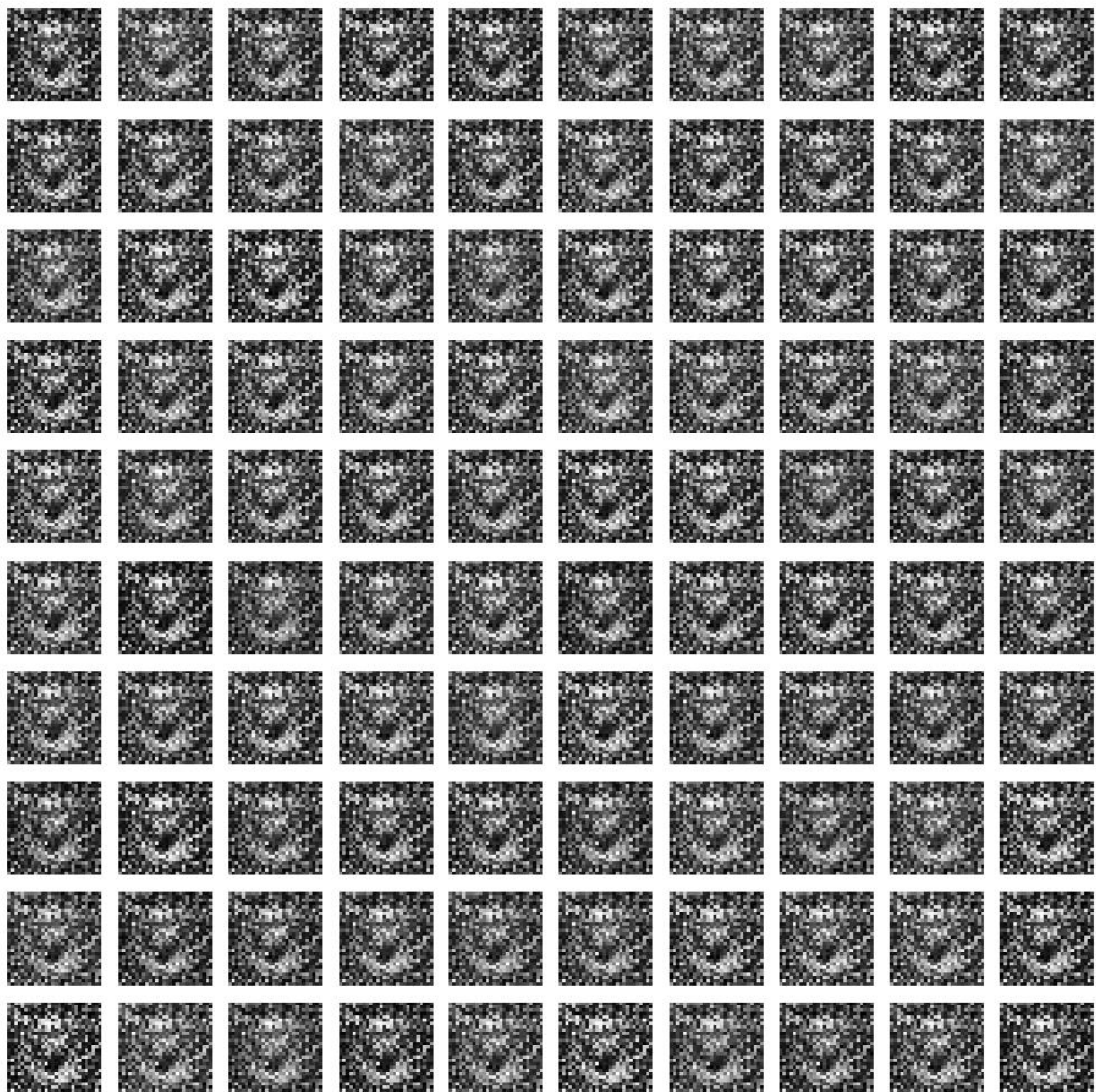Fake Data Generation from noise using GAN

A fight recorded in between Generator and Discriminator for 50 rounds battle, Both Generator and Discriminator were not ready to give up and became trained fighting battle, Their losses were also not reduced because better the Discriminator needs Generator to be best. Discriminator wanted to maximize his chance to find difference in fake and real and Generator tried to minimize the chances such that fake data can be distinguished. As Generator weights becoming good to generate then Discriminator weights are also shifted in a manner such that it can better distinguish between real mnist data and fake mnist data.
