9619
```

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Iteration: 2844; Percent done: 71.1%; Mean loss: 2.6596
Iteration: 2845; Percent done: 71.1%; Mean loss: 2.7474
Iteration: 2846; Percent done: 71.2%; Mean loss: 3.1854
Iteration: 2847; Percent done: 71.2%; Mean loss: 3.1235
Iteration: 2848; Percent done: 71.2%; Mean loss: 2.8870
Iteration: 2849; Percent done: 71.2%; Mean loss: 3.1014
Iteration: 2850; Percent done: 71.2%; Mean loss: 2.9644
Iteration: 2851; Percent done: 71.3%; Mean loss: 2.9096
Iteration: 2852; Percent done: 71.3%; Mean loss: 2.7883
Iteration: 2853; Percent done: 71.3%; Mean loss: 3.1061
Iteration: 2854; Percent done: 71.4%; Mean loss: 3.4681
Iteration: 2855; Percent done: 71.4%; Mean loss: 3.0072
Iteration: 2856; Percent done: 71.4%; Mean loss: 3.2784
Iteration: 2857; Percent done: 71.4%; Mean loss: 3.0777
Iteration: 2858; Percent done: 71.5%; Mean loss: 3.1306
Iteration: 2859; Percent done: 71.5%; Mean loss: 3.1013
Iteration: 2860; Percent done: 71.5%; Mean loss: 3.2209
Iteration: 2861; Percent done: 71.5%; Mean loss: 2.8497
Iteration: 2862; Percent done: 71.5%; Mean loss: 2.7303
Iteration: 2863; Percent done: 71.6%; Mean loss: 2.9451
Iteration: 2864; Percent done: 71.6%; Mean loss: 2.9873
Iteration: 2865; Percent done: 71.6%; Mean loss: 2.9396
Iteration: 2866; Percent done: 71.7%; Mean loss: 2.9484
Iteration: 2867; Percent done: 71.7%; Mean loss: 2.8643
Iteration: 2868; Percent done: 71.7%; Mean loss: 2.7999
Iteration: 2869; Percent done: 71.7%; Mean loss: 3.0415
Iteration: 2870; Percent done: 71.8%; Mean loss: 2.8634
Iteration: 2871; Percent done: 71.8%; Mean loss: 2.9778
Iteration: 2872; Percent done: 71.8%; Mean loss: 2.9717
Iteration: 2873; Percent done: 71.8%; Mean loss: 2.8404
Iteration: 2874; Percent done: 71.9%; Mean loss: 2.9347
Iteration: 2875; Percent done: 71.9%; Mean loss: 2.6826
Iteration: 2876; Percent done: 71.9%; Mean loss: 2.9895
Iteration: 2877; Percent done: 71.9%; Mean loss: 2.9628
Iteration: 2878; Percent done: 72.0%; Mean loss: 2.7958
Iteration: 2879; Percent done: 72.0%; Mean loss: 3.0272
Iteration: 2880; Percent done: 72.0%; Mean loss: 3.0036
Iteration: 2881; Percent done: 72.0%; Mean loss: 3.2596
Iteration: 2882; Percent done: 72.0%; Mean loss: 2.8738
Iteration: 2883; Percent done: 72.1%; Mean loss: 2.8866
Iteration: 2884; Percent done: 72.1%; Mean loss: 2.9658
Iteration: 2885; Percent done: 72.1%; Mean loss: 2.9422
Iteration: 2886; Percent done: 72.2%; Mean loss: 2.8336
Iteration: 2887; Percent done: 72.2%; Mean loss: 3.1092
Iteration: 2888; Percent done: 72.2%; Mean loss: 2.9029
Iteration: 2889; Percent done: 72.2%; Mean loss: 2.7631
Iteration: 2890; Percent done: 72.2%; Mean loss: 2.9539
Iteration: 2891; Percent done: 72.3%; Mean loss: 2.7747
Iteration: 2892; Percent done: 72.3%; Mean loss: 3.0123
Iteration: 2893; Percent done: 72.3%; Mean loss: 2.7419
Iteration: 2894; Percent done: 72.4%; Mean loss: 2.9132
Iteration: 2895; Percent done: 72.4%; Mean loss: 3.1470
Iteration: 2896; Percent done: 72.4%; Mean loss: 3.1855
Iteration: 2897; Percent done: 72.4%; Mean loss: 3.0590
Iteration: 2898; Percent done: 72.5%; Mean loss: 2.9785
Iteration: 2899; Percent done: 72.5%; Mean loss: 3.1189
Iteration: 2900; Percent done: 72.5%; Mean loss: 3.1232
Iteration: 2901; Percent done: 72.5%; Mean loss: 2.8728
```

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Iteration: 2902; Percent done: 72.5%; Mean loss: 2.9355
Iteration: 2903; Percent done: 72.6%; Mean loss: 2.8069
Iteration: 2904; Percent done: 72.6%; Mean loss: 3.3187
Iteration: 2905; Percent done: 72.6%; Mean loss: 3.0117
Iteration: 2906; Percent done: 72.7%; Mean loss: 3.0503
Iteration: 2907; Percent done: 72.7%; Mean loss: 2.8201
Iteration: 2908; Percent done: 72.7%; Mean loss: 2.8420
Iteration: 2909; Percent done: 72.7%; Mean loss: 3.0682
Iteration: 2910; Percent done: 72.8%; Mean loss: 2.9266
Iteration: 2911; Percent done: 72.8%; Mean loss: 2.8382
Iteration: 2912; Percent done: 72.8%; Mean loss: 2.8859
Iteration: 2913; Percent done: 72.8%; Mean loss: 2.9910
Iteration: 2914; Percent done: 72.9%; Mean loss: 3.2887
Iteration: 2915; Percent done: 72.9%; Mean loss: 3.1563
Iteration: 2916; Percent done: 72.9%; Mean loss: 3.1281
Iteration: 2917; Percent done: 72.9%; Mean loss: 2.9240
Iteration: 2918; Percent done: 73.0%; Mean loss: 3.1072
Iteration: 2919; Percent done: 73.0%; Mean loss: 2.8885
Iteration: 2920; Percent done: 73.0%; Mean loss: 3.0859
Iteration: 2921; Percent done: 73.0%; Mean loss: 2.8274
Iteration: 2922; Percent done: 73.0%; Mean loss: 3.0347
Iteration: 2923; Percent done: 73.1%; Mean loss: 2.7851
Iteration: 2924; Percent done: 73.1%; Mean loss: 3.0314
Iteration: 2925; Percent done: 73.1%; Mean loss: 2.9917
Iteration: 2926; Percent done: 73.2%; Mean loss: 2.9829
Iteration: 2927; Percent done: 73.2%; Mean loss: 3.0366
Iteration: 2928; Percent done: 73.2%; Mean loss: 3.0193
Iteration: 2929; Percent done: 73.2%; Mean loss: 3.1027
Iteration: 2930; Percent done: 73.2%; Mean loss: 2.8326
Iteration: 2931; Percent done: 73.3%; Mean loss: 3.1754
Iteration: 2932; Percent done: 73.3%; Mean loss: 2.8635
Iteration: 2933; Percent done: 73.3%; Mean loss: 2.8347
Iteration: 2934; Percent done: 73.4%; Mean loss: 2.9221
Iteration: 2935; Percent done: 73.4%; Mean loss: 2.9405
Iteration: 2936; Percent done: 73.4%; Mean loss: 2.9177
Iteration: 2937; Percent done: 73.4%; Mean loss: 2.9317
Iteration: 2938; Percent done: 73.5%; Mean loss: 2.9474
Iteration: 2939; Percent done: 73.5%; Mean loss: 3.0431
Iteration: 2940; Percent done: 73.5%; Mean loss: 2.7863
Iteration: 2941; Percent done: 73.5%; Mean loss: 3.1571
Iteration: 2942; Percent done: 73.6%; Mean loss: 2.8859
Iteration: 2943; Percent done: 73.6%; Mean loss: 3.0134
Iteration: 2944; Percent done: 73.6%; Mean loss: 2.7963
Iteration: 2945; Percent done: 73.6%; Mean loss: 2.7246
Iteration: 2946; Percent done: 73.7%; Mean loss: 2.8341
Iteration: 2947; Percent done: 73.7%; Mean loss: 2.8944
Iteration: 2948; Percent done: 73.7%; Mean loss: 2.8327
Iteration: 2949; Percent done: 73.7%; Mean loss: 2.7419
Iteration: 2950; Percent done: 73.8%; Mean loss: 2.7951
Iteration: 2951; Percent done: 73.8%; Mean loss: 2.8912
Iteration: 2952; Percent done: 73.8%; Mean loss: 2.9314
Iteration: 2953; Percent done: 73.8%; Mean loss: 2.9963
Iteration: 2954; Percent done: 73.9%; Mean loss: 2.8936
Iteration: 2955; Percent done: 73.9%; Mean loss: 3.0473
Iteration: 2956; Percent done: 73.9%; Mean loss: 2.8587
Iteration: 2957; Percent done: 73.9%; Mean loss: 3.0914
Iteration: 2958; Percent done: 74.0%; Mean loss: 2.9544
Iteration: 2959; Percent done: 74.0%; Mean loss: 3.0456
Iteration: 2960; Percent done: 74.0%; Mean loss: 3.0503
```

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Iteration: 2960; Percent done: 74.0%; Mean loss: 3.0583
Iteration: 2961; Percent done: 74.0%; Mean loss: 2.8303
Iteration: 2962; Percent done: 74.1%; Mean loss: 3.0507
Iteration: 2963; Percent done: 74.1%; Mean loss: 2.7159
Iteration: 2964; Percent done: 74.1%; Mean loss: 2.9099
Iteration: 2965; Percent done: 74.1%; Mean loss: 2.9204
Iteration: 2966; Percent done: 74.2%; Mean loss: 2.9454
Iteration: 2967; Percent done: 74.2%; Mean loss: 2.8466
Iteration: 2968; Percent done: 74.2%; Mean loss: 2.8406
Iteration: 2969; Percent done: 74.2%; Mean loss: 2.8408
Iteration: 2970; Percent done: 74.2%; Mean loss: 2.9727
Iteration: 2971; Percent done: 74.3%; Mean loss: 2.9055
Iteration: 2972; Percent done: 74.3%; Mean loss: 2.6524
