



**University of Tripoli Department of Electrical and  
Electronic Engineering Spring 2025**

**EE569**

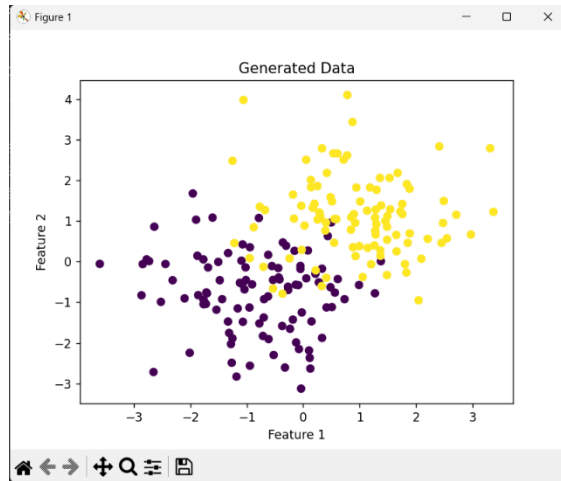
**Homework Assignment 1  
PART A-Results**

**نسيبة عمر بن زاهية**

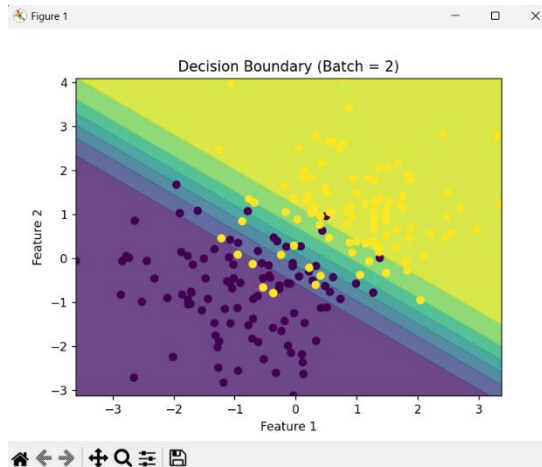
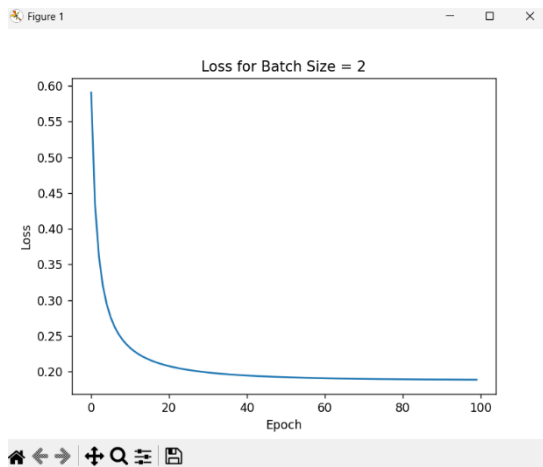
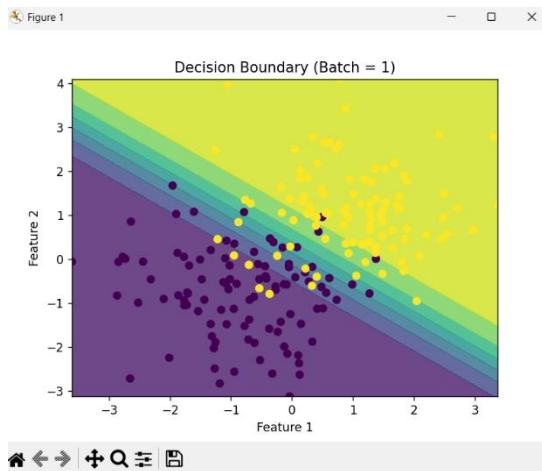