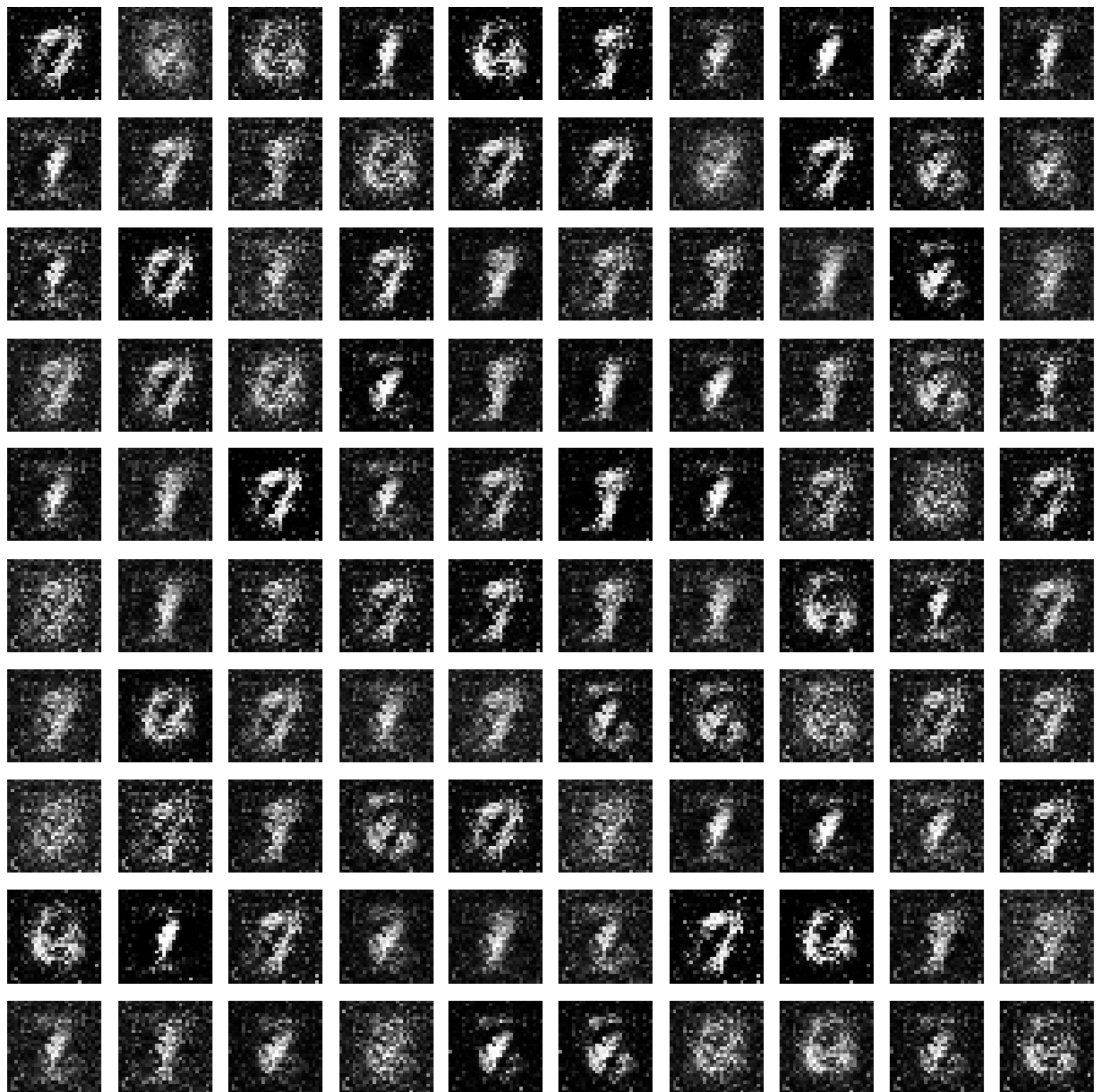
Training time: 1.15 hrs

Processor: T4 TPU (Google colab)
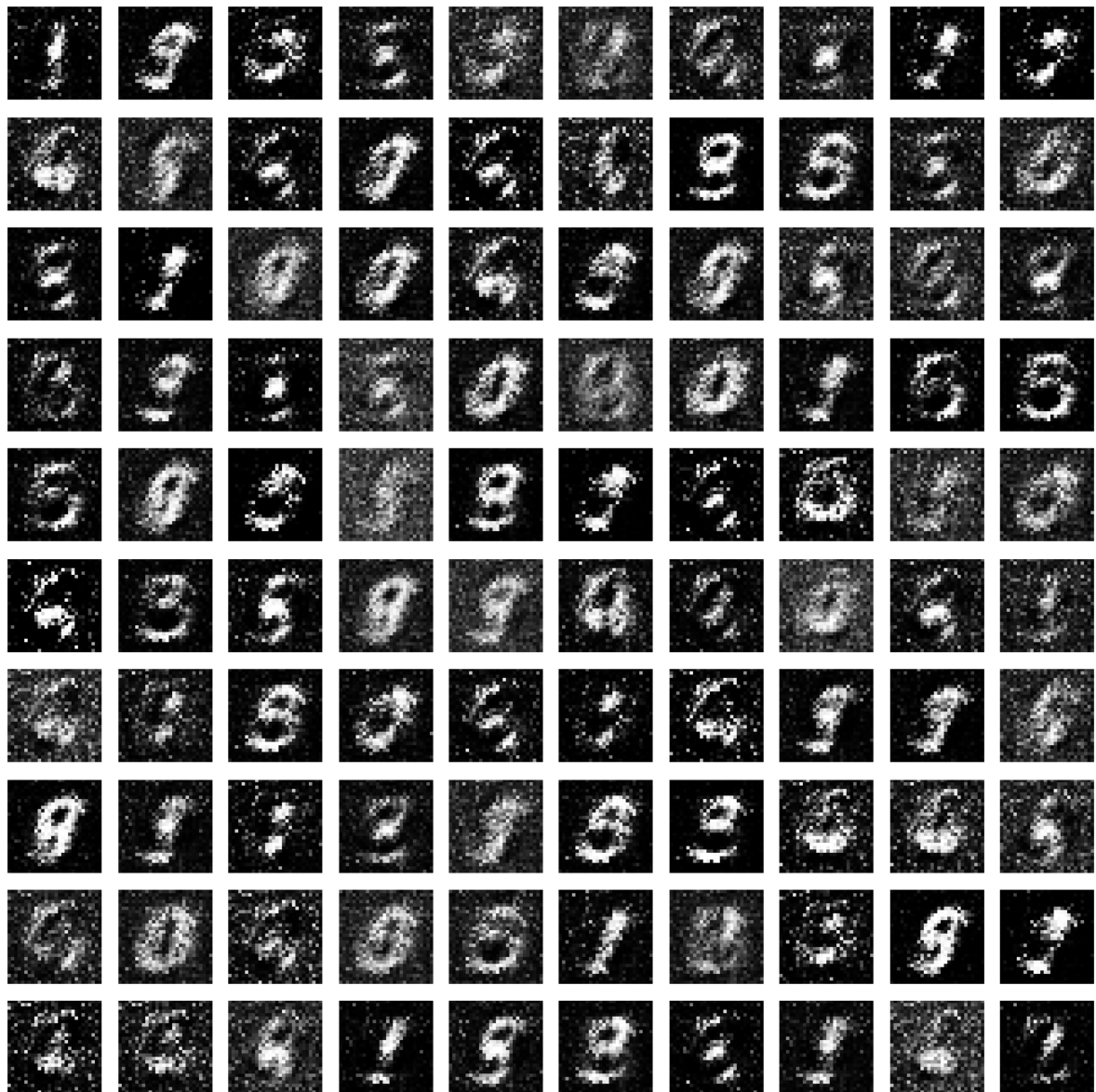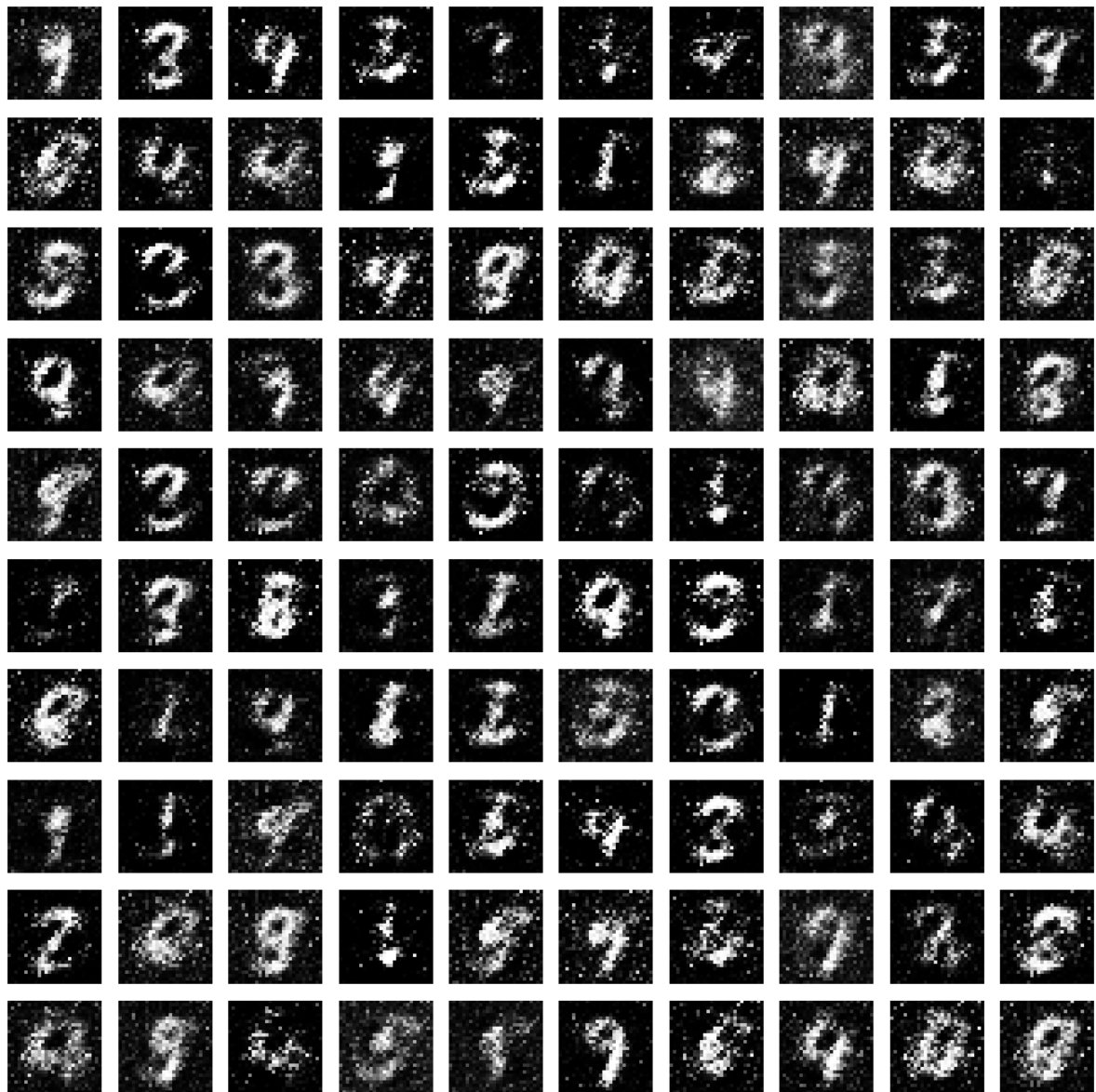