Iteration: 2973; Percent done: 74.3%; Mean loss: 2.8826
Iteration: 2974; Percent done: 74.4%; Mean loss: 3.1472
Iteration: 2975; Percent done: 74.4%; Mean loss: 2.8558
Iteration: 2976; Percent done: 74.4%; Mean loss: 2.8332
Iteration: 2977; Percent done: 74.4%; Mean loss: 2.8996
Iteration: 2978; Percent done: 74.5%; Mean loss: 2.7021
Iteration: 2979; Percent done: 74.5%; Mean loss: 2.8339
Iteration: 2980; Percent done: 74.5%; Mean loss: 2.9332
Iteration: 2981; Percent done: 74.5%; Mean loss: 2.7107
Iteration: 2982; Percent done: 74.6%; Mean loss: 2.8450
Iteration: 2983; Percent done: 74.6%; Mean loss: 3.0118
Iteration: 2984; Percent done: 74.6%; Mean loss: 3.0306
Iteration: 2985; Percent done: 74.6%; Mean loss: 2.7023
Iteration: 2986; Percent done: 74.7%; Mean loss: 3.1962
Iteration: 2987; Percent done: 74.7%; Mean loss: 2.9544
Iteration: 2988; Percent done: 74.7%; Mean loss: 2.9068
Iteration: 2989; Percent done: 74.7%; Mean loss: 2.9463
Iteration: 2990; Percent done: 74.8%; Mean loss: 2.9659
Iteration: 2991; Percent done: 74.8%; Mean loss: 2.8836
Iteration: 2992; Percent done: 74.8%; Mean loss: 2.9345
Iteration: 2993; Percent done: 74.8%; Mean loss: 2.8869
Iteration: 2994; Percent done: 74.9%; Mean loss: 3.0279
Iteration: 2995; Percent done: 74.9%; Mean loss: 2.9690
Iteration: 2996; Percent done: 74.9%; Mean loss: 3.1206
Iteration: 2997; Percent done: 74.9%; Mean loss: 2.8616
Iteration: 2998; Percent done: 75.0%; Mean loss: 3.0528
Iteration: 2999; Percent done: 75.0%; Mean loss: 2.7839
Iteration: 3000; Percent done: 75.0%; Mean loss: 2.8130
Iteration: 3001; Percent done: 75.0%; Mean loss: 2.9053
Iteration: 3002; Percent done: 75.0%; Mean loss: 3.0725
Iteration: 3003; Percent done: 75.1%; Mean loss: 3.0307
Iteration: 3004; Percent done: 75.1%; Mean loss: 2.9423
Iteration: 3005; Percent done: 75.1%; Mean loss: 2.8922
Iteration: 3006; Percent done: 75.1%; Mean loss: 2.9885
Iteration: 3007; Percent done: 75.2%; Mean loss: 2.8598
Iteration: 3008; Percent done: 75.2%; Mean loss: 2.8439
Iteration: 3009; Percent done: 75.2%; Mean loss: 3.0653
Iteration: 3010; Percent done: 75.2%; Mean loss: 2.9009
Iteration: 3011; Percent done: 75.3%; Mean loss: 2.8029
Iteration: 3012; Percent done: 75.3%; Mean loss: 3.1409
Iteration: 3013; Percent done: 75.3%; Mean loss: 2.7131
Iteration: 3014; Percent done: 75.3%; Mean loss: 2.9733
Iteration: 3015; Percent done: 75.4%; Mean loss: 2.8366
Iteration: 3016; Percent done: 75.4%; Mean loss: 2.6496
Iteration: 3017; Percent done: 75.4%; Mean loss: 3.0353
Iteration: 3018; Percent done: 75.4%; Mean loss: 2.7704
```

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Iteration: 3018; Percent done: 75.4%; Mean loss: 2.7764
Iteration: 3019; Percent done: 75.5%; Mean loss: 2.9881
Iteration: 3020; Percent done: 75.5%; Mean loss: 3.1371
Iteration: 3021; Percent done: 75.5%; Mean loss: 3.1006
Iteration: 3022; Percent done: 75.5%; Mean loss: 2.9405
Iteration: 3023; Percent done: 75.6%; Mean loss: 3.1992
Iteration: 3024; Percent done: 75.6%; Mean loss: 2.8691
Iteration: 3025; Percent done: 75.6%; Mean loss: 3.0846
Iteration: 3026; Percent done: 75.6%; Mean loss: 2.9124
Iteration: 3027; Percent done: 75.7%; Mean loss: 2.7571
Iteration: 3028; Percent done: 75.7%; Mean loss: 2.6453
Iteration: 3029; Percent done: 75.7%; Mean loss: 2.9035
Iteration: 3030; Percent done: 75.8%; Mean loss: 2.9220
Iteration: 3031; Percent done: 75.8%; Mean loss: 2.7714
Iteration: 3032; Percent done: 75.8%; Mean loss: 3.0773
Iteration: 3033; Percent done: 75.8%; Mean loss: 2.9265
Iteration: 3034; Percent done: 75.8%; Mean loss: 2.7566
Iteration: 3035; Percent done: 75.9%; Mean loss: 2.8099
Iteration: 3036; Percent done: 75.9%; Mean loss: 3.3144
Iteration: 3037; Percent done: 75.9%; Mean loss: 2.6850
Iteration: 3038; Percent done: 75.9%; Mean loss: 3.0614
Iteration: 3039; Percent done: 76.0%; Mean loss: 2.9483
Iteration: 3040; Percent done: 76.0%; Mean loss: 2.8510
Iteration: 3041; Percent done: 76.0%; Mean loss: 3.0024
Iteration: 3042; Percent done: 76.0%; Mean loss: 2.9174
Iteration: 3043; Percent done: 76.1%; Mean loss: 2.9429
Iteration: 3044; Percent done: 76.1%; Mean loss: 3.2051
Iteration: 3045; Percent done: 76.1%; Mean loss: 2.8285
Iteration: 3046; Percent done: 76.1%; Mean loss: 2.7350
Iteration: 3047; Percent done: 76.2%; Mean loss: 2.8503
Iteration: 3048; Percent done: 76.2%; Mean loss: 2.9253
Iteration: 3049; Percent done: 76.2%; Mean loss: 2.8691
Iteration: 3050; Percent done: 76.2%; Mean loss: 2.8968
Iteration: 3051; Percent done: 76.3%; Mean loss: 2.9526
Iteration: 3052; Percent done: 76.3%; Mean loss: 2.7740
Iteration: 3053; Percent done: 76.3%; Mean loss: 2.8825
Iteration: 3054; Percent done: 76.3%; Mean loss: 3.0276
Iteration: 3055; Percent done: 76.4%; Mean loss: 2.9697
Iteration: 3056; Percent done: 76.4%; Mean loss: 2.9760
Iteration: 3057; Percent done: 76.4%; Mean loss: 2.9711
Iteration: 3058; Percent done: 76.4%; Mean loss: 2.9004
Iteration: 3059; Percent done: 76.5%; Mean loss: 2.7671
Iteration: 3060; Percent done: 76.5%; Mean loss: 3.1795
Iteration: 3061; Percent done: 76.5%; Mean loss: 3.1376
Iteration: 3062; Percent done: 76.5%; Mean loss: 2.9026
Iteration: 3063; Percent done: 76.6%; Mean loss: 2.8392
Iteration: 3064; Percent done: 76.6%; Mean loss: 2.7582
Iteration: 3065; Percent done: 76.6%; Mean loss: 2.9643
Iteration: 3066; Percent done: 76.6%; Mean loss: 2.8420
Iteration: 3067; Percent done: 76.7%; Mean loss: 2.8434
Iteration: 3068; Percent done: 76.7%; Mean loss: 2.6295
Iteration: 3069; Percent done: 76.7%; Mean loss: 2.9702
Iteration: 3070; Percent done: 76.8%; Mean loss: 2.6660
Iteration: 3071; Percent done: 76.8%; Mean loss: 3.0850
Iteration: 3072; Percent done: 76.8%; Mean loss: 2.9951
Iteration: 3073; Percent done: 76.8%; Mean loss: 2.8872
Iteration: 3074; Percent done: 76.8%; Mean loss: 2.9505
Iteration: 3075; Percent done: 76.9%; Mean loss: 2.9930
Iteration: 3076; Percent done: 76.9%; Mean loss: 2.9668
```

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Iteration: 3076; Percent done: 76.9%; Mean loss: 2.9008
Iteration: 3077; Percent done: 76.9%; Mean loss: 2.8422
Iteration: 3078; Percent done: 77.0%; Mean loss: 3.0261
Iteration: 3079; Percent done: 77.0%; Mean loss: 3.1439
Iteration: 3080; Percent done: 77.0%; Mean loss: 2.8640
Iteration: 3081; Percent done: 77.0%; Mean loss: 2.9824
Iteration: 3082; Percent done: 77.0%; Mean loss: 2.8352
Iteration: 3083; Percent done: 77.1%; Mean loss: 2.9368
Iteration: 3084; Percent done: 77.1%; Mean loss: 3.0684
Iteration: 3085; Percent done: 77.1%; Mean loss: 2.9837
Iteration: 3086; Percent done: 77.1%; Mean loss: 3.0368
Iteration: 3087; Percent done: 77.2%; Mean loss: 3.1237
Iteration: 3088; Percent done: 77.2%; Mean loss: 2.8929
Iteration: 3089; Percent done: 77.2%; Mean loss: 2.8365
Iteration: 3090; Percent done: 77.2%; Mean loss: 2.9098
Iteration: 3091; Percent done: 77.3%; Mean loss: 2.9674
Iteration: 3092; Percent done: 77.3%; Mean loss: 2.9118
Iteration: 3093; Percent done: 77.3%; Mean loss: 2.8986
Iteration: 3094; Percent done: 77.3%; Mean loss: 2.8417
Iteration: 3095; Percent done: 77.4%; Mean loss: 3.0450
Iteration: 3096; Percent done: 77.4%; Mean loss: 2.8497
Iteration: 3097; Percent done: 77.4%; Mean loss: 3.1217
Iteration: 3098; Percent done: 77.5%; Mean loss: 2.9531
Iteration: 3099; Percent done: 77.5%; Mean loss: 2.9551
Iteration: 3100; Percent done: 77.5%; Mean loss: 2.8977
Iteration: 3101; Percent done: 77.5%; Mean loss: 2.8705
