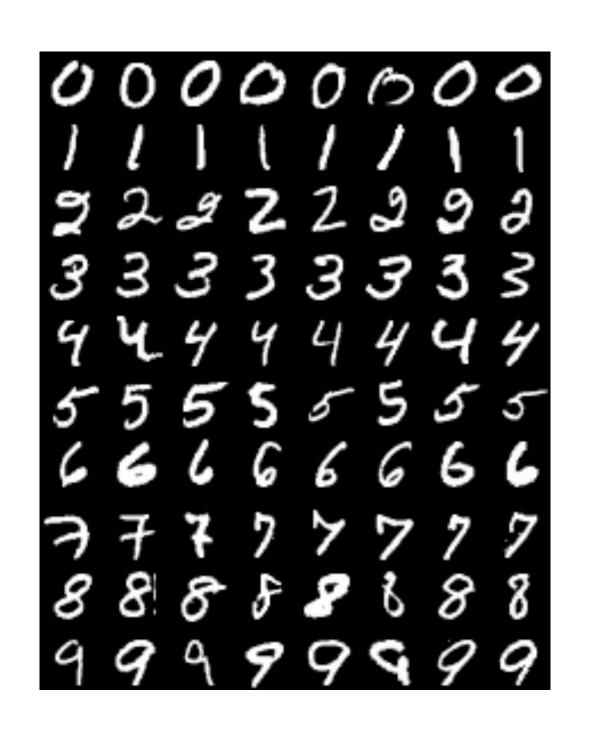
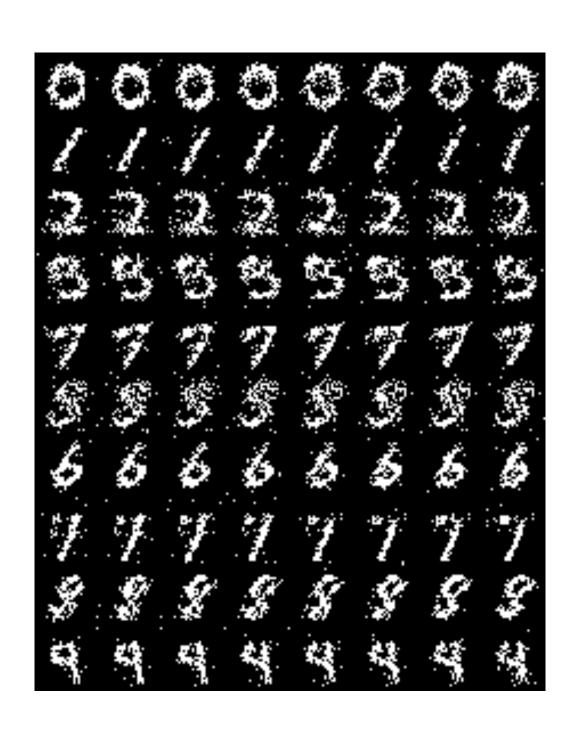
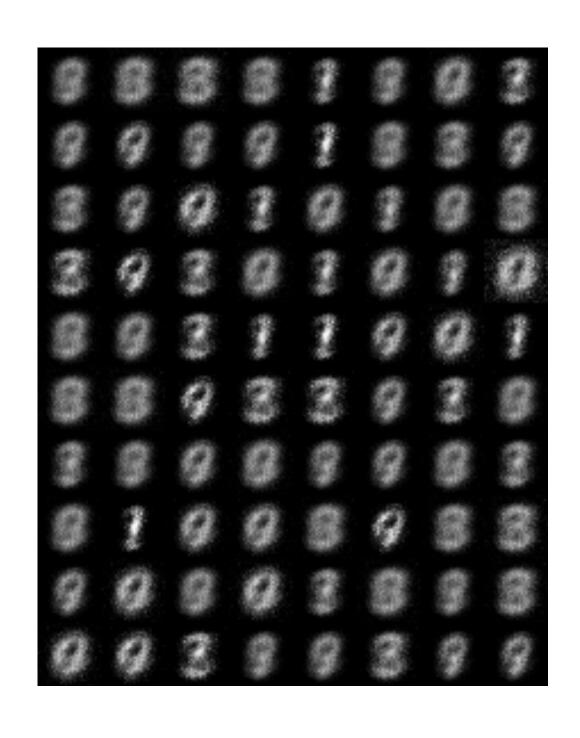
Synthetic Samples (MNIST)



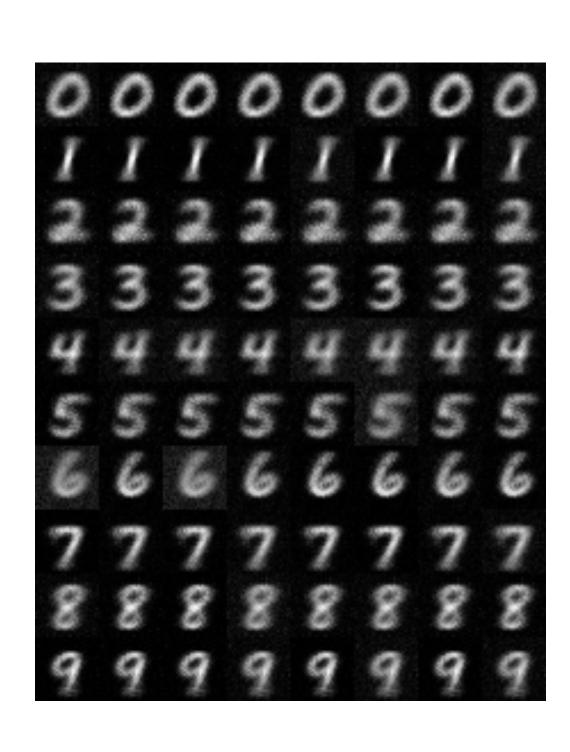
Original samples



RBM samples



VAE w/o clustering



VAE with clustering

Epsilon 1.74, 20 SGD epochs

Counting-Query

Task: Given a dataset D, return the number of users in the dataset which satisfy a given predicate

Evaluation:

Call-Data-Record (CDR) dataset of tower cells. Query returns the number of users in D who visited a subset of cells.

Dataset: approx. 4 million users, 1303 number of towers