Generator Generated images as follows:
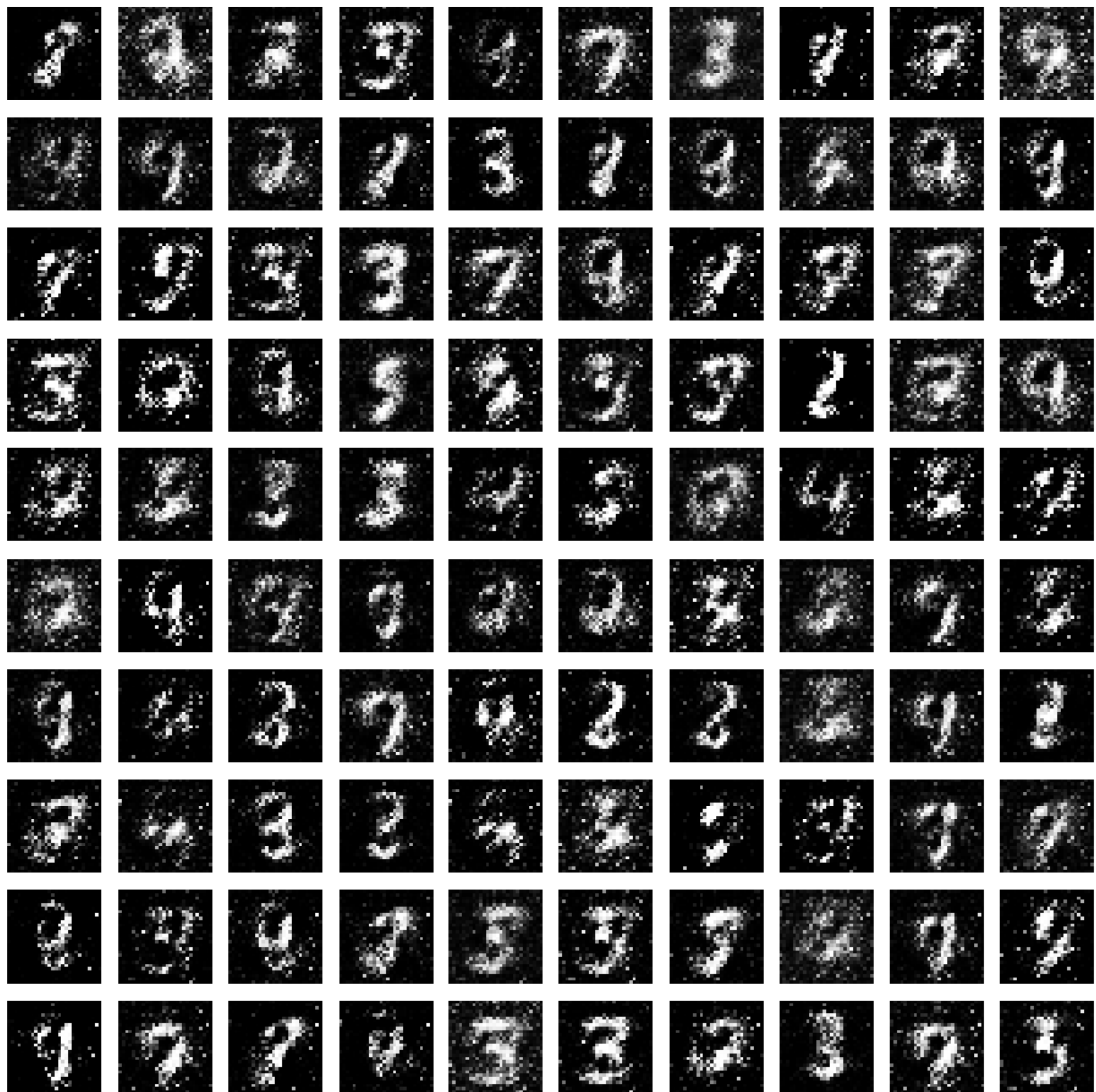