Iteration: 3102; Percent done: 77.5%; Mean loss: 2.6631
Iteration: 3103; Percent done: 77.6%; Mean loss: 2.8040
Iteration: 3104; Percent done: 77.6%; Mean loss: 2.6376
Iteration: 3105; Percent done: 77.6%; Mean loss: 2.8702
Iteration: 3106; Percent done: 77.6%; Mean loss: 2.6965
Iteration: 3107; Percent done: 77.7%; Mean loss: 2.7590
Iteration: 3108; Percent done: 77.7%; Mean loss: 2.8834
Iteration: 3109; Percent done: 77.7%; Mean loss: 2.9845
Iteration: 3110; Percent done: 77.8%; Mean loss: 2.8227
Iteration: 3111; Percent done: 77.8%; Mean loss: 2.9406
Iteration: 3112; Percent done: 77.8%; Mean loss: 2.7524
Iteration: 3113; Percent done: 77.8%; Mean loss: 3.0340
Iteration: 3114; Percent done: 77.8%; Mean loss: 2.5497
Iteration: 3115; Percent done: 77.9%; Mean loss: 3.0990
Iteration: 3116; Percent done: 77.9%; Mean loss: 2.9346
Iteration: 3117; Percent done: 77.9%; Mean loss: 3.0196
Iteration: 3118; Percent done: 78.0%; Mean loss: 2.8230
Iteration: 3119; Percent done: 78.0%; Mean loss: 3.0017
Iteration: 3120; Percent done: 78.0%; Mean loss: 3.0433
Iteration: 3121; Percent done: 78.0%; Mean loss: 2.7078
Iteration: 3122; Percent done: 78.0%; Mean loss: 2.8628
Iteration: 3123; Percent done: 78.1%; Mean loss: 2.9646
Iteration: 3124; Percent done: 78.1%; Mean loss: 3.0710
Iteration: 3125; Percent done: 78.1%; Mean loss: 3.1371
Iteration: 3126; Percent done: 78.1%; Mean loss: 2.9751
Iteration: 3127; Percent done: 78.2%; Mean loss: 2.9130
Iteration: 3128; Percent done: 78.2%; Mean loss: 2.8400
Iteration: 3129; Percent done: 78.2%; Mean loss: 3.1429
Iteration: 3130; Percent done: 78.2%; Mean loss: 2.9679
Iteration: 3131; Percent done: 78.3%; Mean loss: 3.0105
Iteration: 3132; Percent done: 78.3%; Mean loss: 2.9842
Iteration: 3133; Percent done: 78.3%; Mean loss: 2.5553
Iteration: 3134; Percent done: 78.3%; Mean loss: 2.8789
```

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Iteration: 3135; Percent done: 78.4%; Mean loss: 3.0028
Iteration: 3136; Percent done: 78.4%; Mean loss: 3.3454
Iteration: 3137; Percent done: 78.4%; Mean loss: 3.0644
Iteration: 3138; Percent done: 78.5%; Mean loss: 2.9260
Iteration: 3139; Percent done: 78.5%; Mean loss: 2.8276
Iteration: 3140; Percent done: 78.5%; Mean loss: 2.7327
Iteration: 3141; Percent done: 78.5%; Mean loss: 2.8476
Iteration: 3142; Percent done: 78.5%; Mean loss: 2.8478
Iteration: 3143; Percent done: 78.6%; Mean loss: 2.9320
Iteration: 3144; Percent done: 78.6%; Mean loss: 2.8299
Iteration: 3145; Percent done: 78.6%; Mean loss: 2.6861
Iteration: 3146; Percent done: 78.6%; Mean loss: 2.9404
Iteration: 3147; Percent done: 78.7%; Mean loss: 2.7123
Iteration: 3148; Percent done: 78.7%; Mean loss: 2.7945
Iteration: 3149; Percent done: 78.7%; Mean loss: 2.9738
Iteration: 3150; Percent done: 78.8%; Mean loss: 3.0558
Iteration: 3151; Percent done: 78.8%; Mean loss: 2.9879
Iteration: 3152; Percent done: 78.8%; Mean loss: 2.8599
Iteration: 3153; Percent done: 78.8%; Mean loss: 2.9427
Iteration: 3154; Percent done: 78.8%; Mean loss: 2.7288
Iteration: 3155; Percent done: 78.9%; Mean loss: 2.9536
Iteration: 3156; Percent done: 78.9%; Mean loss: 2.7588
Iteration: 3157; Percent done: 78.9%; Mean loss: 2.8677
Iteration: 3158; Percent done: 79.0%; Mean loss: 2.9491
Iteration: 3159; Percent done: 79.0%; Mean loss: 2.9336
Iteration: 3160; Percent done: 79.0%; Mean loss: 2.8267
Iteration: 3161; Percent done: 79.0%; Mean loss: 2.9436
Iteration: 3162; Percent done: 79.0%; Mean loss: 2.9305
Iteration: 3163; Percent done: 79.1%; Mean loss: 2.9442
Iteration: 3164; Percent done: 79.1%; Mean loss: 2.8881
Iteration: 3165; Percent done: 79.1%; Mean loss: 2.9063
Iteration: 3166; Percent done: 79.1%; Mean loss: 2.9998
Iteration: 3167; Percent done: 79.2%; Mean loss: 2.8297
Iteration: 3168; Percent done: 79.2%; Mean loss: 3.1091
Iteration: 3169; Percent done: 79.2%; Mean loss: 3.1215
Iteration: 3170; Percent done: 79.2%; Mean loss: 2.9177
Iteration: 3171; Percent done: 79.3%; Mean loss: 2.7800
Iteration: 3172; Percent done: 79.3%; Mean loss: 2.8943
Iteration: 3173; Percent done: 79.3%; Mean loss: 2.8165
Iteration: 3174; Percent done: 79.3%; Mean loss: 2.8832
Iteration: 3175; Percent done: 79.4%; Mean loss: 2.8179
Iteration: 3176; Percent done: 79.4%; Mean loss: 2.8346
Iteration: 3177; Percent done: 79.4%; Mean loss: 2.8921
Iteration: 3178; Percent done: 79.5%; Mean loss: 2.9099
Iteration: 3179; Percent done: 79.5%; Mean loss: 2.9780
Iteration: 3180; Percent done: 79.5%; Mean loss: 3.2126
Iteration: 3181; Percent done: 79.5%; Mean loss: 2.6817
Iteration: 3182; Percent done: 79.5%; Mean loss: 3.1023
Iteration: 3183; Percent done: 79.6%; Mean loss: 3.0458
Iteration: 3184; Percent done: 79.6%; Mean loss: 2.7880
Iteration: 3185; Percent done: 79.6%; Mean loss: 2.7952
Iteration: 3186; Percent done: 79.7%; Mean loss: 2.9451
Iteration: 3187; Percent done: 79.7%; Mean loss: 3.1938
Iteration: 3188; Percent done: 79.7%; Mean loss: 2.8455
Iteration: 3189; Percent done: 79.7%; Mean loss: 3.0242
Iteration: 3190; Percent done: 79.8%; Mean loss: 2.7957
Iteration: 3191; Percent done: 79.8%; Mean loss: 2.8088
Iteration: 3192; Percent done: 79.8%; Mean loss: 2.8884
```

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Iteration: 3193; Percent done: 79.8%; Mean loss: 2.8027
Iteration: 3194; Percent done: 79.8%; Mean loss: 2.7850
Iteration: 3195; Percent done: 79.9%; Mean loss: 3.0440
Iteration: 3196; Percent done: 79.9%; Mean loss: 3.0138
Iteration: 3197; Percent done: 79.9%; Mean loss: 2.7608
Iteration: 3198; Percent done: 80.0%; Mean loss: 2.8672
Iteration: 3199; Percent done: 80.0%; Mean loss: 2.9767
Iteration: 3200; Percent done: 80.0%; Mean loss: 2.8397
Iteration: 3201; Percent done: 80.0%; Mean loss: 2.7834
Iteration: 3202; Percent done: 80.0%; Mean loss: 3.0159
Iteration: 3203; Percent done: 80.1%; Mean loss: 2.7560
Iteration: 3204; Percent done: 80.1%; Mean loss: 2.8802
Iteration: 3205; Percent done: 80.1%; Mean loss: 2.8979
Iteration: 3206; Percent done: 80.2%; Mean loss: 2.9659
Iteration: 3207; Percent done: 80.2%; Mean loss: 2.7880
Iteration: 3208; Percent done: 80.2%; Mean loss: 2.8685
Iteration: 3209; Percent done: 80.2%; Mean loss: 3.2615
Iteration: 3210; Percent done: 80.2%; Mean loss: 2.7112
Iteration: 3211; Percent done: 80.3%; Mean loss: 2.8468
Iteration: 3212; Percent done: 80.3%; Mean loss: 2.6562
Iteration: 3213; Percent done: 80.3%; Mean loss: 2.7752
Iteration: 3214; Percent done: 80.3%; Mean loss: 2.6357
Iteration: 3215; Percent done: 80.4%; Mean loss: 3.0456
Iteration: 3216; Percent done: 80.4%; Mean loss: 2.5922
Iteration: 3217; Percent done: 80.4%; Mean loss: 3.1444
Iteration: 3218; Percent done: 80.5%; Mean loss: 2.8195
Iteration: 3219; Percent done: 80.5%; Mean loss: 2.7386
Iteration: 3220; Percent done: 80.5%; Mean loss: 2.8754
Iteration: 3221; Percent done: 80.5%; Mean loss: 2.9165
Iteration: 3222; Percent done: 80.5%; Mean loss: 2.8605
Iteration: 3223; Percent done: 80.6%; Mean loss: 2.7150
Iteration: 3224; Percent done: 80.6%; Mean loss: 2.9839
Iteration: 3225; Percent done: 80.6%; Mean loss: 2.8825
Iteration: 3226; Percent done: 80.7%; Mean loss: 2.8086
Iteration: 3227; Percent done: 80.7%; Mean loss: 2.5619
Iteration: 3228; Percent done: 80.7%; Mean loss: 3.0000
Iteration: 3229; Percent done: 80.7%; Mean loss: 3.0098
Iteration: 3230; Percent done: 80.8%; Mean loss: 2.8588
Iteration: 3231; Percent done: 80.8%; Mean loss: 2.7548
Iteration: 3232; Percent done: 80.8%; Mean loss: 2.8002
