Topics on High Dimensional Data Analytics
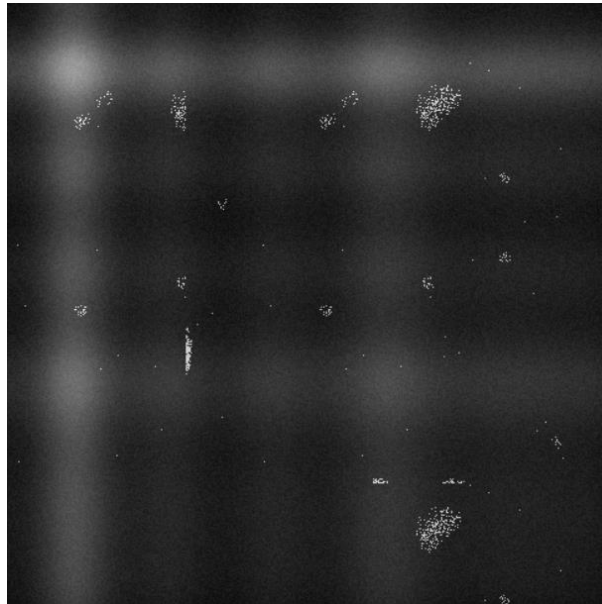
Final Exam

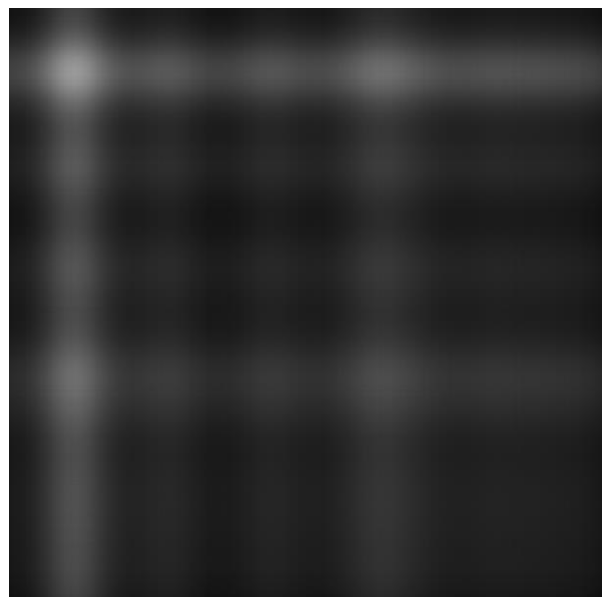**Q4: Part 1 and 2**

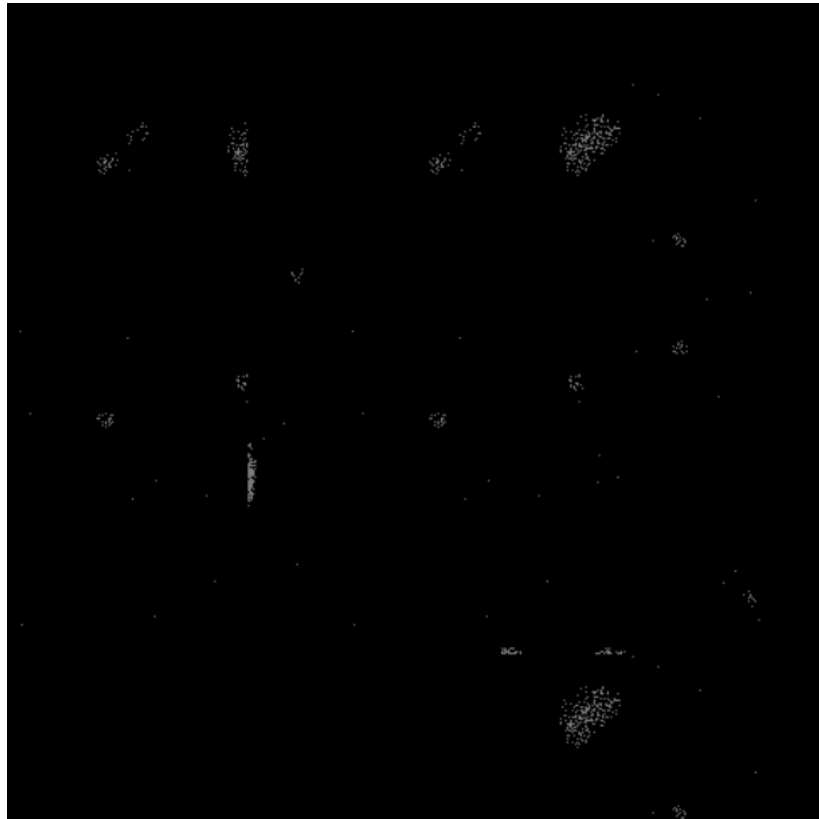**Ian Dover**

Part 1:

Original Image (M)

Smoothed Image (L)

Noisy Image (S)

Part 2.1:

Linear Kernel
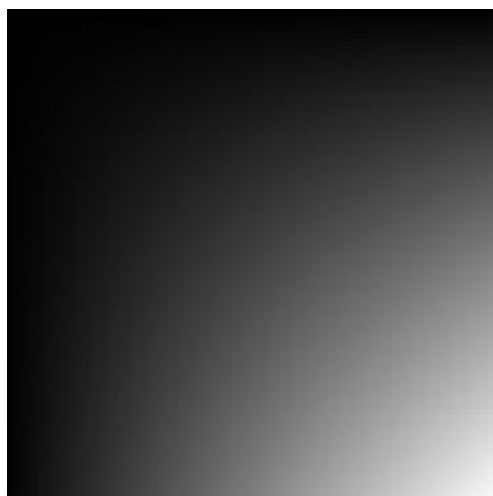
Polynomial Kernel
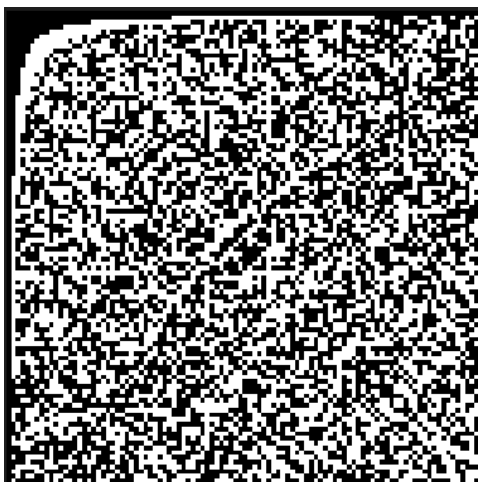
Periodic Kernel
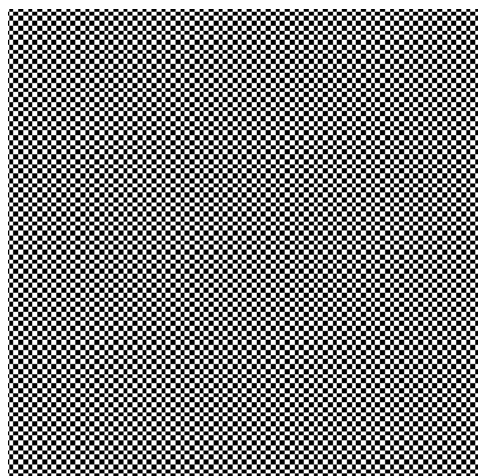
Gaussian Kernel
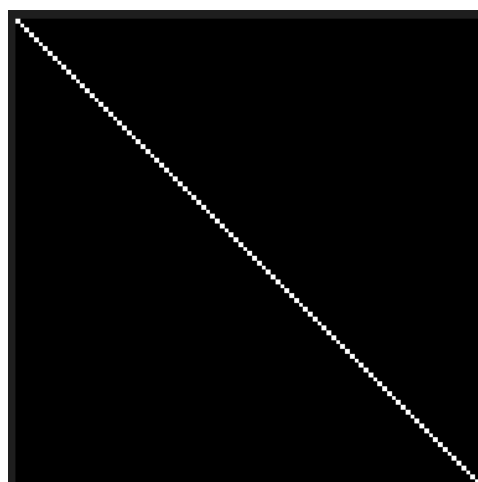
Part 2.2:

```
###########################################
The RMSE on the test set for the linear kernel is:
0.215313
The RMSE on the test set for the polynomial kernel is:
0.068106
The RMSE on the test set for the periodic kernel is:
0.406997
The RMSE on the test set for the gaussian kernel is:
0.074666
###########################################
```


Linear Kernel Y Predictions VS. True Y

Polynomial Kernel Y Predictions VS. True Y

Periodic Kernel Y Predictions VS. True Y

Gaussian Kernel Y Predictions VS. True Y