After Epoch-5
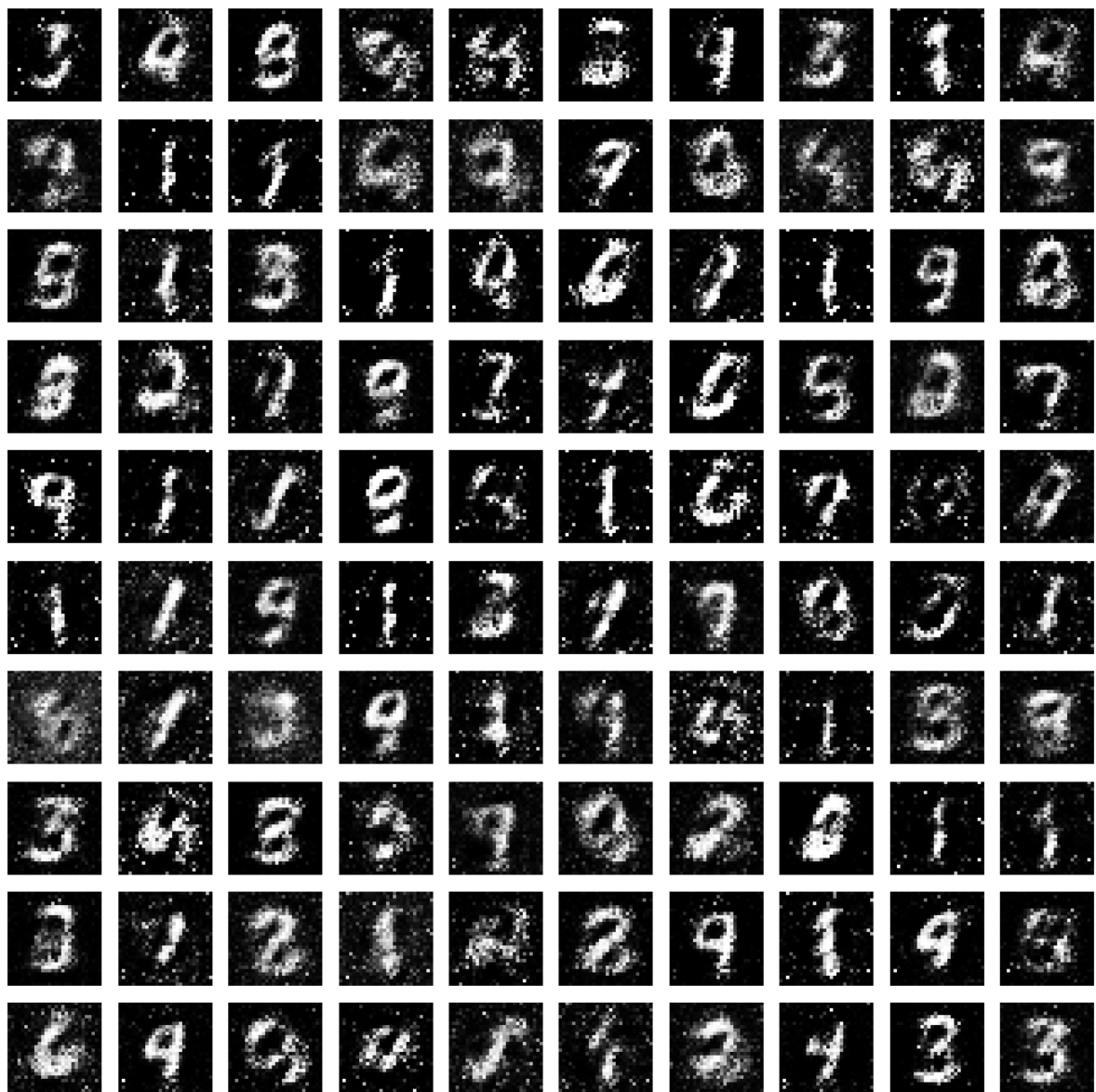