Iteration: 3233; Percent done: 80.8%; Mean loss: 2.8456
Iteration: 3234; Percent done: 80.8%; Mean loss: 2.9112
Iteration: 3235; Percent done: 80.9%; Mean loss: 2.8670
Iteration: 3236; Percent done: 80.9%; Mean loss: 3.0637
Iteration: 3237; Percent done: 80.9%; Mean loss: 2.8945
Iteration: 3238; Percent done: 81.0%; Mean loss: 3.1291
Iteration: 3239; Percent done: 81.0%; Mean loss: 2.6137
Iteration: 3240; Percent done: 81.0%; Mean loss: 2.8069
Iteration: 3241; Percent done: 81.0%; Mean loss: 2.8309
Iteration: 3242; Percent done: 81.0%; Mean loss: 3.1616
Iteration: 3243; Percent done: 81.1%; Mean loss: 2.7009
Iteration: 3244; Percent done: 81.1%; Mean loss: 2.8387
Iteration: 3245; Percent done: 81.1%; Mean loss: 2.8574
Iteration: 3246; Percent done: 81.2%; Mean loss: 3.0245
Iteration: 3247; Percent done: 81.2%; Mean loss: 2.9482
Iteration: 3248; Percent done: 81.2%; Mean loss: 2.7716
Iteration: 3249; Percent done: 81.2%; Mean loss: 2.7964
Iteration: 3250; Percent done: 81.2%; Mean loss: 2.6773
```

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Iteration: 3251; Percent done: 81.3%; Mean loss: 2.8211
Iteration: 3252; Percent done: 81.3%; Mean loss: 2.8102
Iteration: 3253; Percent done: 81.3%; Mean loss: 3.1439
Iteration: 3254; Percent done: 81.3%; Mean loss: 2.9718
Iteration: 3255; Percent done: 81.4%; Mean loss: 2.7145
Iteration: 3256; Percent done: 81.4%; Mean loss: 2.8139
Iteration: 3257; Percent done: 81.4%; Mean loss: 2.6931
Iteration: 3258; Percent done: 81.5%; Mean loss: 2.7209
Iteration: 3259; Percent done: 81.5%; Mean loss: 2.9441
Iteration: 3260; Percent done: 81.5%; Mean loss: 2.7603
Iteration: 3261; Percent done: 81.5%; Mean loss: 2.7767
Iteration: 3262; Percent done: 81.5%; Mean loss: 2.9507
Iteration: 3263; Percent done: 81.6%; Mean loss: 2.6050
Iteration: 3264; Percent done: 81.6%; Mean loss: 2.9305
Iteration: 3265; Percent done: 81.6%; Mean loss: 3.0051
Iteration: 3266; Percent done: 81.7%; Mean loss: 2.8746
Iteration: 3267; Percent done: 81.7%; Mean loss: 2.8094
Iteration: 3268; Percent done: 81.7%; Mean loss: 2.8129
Iteration: 3269; Percent done: 81.7%; Mean loss: 2.9544
Iteration: 3270; Percent done: 81.8%; Mean loss: 2.9168
Iteration: 3271; Percent done: 81.8%; Mean loss: 3.1068
Iteration: 3272; Percent done: 81.8%; Mean loss: 3.2581
Iteration: 3273; Percent done: 81.8%; Mean loss: 3.0031
Iteration: 3274; Percent done: 81.8%; Mean loss: 3.0013
Iteration: 3275; Percent done: 81.9%; Mean loss: 3.1688
Iteration: 3276; Percent done: 81.9%; Mean loss: 2.9099
Iteration: 3277; Percent done: 81.9%; Mean loss: 2.7598
Iteration: 3278; Percent done: 82.0%; Mean loss: 2.9849
Iteration: 3279; Percent done: 82.0%; Mean loss: 2.9472
Iteration: 3280; Percent done: 82.0%; Mean loss: 2.7506
Iteration: 3281; Percent done: 82.0%; Mean loss: 2.7319
Iteration: 3282; Percent done: 82.0%; Mean loss: 2.8821
Iteration: 3283; Percent done: 82.1%; Mean loss: 2.6921
Iteration: 3284; Percent done: 82.1%; Mean loss: 2.7131
Iteration: 3285; Percent done: 82.1%; Mean loss: 2.7328
Iteration: 3286; Percent done: 82.2%; Mean loss: 2.8141
Iteration: 3287; Percent done: 82.2%; Mean loss: 2.9380
Iteration: 3288; Percent done: 82.2%; Mean loss: 2.8039
Iteration: 3289; Percent done: 82.2%; Mean loss: 2.9183
Iteration: 3290; Percent done: 82.2%; Mean loss: 2.7691
Iteration: 3291; Percent done: 82.3%; Mean loss: 2.6479
Iteration: 3292; Percent done: 82.3%; Mean loss: 2.6721
Iteration: 3293; Percent done: 82.3%; Mean loss: 2.9702
Iteration: 3294; Percent done: 82.3%; Mean loss: 2.7211
Iteration: 3295; Percent done: 82.4%; Mean loss: 2.9320
Iteration: 3296; Percent done: 82.4%; Mean loss: 2.7919
Iteration: 3297; Percent done: 82.4%; Mean loss: 2.8855
Iteration: 3298; Percent done: 82.5%; Mean loss: 3.0551
Iteration: 3299; Percent done: 82.5%; Mean loss: 2.6352
Iteration: 3300; Percent done: 82.5%; Mean loss: 2.9588
Iteration: 3301; Percent done: 82.5%; Mean loss: 2.7593
Iteration: 3302; Percent done: 82.5%; Mean loss: 2.7164
Iteration: 3303; Percent done: 82.6%; Mean loss: 2.8135
Iteration: 3304; Percent done: 82.6%; Mean loss: 2.9296
Iteration: 3305; Percent done: 82.6%; Mean loss: 2.7461
Iteration: 3306; Percent done: 82.7%; Mean loss: 2.9010
Iteration: 3307; Percent done: 82.7%; Mean loss: 2.6733
Iteration: 3308; Percent done: 82.7%; Mean loss: 2.9358
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Iteration: 3309; Percent done: 82.7%; Mean loss: 2.7980
Iteration: 3310; Percent done: 82.8%; Mean loss: 2.8766
Iteration: 3311; Percent done: 82.8%; Mean loss: 2.8671
Iteration: 3312; Percent done: 82.8%; Mean loss: 2.9161
Iteration: 3313; Percent done: 82.8%; Mean loss: 2.8890
Iteration: 3314; Percent done: 82.8%; Mean loss: 2.9257
Iteration: 3315; Percent done: 82.9%; Mean loss: 2.8749
Iteration: 3316; Percent done: 82.9%; Mean loss: 2.8979
Iteration: 3317; Percent done: 82.9%; Mean loss: 3.1111
Iteration: 3318; Percent done: 83.0%; Mean loss: 2.7160
Iteration: 3319; Percent done: 83.0%; Mean loss: 2.6712
Iteration: 3320; Percent done: 83.0%; Mean loss: 2.9964
Iteration: 3321; Percent done: 83.0%; Mean loss: 2.8886
Iteration: 3322; Percent done: 83.0%; Mean loss: 3.2826
Iteration: 3323; Percent done: 83.1%; Mean loss: 2.7183
Iteration: 3324; Percent done: 83.1%; Mean loss: 2.9008
Iteration: 3325; Percent done: 83.1%; Mean loss: 2.8846
Iteration: 3326; Percent done: 83.2%; Mean loss: 2.8074
Iteration: 3327; Percent done: 83.2%; Mean loss: 2.7786
Iteration: 3328; Percent done: 83.2%; Mean loss: 2.7990
Iteration: 3329; Percent done: 83.2%; Mean loss: 2.8005
Iteration: 3330; Percent done: 83.2%; Mean loss: 2.6895
Iteration: 3331; Percent done: 83.3%; Mean loss: 2.8378
Iteration: 3332; Percent done: 83.3%; Mean loss: 3.0576
Iteration: 3333; Percent done: 83.3%; Mean loss: 3.0109
Iteration: 3334; Percent done: 83.4%; Mean loss: 2.7758
Iteration: 3335; Percent done: 83.4%; Mean loss: 2.9374
Iteration: 3336; Percent done: 83.4%; Mean loss: 2.7720
Iteration: 3337; Percent done: 83.4%; Mean loss: 2.8068
Iteration: 3338; Percent done: 83.5%; Mean loss: 2.6939
Iteration: 3339; Percent done: 83.5%; Mean loss: 2.7390
Iteration: 3340; Percent done: 83.5%; Mean loss: 2.7037
Iteration: 3341; Percent done: 83.5%; Mean loss: 2.8990
Iteration: 3342; Percent done: 83.5%; Mean loss: 2.9381
Iteration: 3343; Percent done: 83.6%; Mean loss: 2.7143
Iteration: 3344; Percent done: 83.6%; Mean loss: 2.7343
Iteration: 3345; Percent done: 83.6%; Mean loss: 2.9484
Iteration: 3346; Percent done: 83.7%; Mean loss: 2.6929
Iteration: 3347; Percent done: 83.7%; Mean loss: 2.9935
Iteration: 3348; Percent done: 83.7%; Mean loss: 2.8135
Iteration: 3349; Percent done: 83.7%; Mean loss: 2.7458
Iteration: 3350; Percent done: 83.8%; Mean loss: 2.9889
Iteration: 3351; Percent done: 83.8%; Mean loss: 2.9531
Iteration: 3352; Percent done: 83.8%; Mean loss: 2.7002
Iteration: 3353; Percent done: 83.8%; Mean loss: 2.8221
Iteration: 3354; Percent done: 83.9%; Mean loss: 2.7111
Iteration: 3355; Percent done: 83.9%; Mean loss: 3.0295
Iteration: 3356; Percent done: 83.9%; Mean loss: 2.7778
Iteration: 3357; Percent done: 83.9%; Mean loss: 2.6228
Iteration: 3358; Percent done: 84.0%; Mean loss: 2.5224
Iteration: 3359; Percent done: 84.0%; Mean loss: 3.0824
Iteration: 3360; Percent done: 84.0%; Mean loss: 2.8636
Iteration: 3361; Percent done: 84.0%; Mean loss: 2.9484
Iteration: 3362; Percent done: 84.0%; Mean loss: 2.7258
Iteration: 3363; Percent done: 84.1%; Mean loss: 2.9014
