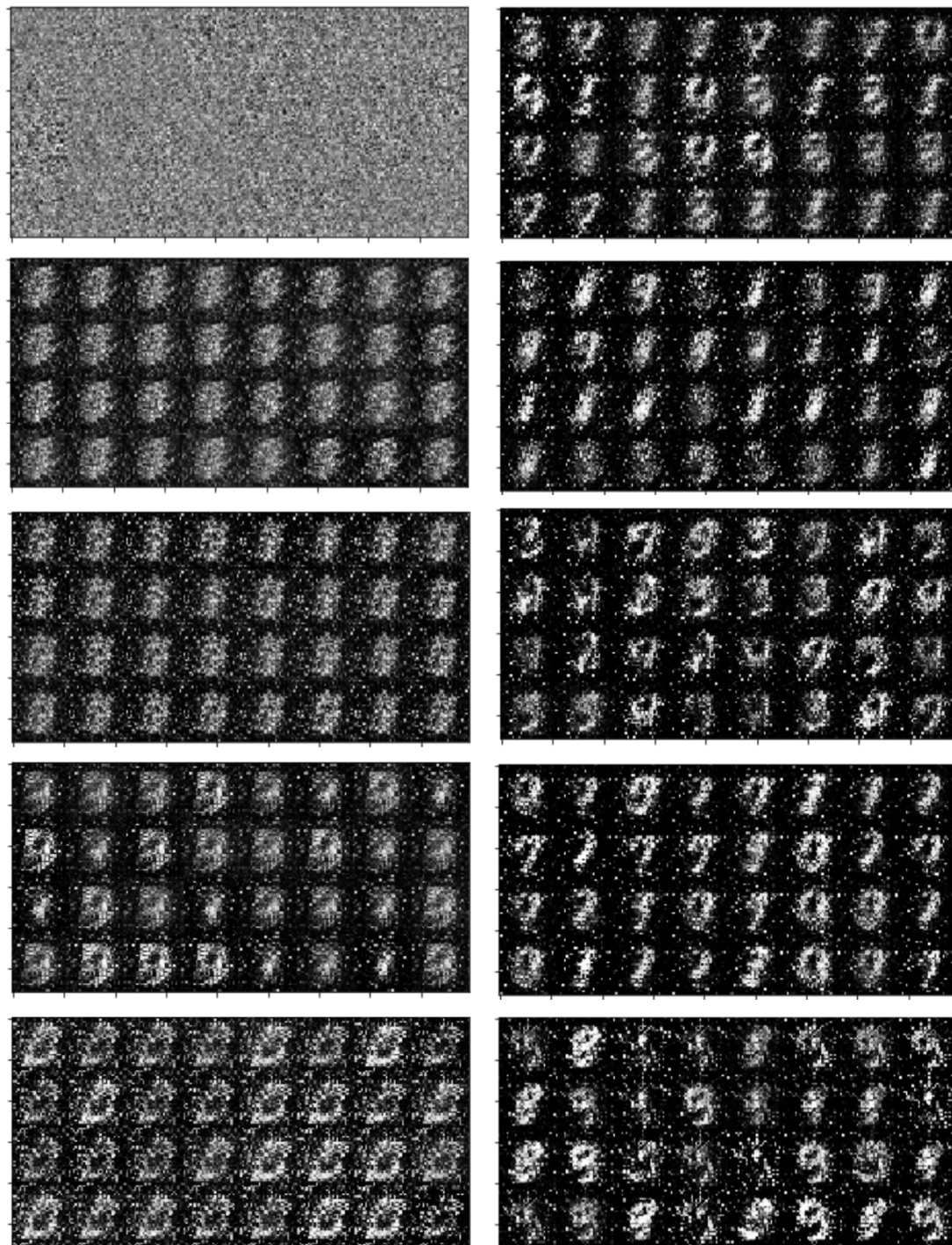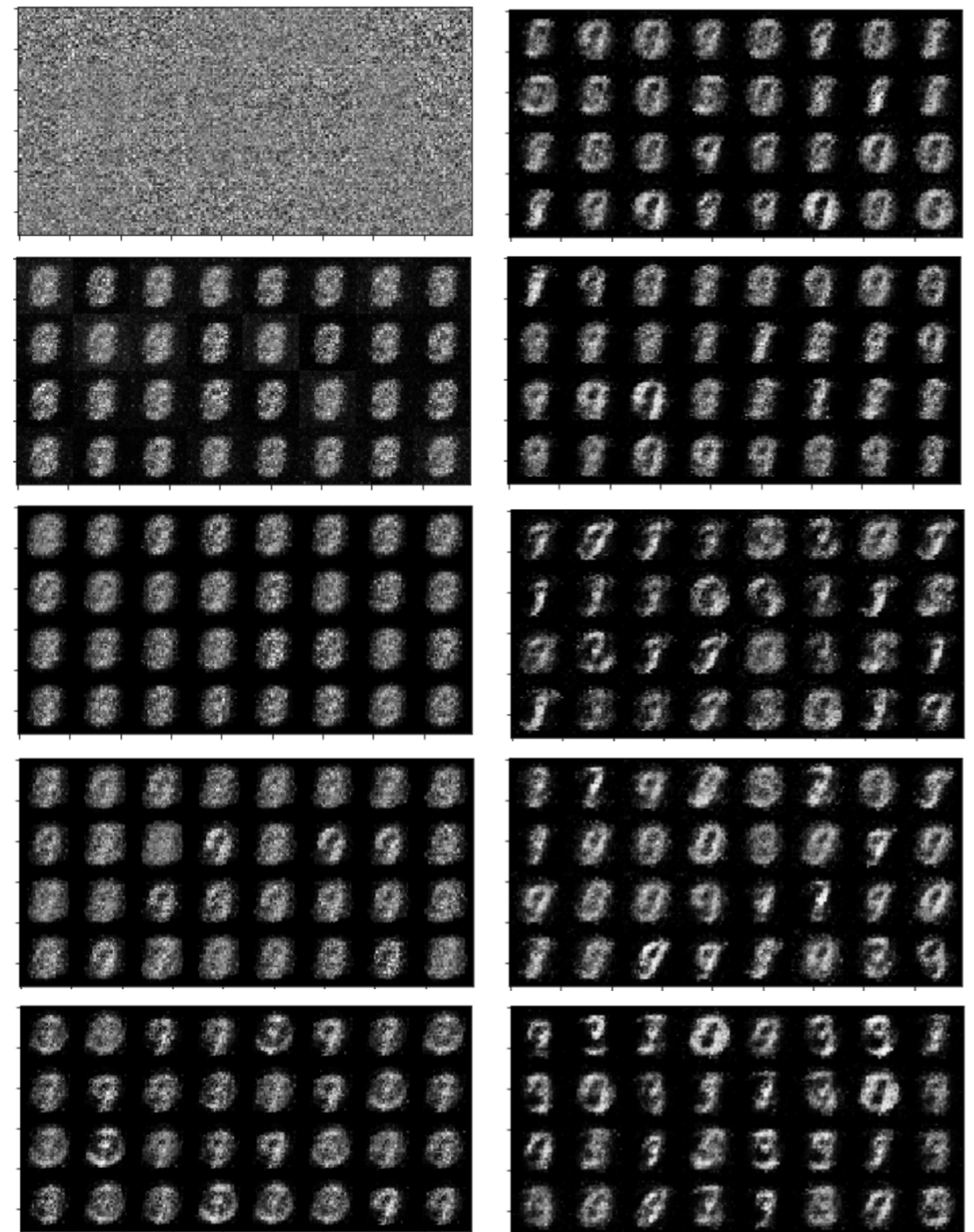Compare the performance of the two GAN's over the different iterations.
Do you see an improvement in stability and quality of the generated samples?
Elaborate on the knowledge you have gained about optimal transport and the Wasserstein distance.