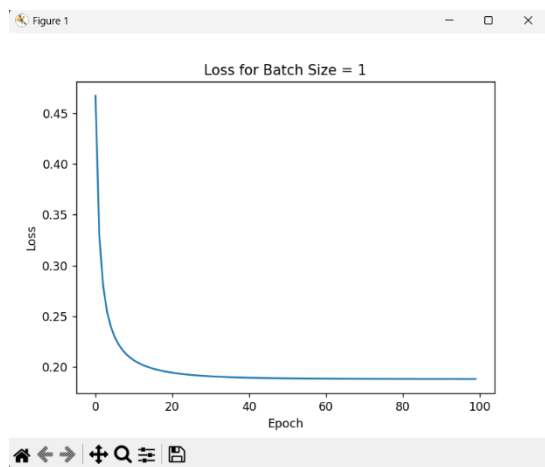
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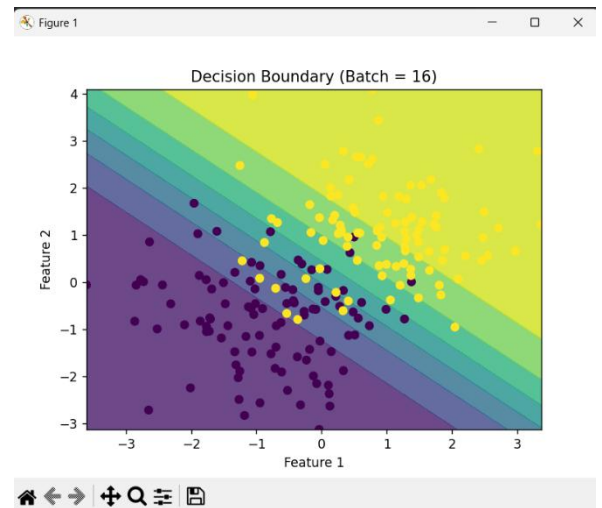
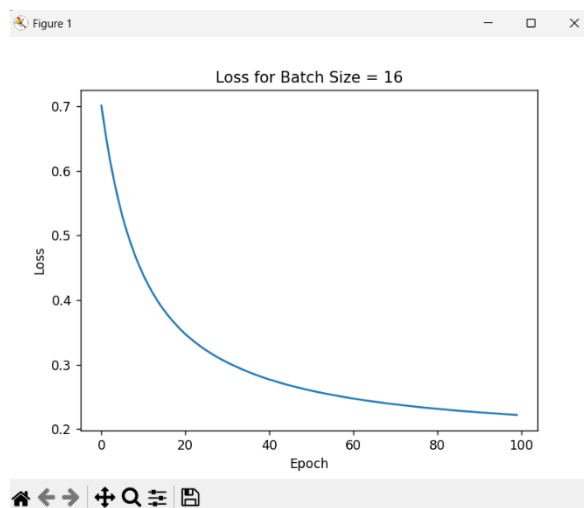
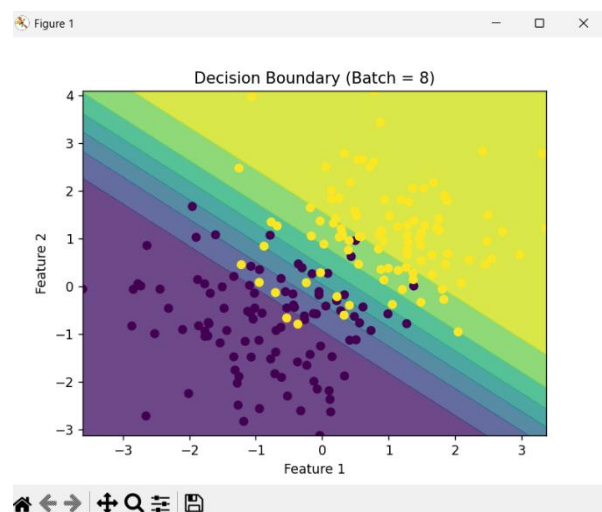
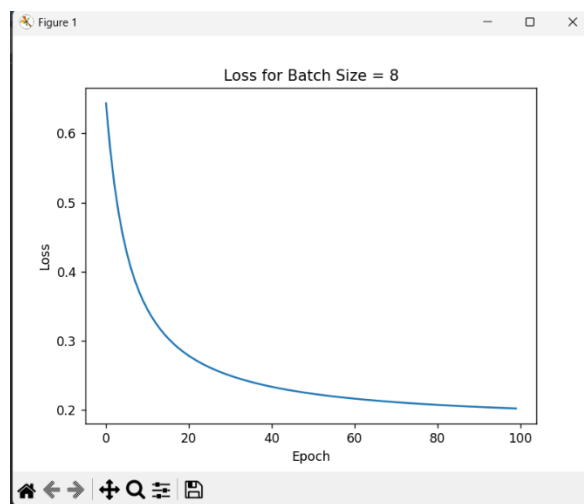
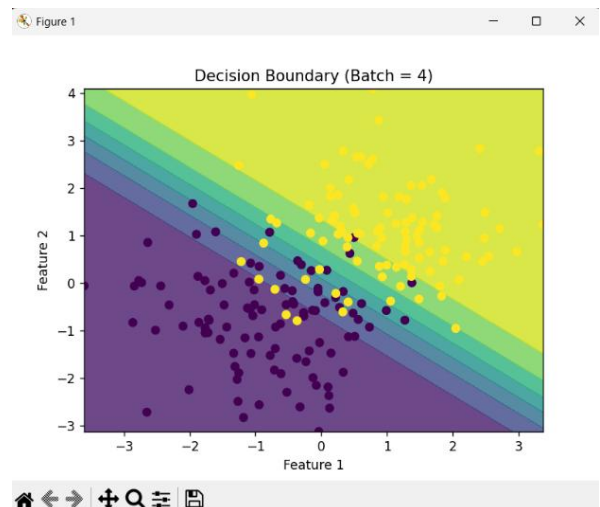
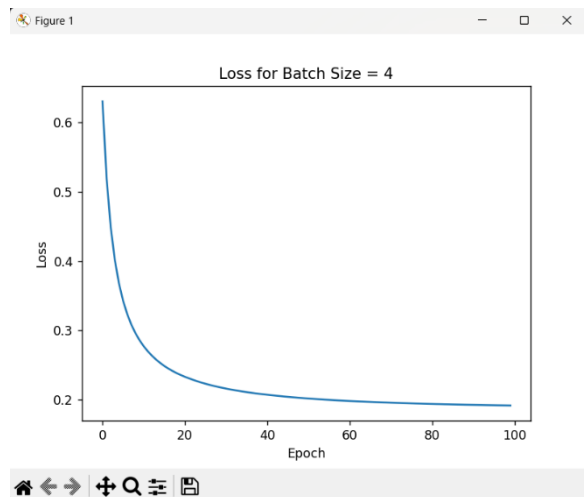
**Dr. Nuri BenBarka**