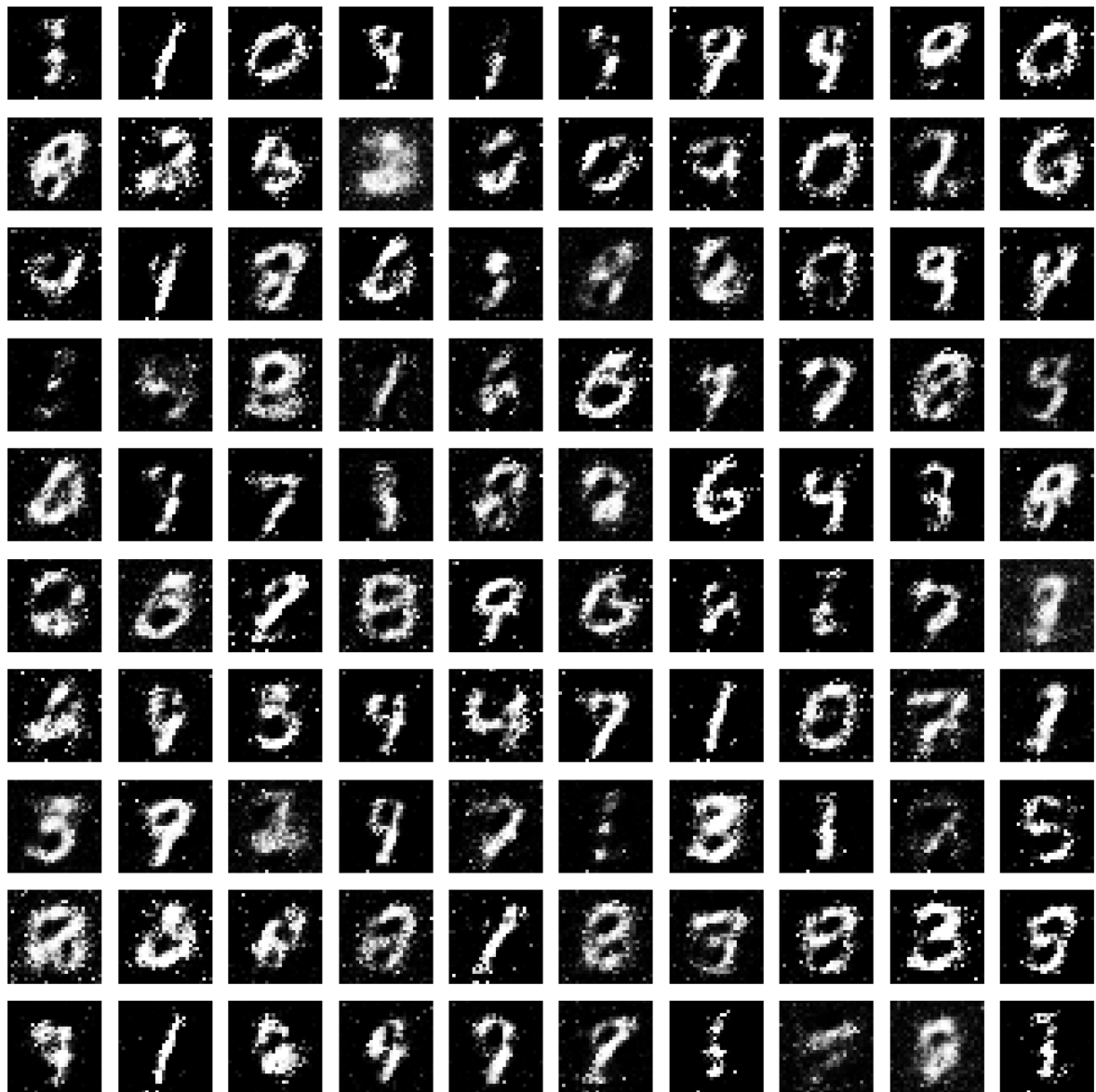
After Epoch-10

After Epoch-15
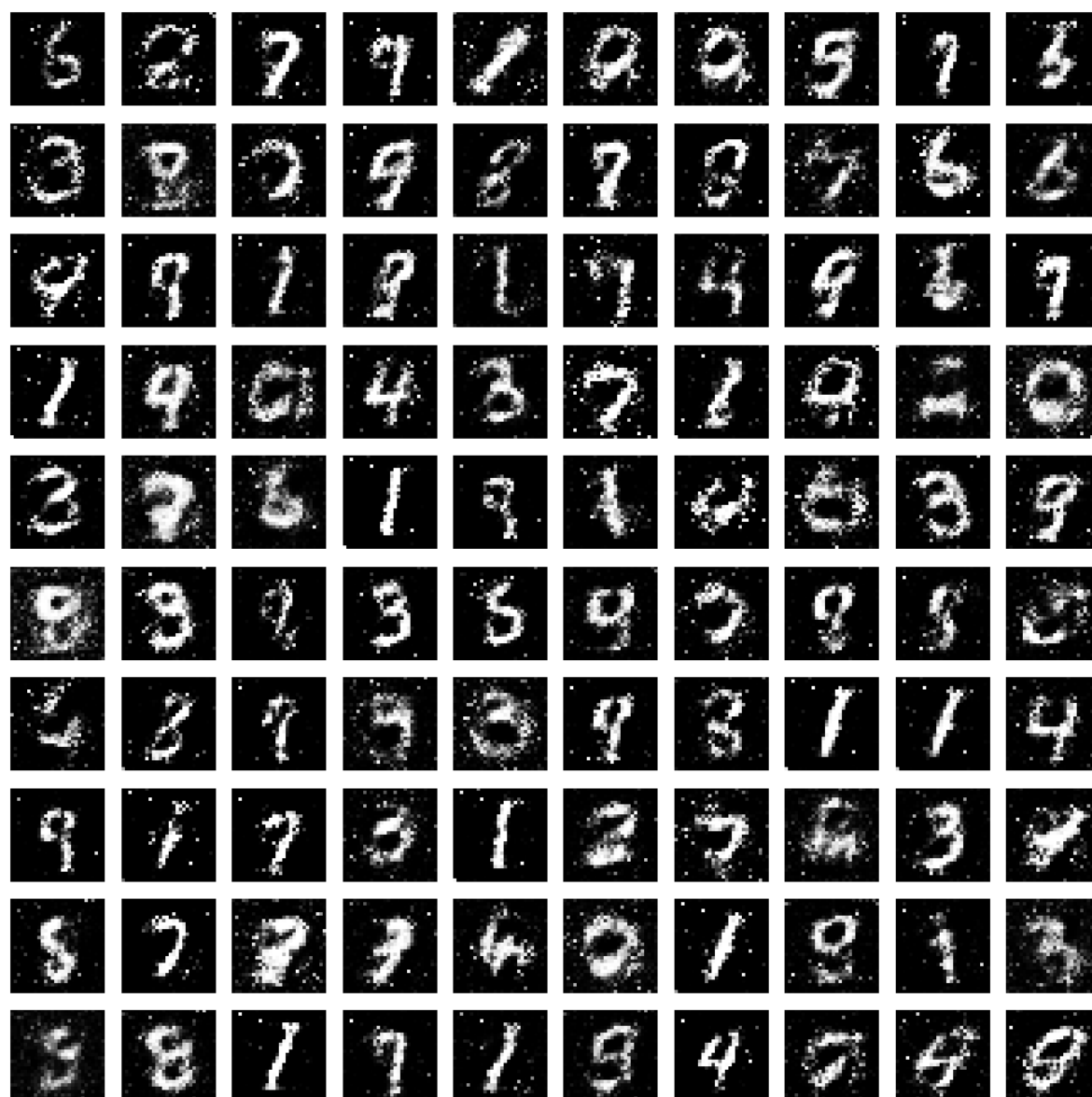