Iteration: 3364; Percent done: 84.1%; Mean loss: 2.6749
Iteration: 3365; Percent done: 84.1%; Mean loss: 2.7199
Iteration: 3366; Percent done: 84.2%; Mean loss: 2.7524
```

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Iteration: 3367; Percent done: 84.2%; Mean loss: 2.9707
Iteration: 3368; Percent done: 84.2%; Mean loss: 2.6713
Iteration: 3369; Percent done: 84.2%; Mean loss: 2.8033
Iteration: 3370; Percent done: 84.2%; Mean loss: 2.6663
Iteration: 3371; Percent done: 84.3%; Mean loss: 2.8539
Iteration: 3372; Percent done: 84.3%; Mean loss: 2.9665
Iteration: 3373; Percent done: 84.3%; Mean loss: 3.0055
Iteration: 3374; Percent done: 84.4%; Mean loss: 2.8456
Iteration: 3375; Percent done: 84.4%; Mean loss: 3.0974
Iteration: 3376; Percent done: 84.4%; Mean loss: 2.7364
Iteration: 3377; Percent done: 84.4%; Mean loss: 2.9381
Iteration: 3378; Percent done: 84.5%; Mean loss: 2.6364
Iteration: 3379; Percent done: 84.5%; Mean loss: 2.5318
Iteration: 3380; Percent done: 84.5%; Mean loss: 2.7040
Iteration: 3381; Percent done: 84.5%; Mean loss: 2.8624
Iteration: 3382; Percent done: 84.5%; Mean loss: 2.7896
Iteration: 3383; Percent done: 84.6%; Mean loss: 2.7672
Iteration: 3384; Percent done: 84.6%; Mean loss: 2.9598
Iteration: 3385; Percent done: 84.6%; Mean loss: 2.7434
Iteration: 3386; Percent done: 84.7%; Mean loss: 2.6924
Iteration: 3387; Percent done: 84.7%; Mean loss: 2.8631
Iteration: 3388; Percent done: 84.7%; Mean loss: 2.8488
Iteration: 3389; Percent done: 84.7%; Mean loss: 2.7963
Iteration: 3390; Percent done: 84.8%; Mean loss: 2.9326
Iteration: 3391; Percent done: 84.8%; Mean loss: 3.1227
Iteration: 3392; Percent done: 84.8%; Mean loss: 2.7359
Iteration: 3393; Percent done: 84.8%; Mean loss: 2.9668
Iteration: 3394; Percent done: 84.9%; Mean loss: 3.0695
Iteration: 3395; Percent done: 84.9%; Mean loss: 2.9710
Iteration: 3396; Percent done: 84.9%; Mean loss: 2.8602
Iteration: 3397; Percent done: 84.9%; Mean loss: 2.7931
Iteration: 3398; Percent done: 85.0%; Mean loss: 2.8467
Iteration: 3399; Percent done: 85.0%; Mean loss: 2.6780
Iteration: 3400; Percent done: 85.0%; Mean loss: 3.0238
Iteration: 3401; Percent done: 85.0%; Mean loss: 2.8447
Iteration: 3402; Percent done: 85.0%; Mean loss: 2.7837
Iteration: 3403; Percent done: 85.1%; Mean loss: 2.7186
Iteration: 3404; Percent done: 85.1%; Mean loss: 2.8752
Iteration: 3405; Percent done: 85.1%; Mean loss: 2.9661
Iteration: 3406; Percent done: 85.2%; Mean loss: 2.6998
Iteration: 3407; Percent done: 85.2%; Mean loss: 2.7274
Iteration: 3408; Percent done: 85.2%; Mean loss: 2.6768
Iteration: 3409; Percent done: 85.2%; Mean loss: 2.8880
Iteration: 3410; Percent done: 85.2%; Mean loss: 2.8741
Iteration: 3411; Percent done: 85.3%; Mean loss: 3.1015
Iteration: 3412; Percent done: 85.3%; Mean loss: 2.7160
Iteration: 3413; Percent done: 85.3%; Mean loss: 2.8440
Iteration: 3414; Percent done: 85.4%; Mean loss: 2.8956
Iteration: 3415; Percent done: 85.4%; Mean loss: 2.8167
Iteration: 3416; Percent done: 85.4%; Mean loss: 2.7066
Iteration: 3417; Percent done: 85.4%; Mean loss: 2.8456
Iteration: 3418; Percent done: 85.5%; Mean loss: 2.9051
Iteration: 3419; Percent done: 85.5%; Mean loss: 2.8193
Iteration: 3420; Percent done: 85.5%; Mean loss: 2.9628
Iteration: 3421; Percent done: 85.5%; Mean loss: 2.6859
Iteration: 3422; Percent done: 85.5%; Mean loss: 2.9383
Iteration: 3423; Percent done: 85.6%; Mean loss: 2.9154
Iteration: 3424; Percent done: 85.6%; Mean loss: 2.9984
```

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Iteration: 3425; Percent done: 85.6%; Mean loss: 2.8544
Iteration: 3426; Percent done: 85.7%; Mean loss: 2.8150
Iteration: 3427; Percent done: 85.7%; Mean loss: 2.8050
Iteration: 3428; Percent done: 85.7%; Mean loss: 2.9890
Iteration: 3429; Percent done: 85.7%; Mean loss: 2.6545
Iteration: 3430; Percent done: 85.8%; Mean loss: 2.7664
Iteration: 3431; Percent done: 85.8%; Mean loss: 2.8851
Iteration: 3432; Percent done: 85.8%; Mean loss: 2.7658
Iteration: 3433; Percent done: 85.8%; Mean loss: 2.6600
Iteration: 3434; Percent done: 85.9%; Mean loss: 2.9120
Iteration: 3435; Percent done: 85.9%; Mean loss: 2.6665
Iteration: 3436; Percent done: 85.9%; Mean loss: 2.6473
Iteration: 3437; Percent done: 85.9%; Mean loss: 3.0824
Iteration: 3438; Percent done: 86.0%; Mean loss: 3.0449
Iteration: 3439; Percent done: 86.0%; Mean loss: 2.7356
Iteration: 3440; Percent done: 86.0%; Mean loss: 2.5881
Iteration: 3441; Percent done: 86.0%; Mean loss: 2.8642
Iteration: 3442; Percent done: 86.1%; Mean loss: 2.5826
Iteration: 3443; Percent done: 86.1%; Mean loss: 2.8882
Iteration: 3444; Percent done: 86.1%; Mean loss: 2.7343
Iteration: 3445; Percent done: 86.1%; Mean loss: 2.5855
Iteration: 3446; Percent done: 86.2%; Mean loss: 2.7576
Iteration: 3447; Percent done: 86.2%; Mean loss: 2.8755
Iteration: 3448; Percent done: 86.2%; Mean loss: 2.7592
Iteration: 3449; Percent done: 86.2%; Mean loss: 2.8472
Iteration: 3450; Percent done: 86.2%; Mean loss: 2.8772
Iteration: 3451; Percent done: 86.3%; Mean loss: 2.7629
Iteration: 3452; Percent done: 86.3%; Mean loss: 2.8712
Iteration: 3453; Percent done: 86.3%; Mean loss: 2.6821
Iteration: 3454; Percent done: 86.4%; Mean loss: 2.8214
Iteration: 3455; Percent done: 86.4%; Mean loss: 3.0208
Iteration: 3456; Percent done: 86.4%; Mean loss: 2.8766
Iteration: 3457; Percent done: 86.4%; Mean loss: 2.9426
Iteration: 3458; Percent done: 86.5%; Mean loss: 2.7812
Iteration: 3459; Percent done: 86.5%; Mean loss: 2.6789
Iteration: 3460; Percent done: 86.5%; Mean loss: 2.9238
Iteration: 3461; Percent done: 86.5%; Mean loss: 2.6751
Iteration: 3462; Percent done: 86.6%; Mean loss: 2.9491
Iteration: 3463; Percent done: 86.6%; Mean loss: 2.7293
Iteration: 3464; Percent done: 86.6%; Mean loss: 2.8748
Iteration: 3465; Percent done: 86.6%; Mean loss: 2.7220
Iteration: 3466; Percent done: 86.7%; Mean loss: 2.6079
Iteration: 3467; Percent done: 86.7%; Mean loss: 2.6997
Iteration: 3468; Percent done: 86.7%; Mean loss: 2.6479
Iteration: 3469; Percent done: 86.7%; Mean loss: 2.6965
Iteration: 3470; Percent done: 86.8%; Mean loss: 2.6443
Iteration: 3471; Percent done: 86.8%; Mean loss: 2.8015
Iteration: 3472; Percent done: 86.8%; Mean loss: 2.6115
Iteration: 3473; Percent done: 86.8%; Mean loss: 3.0655
Iteration: 3474; Percent done: 86.9%; Mean loss: 2.9890
Iteration: 3475; Percent done: 86.9%; Mean loss: 2.8048
Iteration: 3476; Percent done: 86.9%; Mean loss: 2.9139
Iteration: 3477; Percent done: 86.9%; Mean loss: 2.9676
Iteration: 3478; Percent done: 87.0%; Mean loss: 2.6425
Iteration: 3479; Percent done: 87.0%; Mean loss: 2.5905
Iteration: 3480; Percent done: 87.0%; Mean loss: 2.6995
Iteration: 3481; Percent done: 87.0%; Mean loss: 2.9804
Iteration: 3482; Percent done: 87.1%; Mean loss: 2.7635
```

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Iteration: 3483; Percent done: 87.1%; Mean loss: 2.9713
Iteration: 3484; Percent done: 87.1%; Mean loss: 2.9245
Iteration: 3485; Percent done: 87.1%; Mean loss: 2.5575
Iteration: 3486; Percent done: 87.2%; Mean loss: 2.8157
Iteration: 3487; Percent done: 87.2%; Mean loss: 2.8149
Iteration: 3488; Percent done: 87.2%; Mean loss: 2.8648
Iteration: 3489; Percent done: 87.2%; Mean loss: 2.9469
Iteration: 3490; Percent done: 87.2%; Mean loss: 2.7160
Iteration: 3491; Percent done: 87.3%; Mean loss: 2.7268
Iteration: 3492; Percent done: 87.3%; Mean loss: 2.7270
Iteration: 3493; Percent done: 87.3%; Mean loss: 2.7341
Iteration: 3494; Percent done: 87.4%; Mean loss: 2.8452