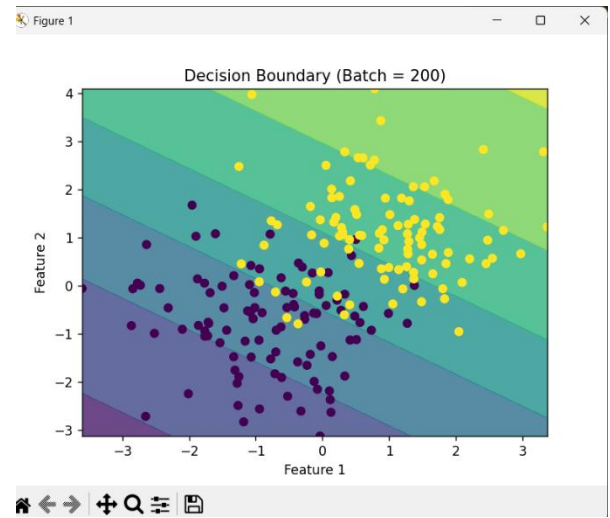
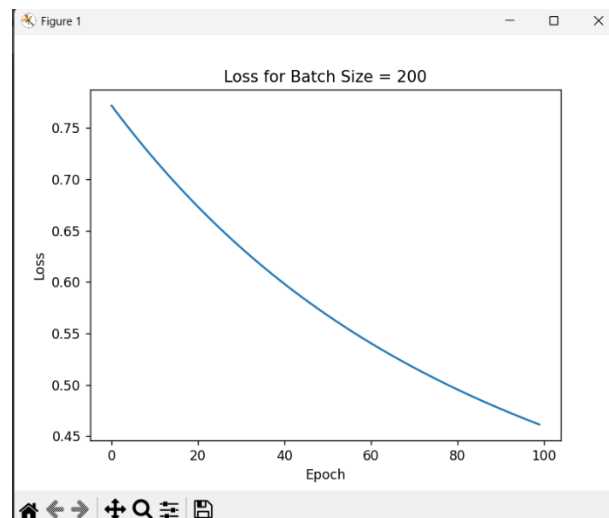
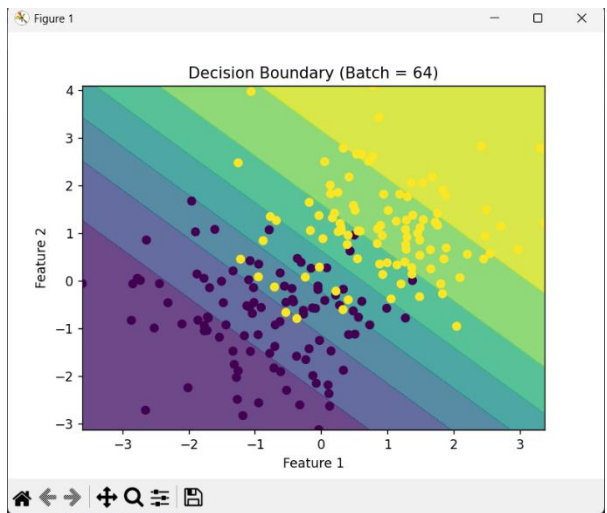
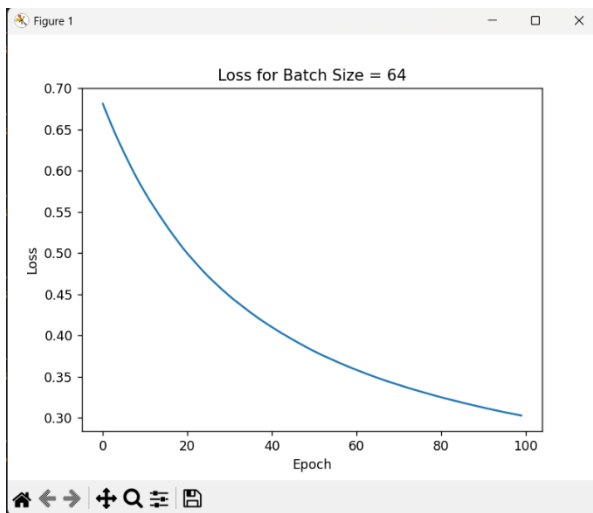
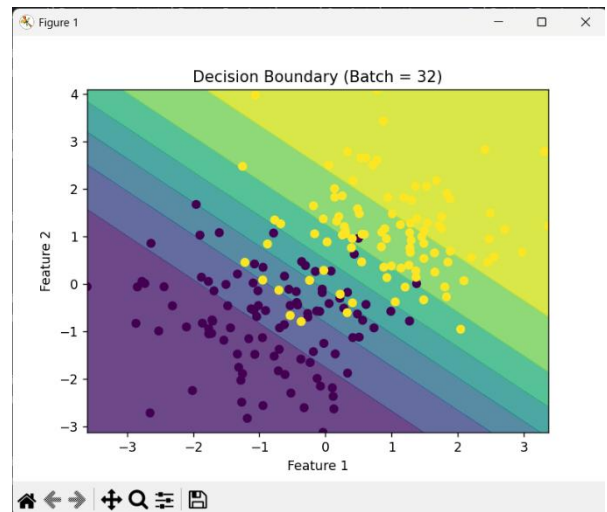
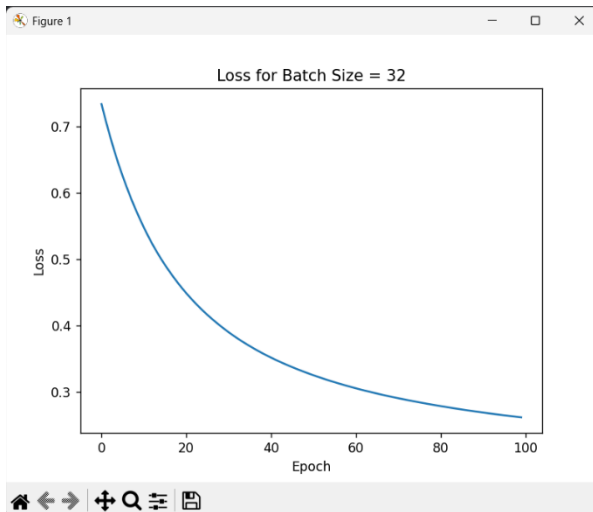
## Generated Dataset:



## Effect of Batch Size on Model Training Performance:







## Numerical Results of Loss and Accuracy for Each Batch Size:

Epoch 100, Loss: 0.1886

Accuracy: 88.00%

♦ Training with batch size = 4

Epoch 100, Loss: 0.1918

Accuracy: 88.00%

♦ Training with batch size = 8

Epoch 100, Loss: 0.2021

Accuracy: 88.00%

♦ Training with batch size = 16

Epoch 100, Loss: 0.2218

Accuracy: 88.00%

♦ Training with batch size = 32

Epoch 100, Loss: 0.2613

Accuracy: 86.00%

♦ Training with batch size = 64

Epoch 100, Loss: 0.3028

Accuracy: 86.00%

♦ Training with batch size = 200

Epoch 100, Loss: 0.4614

Accuracy: 86.00%

Process finished with exit code 0