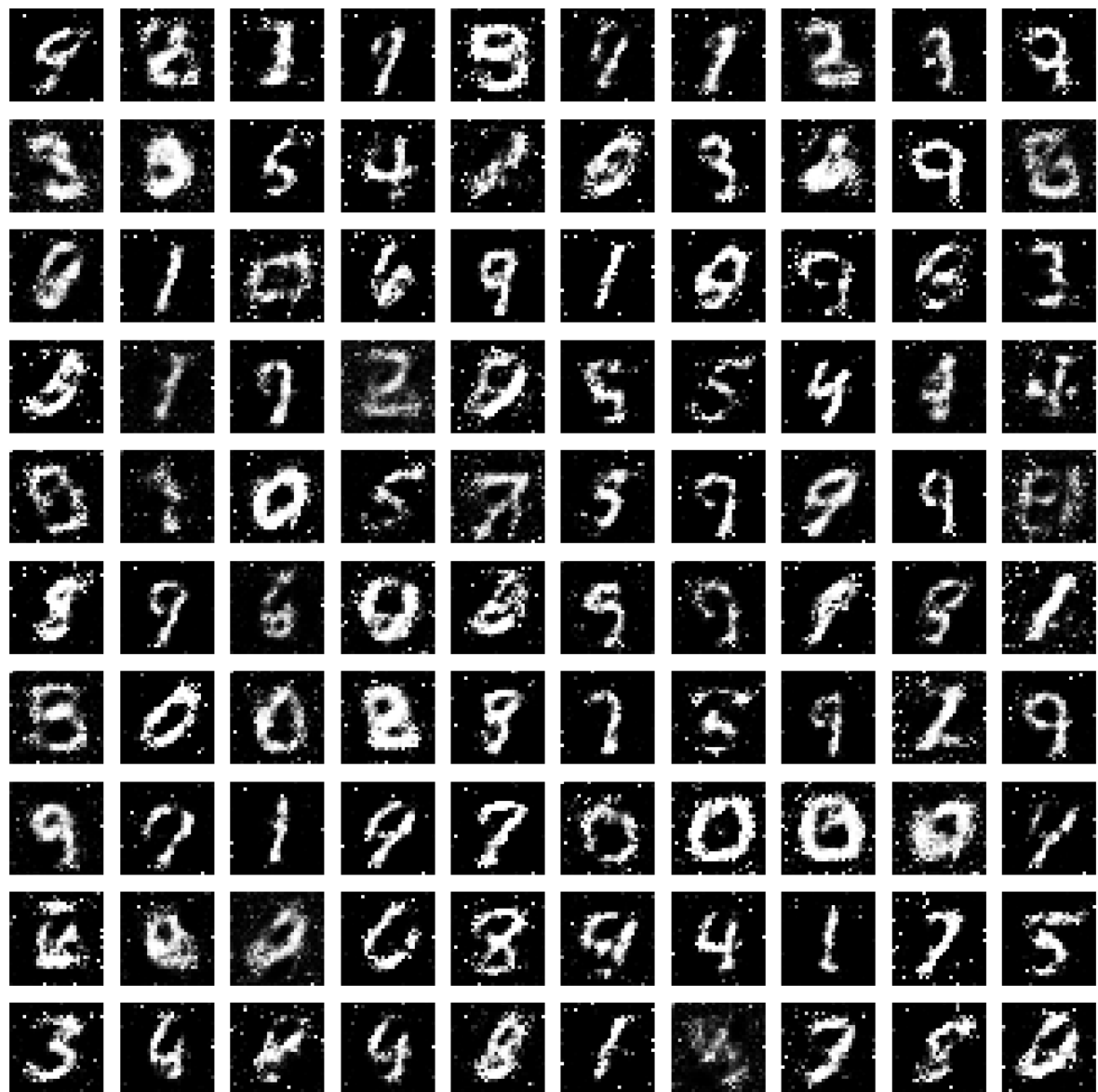
After Epoch-20

After Epoch-25

After Epoch-30

After Epoch-35

After Epoch-40

After Epoch-45

After Epoch-50