Iteration: 3495; Percent done: 87.4%; Mean loss: 2.8845
Iteration: 3496; Percent done: 87.4%; Mean loss: 2.8240
Iteration: 3497; Percent done: 87.4%; Mean loss: 2.6606
Iteration: 3498; Percent done: 87.5%; Mean loss: 2.8635
Iteration: 3499; Percent done: 87.5%; Mean loss: 3.0143
Iteration: 3500; Percent done: 87.5%; Mean loss: 2.8691
Iteration: 3501; Percent done: 87.5%; Mean loss: 2.7293
Iteration: 3502; Percent done: 87.5%; Mean loss: 2.8581
Iteration: 3503; Percent done: 87.6%; Mean loss: 3.0125
Iteration: 3504; Percent done: 87.6%; Mean loss: 2.8997
Iteration: 3505; Percent done: 87.6%; Mean loss: 2.7726
Iteration: 3506; Percent done: 87.6%; Mean loss: 2.8717
Iteration: 3507; Percent done: 87.7%; Mean loss: 2.9110
Iteration: 3508; Percent done: 87.7%; Mean loss: 2.7571
Iteration: 3509; Percent done: 87.7%; Mean loss: 2.7093
Iteration: 3510; Percent done: 87.8%; Mean loss: 2.7429
Iteration: 3511; Percent done: 87.8%; Mean loss: 2.9945
Iteration: 3512; Percent done: 87.8%; Mean loss: 2.7405
Iteration: 3513; Percent done: 87.8%; Mean loss: 2.6721
Iteration: 3514; Percent done: 87.8%; Mean loss: 2.7733
Iteration: 3515; Percent done: 87.9%; Mean loss: 3.0485
Iteration: 3516; Percent done: 87.9%; Mean loss: 2.7620
Iteration: 3517; Percent done: 87.9%; Mean loss: 2.9214
Iteration: 3518; Percent done: 87.9%; Mean loss: 2.5346
Iteration: 3519; Percent done: 88.0%; Mean loss: 2.8276
Iteration: 3520; Percent done: 88.0%; Mean loss: 2.7382
Iteration: 3521; Percent done: 88.0%; Mean loss: 2.7580
Iteration: 3522; Percent done: 88.0%; Mean loss: 2.8515
Iteration: 3523; Percent done: 88.1%; Mean loss: 2.7793
Iteration: 3524; Percent done: 88.1%; Mean loss: 2.6192
Iteration: 3525; Percent done: 88.1%; Mean loss: 2.7621
Iteration: 3526; Percent done: 88.1%; Mean loss: 2.8626
Iteration: 3527; Percent done: 88.2%; Mean loss: 2.9079
Iteration: 3528; Percent done: 88.2%; Mean loss: 2.9538
Iteration: 3529; Percent done: 88.2%; Mean loss: 2.8971
Iteration: 3530; Percent done: 88.2%; Mean loss: 2.7492
Iteration: 3531; Percent done: 88.3%; Mean loss: 2.7345
Iteration: 3532; Percent done: 88.3%; Mean loss: 2.9429
Iteration: 3533; Percent done: 88.3%; Mean loss: 2.6564
Iteration: 3534; Percent done: 88.3%; Mean loss: 2.6095
Iteration: 3535; Percent done: 88.4%; Mean loss: 2.5852
Iteration: 3536; Percent done: 88.4%; Mean loss: 2.7704
Iteration: 3537; Percent done: 88.4%; Mean loss: 2.8305
Iteration: 3538; Percent done: 88.4%; Mean loss: 2.8210
Iteration: 3539; Percent done: 88.5%; Mean loss: 2.9036
Iteration: 3540; Percent done: 88.5%; Mean loss: 2.7981
Iteration: 3541; Percent done: 88.5%; Mean loss: 2.6224
```

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Iteration: 3541; Percent done: 88.5%; Mean loss: 2.6224
Iteration: 3542; Percent done: 88.5%; Mean loss: 2.9325
Iteration: 3543; Percent done: 88.6%; Mean loss: 2.9264
Iteration: 3544; Percent done: 88.6%; Mean loss: 2.7969
Iteration: 3545; Percent done: 88.6%; Mean loss: 2.9690
Iteration: 3546; Percent done: 88.6%; Mean loss: 2.8273
Iteration: 3547; Percent done: 88.7%; Mean loss: 2.5859
Iteration: 3548; Percent done: 88.7%; Mean loss: 2.6782
Iteration: 3549; Percent done: 88.7%; Mean loss: 2.6162
Iteration: 3550; Percent done: 88.8%; Mean loss: 2.8971
Iteration: 3551; Percent done: 88.8%; Mean loss: 2.6527
Iteration: 3552; Percent done: 88.8%; Mean loss: 2.7481
Iteration: 3553; Percent done: 88.8%; Mean loss: 2.6747
Iteration: 3554; Percent done: 88.8%; Mean loss: 2.8214
Iteration: 3555; Percent done: 88.9%; Mean loss: 2.6459
Iteration: 3556; Percent done: 88.9%; Mean loss: 2.9871
Iteration: 3557; Percent done: 88.9%; Mean loss: 2.7456
Iteration: 3558; Percent done: 88.9%; Mean loss: 2.6584
Iteration: 3559; Percent done: 89.0%; Mean loss: 2.7342
Iteration: 3560; Percent done: 89.0%; Mean loss: 2.7441
Iteration: 3561; Percent done: 89.0%; Mean loss: 2.6857
Iteration: 3562; Percent done: 89.0%; Mean loss: 2.8178
Iteration: 3563; Percent done: 89.1%; Mean loss: 2.7257
Iteration: 3564; Percent done: 89.1%; Mean loss: 2.6705
Iteration: 3565; Percent done: 89.1%; Mean loss: 2.8586
Iteration: 3566; Percent done: 89.1%; Mean loss: 2.7507
Iteration: 3567; Percent done: 89.2%; Mean loss: 3.0452
Iteration: 3568; Percent done: 89.2%; Mean loss: 2.6426
Iteration: 3569; Percent done: 89.2%; Mean loss: 2.9467
Iteration: 3570; Percent done: 89.2%; Mean loss: 2.8495
Iteration: 3571; Percent done: 89.3%; Mean loss: 2.8910
Iteration: 3572; Percent done: 89.3%; Mean loss: 2.6910
Iteration: 3573; Percent done: 89.3%; Mean loss: 2.8297
Iteration: 3574; Percent done: 89.3%; Mean loss: 2.7935
Iteration: 3575; Percent done: 89.4%; Mean loss: 2.9293
Iteration: 3576; Percent done: 89.4%; Mean loss: 2.7686
Iteration: 3577; Percent done: 89.4%; Mean loss: 2.6634
Iteration: 3578; Percent done: 89.5%; Mean loss: 2.7345
Iteration: 3579; Percent done: 89.5%; Mean loss: 2.7141
Iteration: 3580; Percent done: 89.5%; Mean loss: 2.7149
Iteration: 3581; Percent done: 89.5%; Mean loss: 2.8029
Iteration: 3582; Percent done: 89.5%; Mean loss: 2.6694
Iteration: 3583; Percent done: 89.6%; Mean loss: 3.0108
Iteration: 3584; Percent done: 89.6%; Mean loss: 2.7756
Iteration: 3585; Percent done: 89.6%; Mean loss: 2.9157
Iteration: 3586; Percent done: 89.6%; Mean loss: 2.8339
Iteration: 3587; Percent done: 89.7%; Mean loss: 2.6820
Iteration: 3588; Percent done: 89.7%; Mean loss: 2.8195
Iteration: 3589; Percent done: 89.7%; Mean loss: 2.8607
Iteration: 3590; Percent done: 89.8%; Mean loss: 2.9458
Iteration: 3591; Percent done: 89.8%; Mean loss: 2.8674
Iteration: 3592; Percent done: 89.8%; Mean loss: 2.9237
Iteration: 3593; Percent done: 89.8%; Mean loss: 3.0103
Iteration: 3594; Percent done: 89.8%; Mean loss: 2.7594
Iteration: 3595; Percent done: 89.9%; Mean loss: 2.7888
Iteration: 3596; Percent done: 89.9%; Mean loss: 2.8893
Iteration: 3597; Percent done: 89.9%; Mean loss: 3.0693
Iteration: 3598; Percent done: 90.0%; Mean loss: 2.7563
Iteration: 3599; Percent done: 90.0%; Mean loss: 2.5803
```

```
Iteration: 3599; Percent done: 90.0%; Mean loss: 2.5803
Iteration: 3600; Percent done: 90.0%; Mean loss: 2.6624
Iteration: 3601; Percent done: 90.0%; Mean loss: 2.9790
Iteration: 3602; Percent done: 90.0%; Mean loss: 2.7901
Iteration: 3603; Percent done: 90.1%; Mean loss: 2.9367
Iteration: 3604; Percent done: 90.1%; Mean loss: 2.9330
Iteration: 3605; Percent done: 90.1%; Mean loss: 2.9638
Iteration: 3606; Percent done: 90.1%; Mean loss: 2.8503
Iteration: 3607; Percent done: 90.2%; Mean loss: 2.8625
Iteration: 3608; Percent done: 90.2%; Mean loss: 2.7808
Iteration: 3609; Percent done: 90.2%; Mean loss: 2.6928
Iteration: 3610; Percent done: 90.2%; Mean loss: 2.9052
Iteration: 3611; Percent done: 90.3%; Mean loss: 2.7017
Iteration: 3612; Percent done: 90.3%; Mean loss: 3.0137
Iteration: 3613; Percent done: 90.3%; Mean loss: 2.8322
Iteration: 3614; Percent done: 90.3%; Mean loss: 2.7530
Iteration: 3615; Percent done: 90.4%; Mean loss: 2.6941
Iteration: 3616; Percent done: 90.4%; Mean loss: 2.7516
Iteration: 3617; Percent done: 90.4%; Mean loss: 2.8419
Iteration: 3618; Percent done: 90.5%; Mean loss: 2.8690
Iteration: 3619; Percent done: 90.5%; Mean loss: 2.7383
Iteration: 3620; Percent done: 90.5%; Mean loss: 2.7761
Iteration: 3621; Percent done: 90.5%; Mean loss: 2.6255
Iteration: 3622; Percent done: 90.5%; Mean loss: 2.7926
Iteration: 3623; Percent done: 90.6%; Mean loss: 2.8086
Iteration: 3624; Percent done: 90.6%; Mean loss: 2.8318