WCGAN

Train the standard GAN   **Train the Wasserstein GAN**

Train the standard GAN

Batch 1,   D loss: 0.8225 D acc: 0.25 G loss: 0.633 G acc: 0.7969

Batch 501,   D loss: 0.5417 D acc: 0.6562 G loss: 0.9094 G acc: 0.0

Batch 1001,   D loss: 0.5682 D acc: 0.7969 G loss: 0.85 G acc: 0.0938

Batch 1501,   D loss: 0.4764 D acc: 0.9062 G loss: 1.3475 G acc: 0.0

Batch 2001,   D loss: 0.2807 D acc: 0.9531 G loss: 1.4827 G acc: 0.0781

Batch 2501,   D loss: 0.4534 D acc: 0.8438 G loss: 1.6049 G acc: 0.0
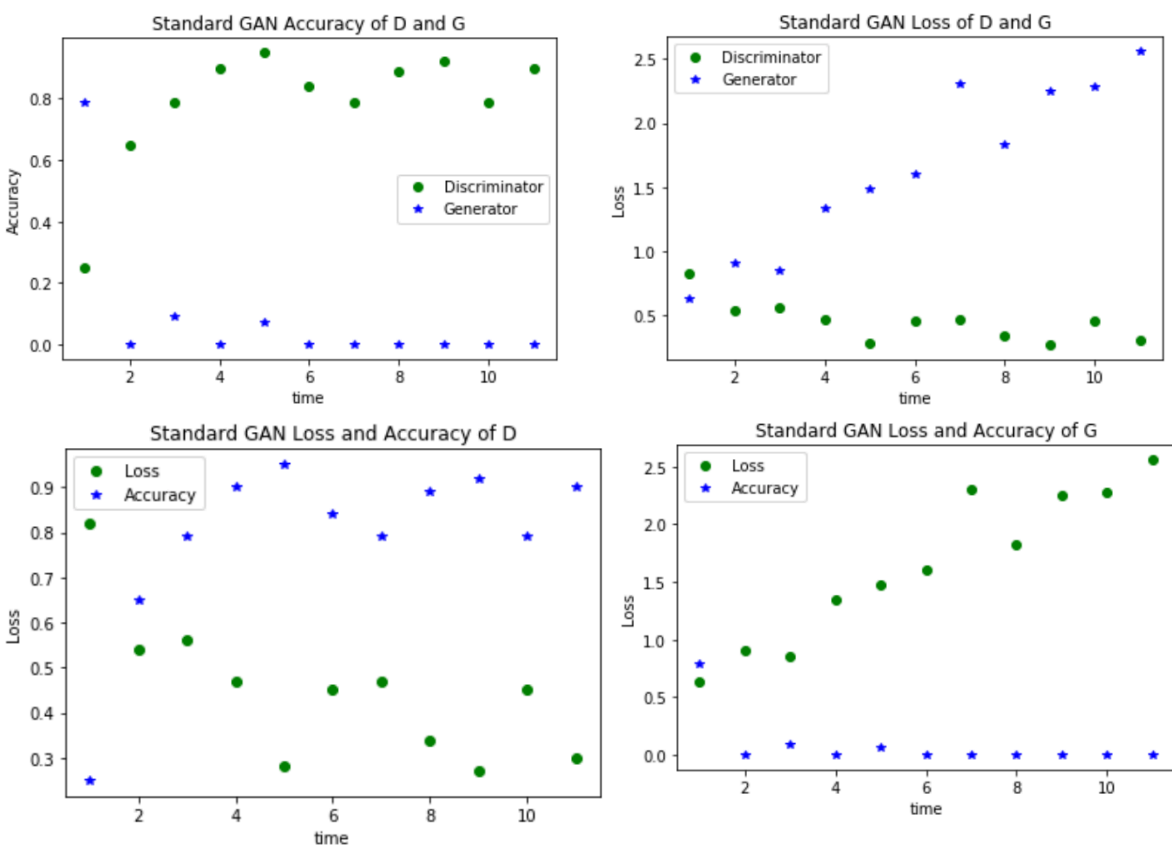
Batch 3001,   D loss: 0.4697 D acc: 0.7969 G loss: 2.3172 G acc: 0.0

Batch 3501,   D loss: 0.3414 D acc: 0.8906 G loss: 1.8377 G acc: 0.0

Batch 4001,   D loss: 0.2708 D acc: 0.9219 G loss: 2.2577 G acc: 0.0

Batch 4501,   D loss: 0.4505 D acc: 0.7969 G loss: 2.2875 G acc: 0.0

Batch 5000,   D loss: 0.3063 D acc: 0.9062 G loss: 2.567 G acc: 0.0

Train the Wasserstein GAN

Batch 1,   D loss: -0.0002 D acc: 0.0 G loss: 0.0004 G acc: 0.0

Batch 501,   D loss: -0.012 D acc: 0.5 G loss: -1.0129 G acc: 0.0

Batch 1001,   D loss: 0.0082 D acc: 0.0 G loss: -0.4682 G acc: 0.0

Batch 1501,   D loss: -0.0208 D acc: 0.0 G loss: -0.1384 G acc: 0.0

Batch 2001,   D loss: -0.0672 D acc: 0.0 G loss: -0.0128 G acc: 0.0

Batch 2501,   D loss: -0.0833 D acc: 0.0 G loss: 0.0199 G acc: 0.0

Batch 3001,   D loss: -0.0674 D acc: 0.0 G loss: -0.0067 G acc: 0.0

Batch 3501,   D loss: -0.0525 D acc: 0.0 G loss: 0.0116 G acc: 0.0

Batch 4001,   D loss: 0.2708 D acc: 0.9219 G loss: 2.2577 G acc: 0.0

Batch 4501,   D loss: -0.0485 D acc: 0.0 G loss: -0.006 G acc: 0.0

Batch 5000,   D loss: -0.0344 D acc: 0.0 G loss: -0.0258 G acc: 0.0