Iteration: 3625; Percent done: 90.6%; Mean loss: 2.5266
Iteration: 3626; Percent done: 90.6%; Mean loss: 2.8694
Iteration: 3627; Percent done: 90.7%; Mean loss: 2.9312
Iteration: 3628; Percent done: 90.7%; Mean loss: 2.7664
Iteration: 3629; Percent done: 90.7%; Mean loss: 2.8891
Iteration: 3630; Percent done: 90.8%; Mean loss: 2.7841
Iteration: 3631; Percent done: 90.8%; Mean loss: 2.6924
Iteration: 3632; Percent done: 90.8%; Mean loss: 2.8143
Iteration: 3633; Percent done: 90.8%; Mean loss: 2.8350
Iteration: 3634; Percent done: 90.8%; Mean loss: 2.9854
Iteration: 3635; Percent done: 90.9%; Mean loss: 2.6099
Iteration: 3636; Percent done: 90.9%; Mean loss: 2.6841
Iteration: 3637; Percent done: 90.9%; Mean loss: 2.7673
Iteration: 3638; Percent done: 91.0%; Mean loss: 2.7071
Iteration: 3639; Percent done: 91.0%; Mean loss: 2.8156
Iteration: 3640; Percent done: 91.0%; Mean loss: 2.6389
Iteration: 3641; Percent done: 91.0%; Mean loss: 2.8276
Iteration: 3642; Percent done: 91.0%; Mean loss: 2.5200
Iteration: 3643; Percent done: 91.1%; Mean loss: 2.8671
Iteration: 3644; Percent done: 91.1%; Mean loss: 2.6792
Iteration: 3645; Percent done: 91.1%; Mean loss: 3.0152
Iteration: 3646; Percent done: 91.1%; Mean loss: 2.7020
Iteration: 3647; Percent done: 91.2%; Mean loss: 2.6049
Iteration: 3648; Percent done: 91.2%; Mean loss: 2.8482
Iteration: 3649; Percent done: 91.2%; Mean loss: 2.8824
Iteration: 3650; Percent done: 91.2%; Mean loss: 2.7839
Iteration: 3651; Percent done: 91.3%; Mean loss: 2.7905
Iteration: 3652; Percent done: 91.3%; Mean loss: 2.5640
Iteration: 3653; Percent done: 91.3%; Mean loss: 2.6675
Iteration: 3654; Percent done: 91.3%; Mean loss: 2.4758
Iteration: 3655; Percent done: 91.4%; Mean loss: 2.7191
Iteration: 3656; Percent done: 91.4%; Mean loss: 2.8152
Iteration: 3657; Percent done: 91.4%; Mean loss: 2.5971
```

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Iteration: 3657; Percent done: 91.4%; Mean loss: 2.9971
Iteration: 3658; Percent done: 91.5%; Mean loss: 2.8612
Iteration: 3659; Percent done: 91.5%; Mean loss: 3.0643
Iteration: 3660; Percent done: 91.5%; Mean loss: 2.6521
Iteration: 3661; Percent done: 91.5%; Mean loss: 2.6964
Iteration: 3662; Percent done: 91.5%; Mean loss: 2.9176
Iteration: 3663; Percent done: 91.6%; Mean loss: 2.7423
Iteration: 3664; Percent done: 91.6%; Mean loss: 2.6986
Iteration: 3665; Percent done: 91.6%; Mean loss: 2.6007
Iteration: 3666; Percent done: 91.6%; Mean loss: 2.8484
Iteration: 3667; Percent done: 91.7%; Mean loss: 2.7255
Iteration: 3668; Percent done: 91.7%; Mean loss: 2.7014
Iteration: 3669; Percent done: 91.7%; Mean loss: 2.9086
Iteration: 3670; Percent done: 91.8%; Mean loss: 2.8219
Iteration: 3671; Percent done: 91.8%; Mean loss: 2.8203
Iteration: 3672; Percent done: 91.8%; Mean loss: 2.6110
Iteration: 3673; Percent done: 91.8%; Mean loss: 2.5988
Iteration: 3674; Percent done: 91.8%; Mean loss: 2.7699
Iteration: 3675; Percent done: 91.9%; Mean loss: 2.8507
Iteration: 3676; Percent done: 91.9%; Mean loss: 2.8547
Iteration: 3677; Percent done: 91.9%; Mean loss: 2.8128
Iteration: 3678; Percent done: 92.0%; Mean loss: 2.8413
Iteration: 3679; Percent done: 92.0%; Mean loss: 2.5027
Iteration: 3680; Percent done: 92.0%; Mean loss: 2.7104
Iteration: 3681; Percent done: 92.0%; Mean loss: 2.6296
Iteration: 3682; Percent done: 92.0%; Mean loss: 2.7054
Iteration: 3683; Percent done: 92.1%; Mean loss: 2.7186
Iteration: 3684; Percent done: 92.1%; Mean loss: 2.6845
Iteration: 3685; Percent done: 92.1%; Mean loss: 2.7190
Iteration: 3686; Percent done: 92.2%; Mean loss: 2.4921
Iteration: 3687; Percent done: 92.2%; Mean loss: 2.7549
Iteration: 3688; Percent done: 92.2%; Mean loss: 2.7854
Iteration: 3689; Percent done: 92.2%; Mean loss: 2.7384
Iteration: 3690; Percent done: 92.2%; Mean loss: 2.6392
Iteration: 3691; Percent done: 92.3%; Mean loss: 2.6817
Iteration: 3692; Percent done: 92.3%; Mean loss: 2.8503
Iteration: 3693; Percent done: 92.3%; Mean loss: 2.6394
Iteration: 3694; Percent done: 92.3%; Mean loss: 2.7937
Iteration: 3695; Percent done: 92.4%; Mean loss: 2.8021
Iteration: 3696; Percent done: 92.4%; Mean loss: 2.7242
Iteration: 3697; Percent done: 92.4%; Mean loss: 2.8544
Iteration: 3698; Percent done: 92.5%; Mean loss: 2.8796
Iteration: 3699; Percent done: 92.5%; Mean loss: 2.5930
Iteration: 3700; Percent done: 92.5%; Mean loss: 2.5810
Iteration: 3701; Percent done: 92.5%; Mean loss: 2.7357
Iteration: 3702; Percent done: 92.5%; Mean loss: 2.9052
Iteration: 3703; Percent done: 92.6%; Mean loss: 2.8306
Iteration: 3704; Percent done: 92.6%; Mean loss: 2.6203
Iteration: 3705; Percent done: 92.6%; Mean loss: 2.9865
Iteration: 3706; Percent done: 92.7%; Mean loss: 2.5739
Iteration: 3707; Percent done: 92.7%; Mean loss: 2.6119
Iteration: 3708; Percent done: 92.7%; Mean loss: 2.9075
Iteration: 3709; Percent done: 92.7%; Mean loss: 2.9524
Iteration: 3710; Percent done: 92.8%; Mean loss: 2.5927
Iteration: 3711; Percent done: 92.8%; Mean loss: 2.9816
Iteration: 3712; Percent done: 92.8%; Mean loss: 3.1178
Iteration: 3713; Percent done: 92.8%; Mean loss: 2.8158
Iteration: 3714; Percent done: 92.8%; Mean loss: 2.6687
Iteration: 3715; Percent done: 92.9%; Mean loss: 2.8126
```

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Iteration: 3716; Percent done: 92.9%; Mean loss: 2.6602
Iteration: 3717; Percent done: 92.9%; Mean loss: 2.6996
Iteration: 3718; Percent done: 93.0%; Mean loss: 2.6350
Iteration: 3719; Percent done: 93.0%; Mean loss: 2.7461
Iteration: 3720; Percent done: 93.0%; Mean loss: 2.6591
Iteration: 3721; Percent done: 93.0%; Mean loss: 2.7169
Iteration: 3722; Percent done: 93.0%; Mean loss: 2.7106
Iteration: 3723; Percent done: 93.1%; Mean loss: 2.8763
Iteration: 3724; Percent done: 93.1%; Mean loss: 2.7075
Iteration: 3725; Percent done: 93.1%; Mean loss: 2.5496
Iteration: 3726; Percent done: 93.2%; Mean loss: 2.7898
Iteration: 3727; Percent done: 93.2%; Mean loss: 2.7469
Iteration: 3728; Percent done: 93.2%; Mean loss: 2.6993
Iteration: 3729; Percent done: 93.2%; Mean loss: 2.8893
Iteration: 3730; Percent done: 93.2%; Mean loss: 3.1087
Iteration: 3731; Percent done: 93.3%; Mean loss: 2.7176
Iteration: 3732; Percent done: 93.3%; Mean loss: 2.8711
Iteration: 3733; Percent done: 93.3%; Mean loss: 2.5937
Iteration: 3734; Percent done: 93.3%; Mean loss: 2.6474
Iteration: 3735; Percent done: 93.4%; Mean loss: 2.6502
Iteration: 3736; Percent done: 93.4%; Mean loss: 3.1387
Iteration: 3737; Percent done: 93.4%; Mean loss: 2.6682
Iteration: 3738; Percent done: 93.5%; Mean loss: 2.8201
Iteration: 3739; Percent done: 93.5%; Mean loss: 2.4256
Iteration: 3740; Percent done: 93.5%; Mean loss: 2.6654
Iteration: 3741; Percent done: 93.5%; Mean loss: 2.6265
Iteration: 3742; Percent done: 93.5%; Mean loss: 2.5734
Iteration: 3743; Percent done: 93.6%; Mean loss: 2.9473
Iteration: 3744; Percent done: 93.6%; Mean loss: 2.8626
Iteration: 3745; Percent done: 93.6%; Mean loss: 2.5856
Iteration: 3746; Percent done: 93.7%; Mean loss: 2.8808
Iteration: 3747; Percent done: 93.7%; Mean loss: 2.7349
Iteration: 3748; Percent done: 93.7%; Mean loss: 2.7647
Iteration: 3749; Percent done: 93.7%; Mean loss: 2.5937
Iteration: 3750; Percent done: 93.8%; Mean loss: 2.7156
Iteration: 3751; Percent done: 93.8%; Mean loss: 2.8349
Iteration: 3752; Percent done: 93.8%; Mean loss: 2.7789
Iteration: 3753; Percent done: 93.8%; Mean loss: 2.7714
Iteration: 3754; Percent done: 93.8%; Mean loss: 2.9083
Iteration: 3755; Percent done: 93.9%; Mean loss: 2.5314
Iteration: 3756; Percent done: 93.9%; Mean loss: 2.6312
Iteration: 3757; Percent done: 93.9%; Mean loss: 2.9536
Iteration: 3758; Percent done: 94.0%; Mean loss: 2.8761
Iteration: 3759; Percent done: 94.0%; Mean loss: 2.5725
Iteration: 3760; Percent done: 94.0%; Mean loss: 2.8004
Iteration: 3761; Percent done: 94.0%; Mean loss: 2.5660
Iteration: 3762; Percent done: 94.0%; Mean loss: 2.5134
Iteration: 3763; Percent done: 94.1%; Mean loss: 2.5845
Iteration: 3764; Percent done: 94.1%; Mean loss: 2.6807
Iteration: 3765; Percent done: 94.1%; Mean loss: 2.7950
Iteration: 3766; Percent done: 94.2%; Mean loss: 2.7326
Iteration: 3767; Percent done: 94.2%; Mean loss: 2.7408
Iteration: 3768; Percent done: 94.2%; Mean loss: 2.7158
Iteration: 3769; Percent done: 94.2%; Mean loss: 2.5088
Iteration: 3770; Percent done: 94.2%; Mean loss: 2.7009
Iteration: 3771; Percent done: 94.3%; Mean loss: 2.8086
Iteration: 3772; Percent done: 94.3%; Mean loss: 2.8309
Iteration: 3773; Percent done: 94.3%; Mean loss: 2.6989
```

```
Iteration: 3774; Percent done: 94.3%; Mean loss: 2.6323
Iteration: 3775; Percent done: 94.4%; Mean loss: 2.8022
Iteration: 3776; Percent done: 94.4%; Mean loss: 2.9514
Iteration: 3777; Percent done: 94.4%; Mean loss: 2.9179
Iteration: 3778; Percent done: 94.5%; Mean loss: 2.5753
Iteration: 3779; Percent done: 94.5%; Mean loss: 2.7205
Iteration: 3780; Percent done: 94.5%; Mean loss: 2.4630
Iteration: 3781; Percent done: 94.5%; Mean loss: 2.7251
Iteration: 3782; Percent done: 94.5%; Mean loss: 2.5283
Iteration: 3783; Percent done: 94.6%; Mean loss: 2.8627
Iteration: 3784; Percent done: 94.6%; Mean loss: 2.8358
Iteration: 3785; Percent done: 94.6%; Mean loss: 2.9717
Iteration: 3786; Percent done: 94.7%; Mean loss: 2.7506
Iteration: 3787; Percent done: 94.7%; Mean loss: 2.9079
Iteration: 3788; Percent done: 94.7%; Mean loss: 2.5574
Iteration: 3789; Percent done: 94.7%; Mean loss: 2.6307
Iteration: 3790; Percent done: 94.8%; Mean loss: 2.7585
Iteration: 3791; Percent done: 94.8%; Mean loss: 2.6984
Iteration: 3792; Percent done: 94.8%; Mean loss: 2.6619
Iteration: 3793; Percent done: 94.8%; Mean loss: 2.6993
Iteration: 3794; Percent done: 94.8%; Mean loss: 2.6883
Iteration: 3795; Percent done: 94.9%; Mean loss: 2.7897
Iteration: 3796; Percent done: 94.9%; Mean loss: 2.8232
Iteration: 3797; Percent done: 94.9%; Mean loss: 2.8490
Iteration: 3798; Percent done: 95.0%; Mean loss: 2.6484
Iteration: 3799; Percent done: 95.0%; Mean loss: 2.6877
Iteration: 3800; Percent done: 95.0%; Mean loss: 2.6176
Iteration: 3801; Percent done: 95.0%; Mean loss: 2.7123
Iteration: 3802; Percent done: 95.0%; Mean loss: 2.7109
Iteration: 3803; Percent done: 95.1%; Mean loss: 2.8041
Iteration: 3804; Percent done: 95.1%; Mean loss: 2.7735
Iteration: 3805; Percent done: 95.1%; Mean loss: 2.6544
Iteration: 3806; Percent done: 95.2%; Mean loss: 2.8303
Iteration: 3807; Percent done: 95.2%; Mean loss: 2.7142
Iteration: 3808; Percent done: 95.2%; Mean loss: 3.0185
Iteration: 3809; Percent done: 95.2%; Mean loss: 2.9106
Iteration: 3810; Percent done: 95.2%; Mean loss: 2.9080
Iteration: 3811; Percent done: 95.3%; Mean loss: 2.9200
Iteration: 3812; Percent done: 95.3%; Mean loss: 2.7926
Iteration: 3813; Percent done: 95.3%; Mean loss: 3.0073
Iteration: 3814; Percent done: 95.3%; Mean loss: 2.8955
Iteration: 3815; Percent done: 95.4%; Mean loss: 2.4457
Iteration: 3816; Percent done: 95.4%; Mean loss: 2.5675
Iteration: 3817; Percent done: 95.4%; Mean loss: 2.7469
Iteration: 3818; Percent done: 95.5%; Mean loss: 2.7331
Iteration: 3819; Percent done: 95.5%; Mean loss: 2.8814
Iteration: 3820; Percent done: 95.5%; Mean loss: 2.5391
Iteration: 3821; Percent done: 95.5%; Mean loss: 2.5625
Iteration: 3822; Percent done: 95.5%; Mean loss: 2.5976
Iteration: 3823; Percent done: 95.6%; Mean loss: 2.7226
Iteration: 3824; Percent done: 95.6%; Mean loss: 2.8448
Iteration: 3825; Percent done: 95.6%; Mean loss: 2.5612
Iteration: 3826; Percent done: 95.7%; Mean loss: 2.8773
Iteration: 3827; Percent done: 95.7%; Mean loss: 2.4859
Iteration: 3828; Percent done: 95.7%; Mean loss: 2.7275
Iteration: 3829; Percent done: 95.7%; Mean loss: 2.6703
Iteration: 3830; Percent done: 95.8%; Mean loss: 2.5651
Iteration: 3831; Percent done: 95.8%; Mean loss: 2.7923
```

```
Iteration: 3832; Percent done: 95.8%; Mean loss: 2.5588
Iteration: 3833; Percent done: 95.8%; Mean loss: 2.5953
Iteration: 3834; Percent done: 95.9%; Mean loss: 2.3835
Iteration: 3835; Percent done: 95.9%; Mean loss: 2.7161
Iteration: 3836; Percent done: 95.9%; Mean loss: 2.8638
Iteration: 3837; Percent done: 95.9%; Mean loss: 2.6502
Iteration: 3838; Percent done: 96.0%; Mean loss: 2.6519
Iteration: 3839; Percent done: 96.0%; Mean loss: 2.7571
Iteration: 3840; Percent done: 96.0%; Mean loss: 2.5078
Iteration: 3841; Percent done: 96.0%; Mean loss: 2.6790
Iteration: 3842; Percent done: 96.0%; Mean loss: 2.7844
Iteration: 3843; Percent done: 96.1%; Mean loss: 2.7766
Iteration: 3844; Percent done: 96.1%; Mean loss: 2.6875
Iteration: 3845; Percent done: 96.1%; Mean loss: 2.6614
Iteration: 3846; Percent done: 96.2%; Mean loss: 2.6877
Iteration: 3847; Percent done: 96.2%; Mean loss: 2.7637
Iteration: 3848; Percent done: 96.2%; Mean loss: 2.5364
Iteration: 3849; Percent done: 96.2%; Mean loss: 2.6596
Iteration: 3850; Percent done: 96.2%; Mean loss: 2.9523
Iteration: 3851; Percent done: 96.3%; Mean loss: 2.6980
Iteration: 3852; Percent done: 96.3%; Mean loss: 2.4977
Iteration: 3853; Percent done: 96.3%; Mean loss: 2.8607
Iteration: 3854; Percent done: 96.4%; Mean loss: 2.8194
Iteration: 3855; Percent done: 96.4%; Mean loss: 2.7239
Iteration: 3856; Percent done: 96.4%; Mean loss: 2.8992
Iteration: 3857; Percent done: 96.4%; Mean loss: 2.7107
Iteration: 3858; Percent done: 96.5%; Mean loss: 2.3084
```

```
1 encoder.eval()
2 decoder.eval()
3
4 searcher = GreedySearchDecoder(encoder, decoder)
```

```
Iteration: 3864; Percent done: 96.6%; Mean loss: 2.8194
```

```
1 runChatBot(encoder, decoder, searcher, voc)
```

⇥

```
> Hi
Response: hi . you ? a minute ?
> how are you.
Response: i m fine . you ? it ?
> i dont like you
Error: Unknown Word
> my name is sahil
Error: Unknown Word
> why unkown word?
Error: Unknown Word
> hi
Response: hi . you ? a minute ?
> im good
Response: you re losing your own good night .
> ohh really
Response: i m sorry . you ? it ?
> haha
Error: Unknown Word
> im happy
Response: yes . you to do that ?
```

KeyboardInterrupt   Traceback (most recent call last)
/usr/local/lib/python3.6/dist-packages/ipykernel/kernelbase.py in
_input_request(self, prompt, ident, parent, password)
    728   try:
--> 729   ident, reply = self.session.recv(self.stdin_socket,
    0)

    1

────────────── ⌃⌄ 6 frames ──────────────

zmq/backend/cython/socket.pyx in zmq.backend.cython.socket.Socket.recv()

zmq/backend/cython/socket.pyx in zmq.backend.cython.socket.Socket.recv()

zmq/backend/cython/socket.pyx in zmq.backend.cython.socket._recv_copy()

KeyboardInterrupt:

During handling of the above exception, another exception occurred:

KeyboardInterrupt   Traceback (most recent call last)
/usr/local/lib/python3.6/dist-packages/ipykernel/kernelbase.py in
_input_request(self, prompt, ident, parent, password)
    732   except KeyboardInterrupt:
    733   # re-raise KeyboardInterrupt, to truncate traceback
--> 734   raise KeyboardInterrupt
    735   else:
    736   break