



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

**EE569**

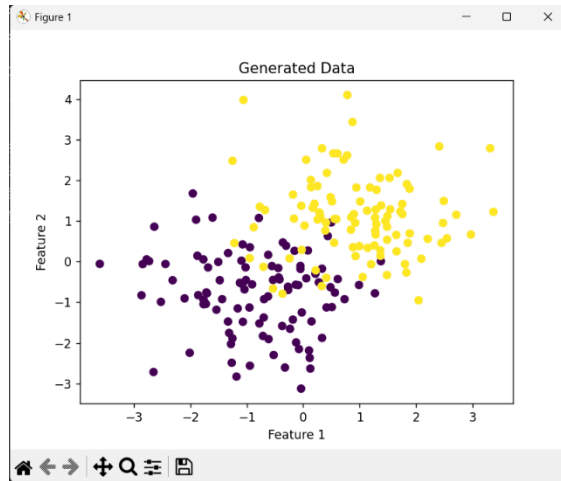
**Homework Assignment 1  
PART A-Results**

**نسيبة عمر بن زاهية**

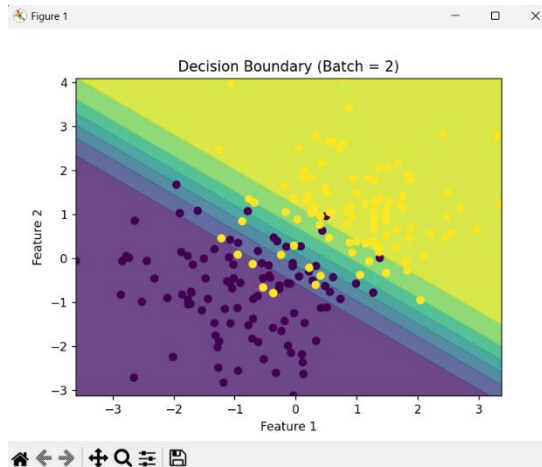
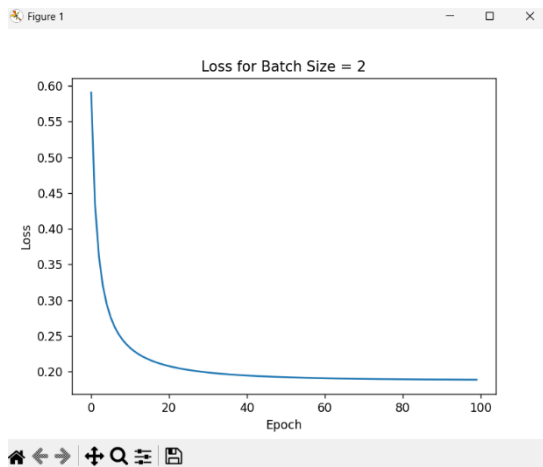
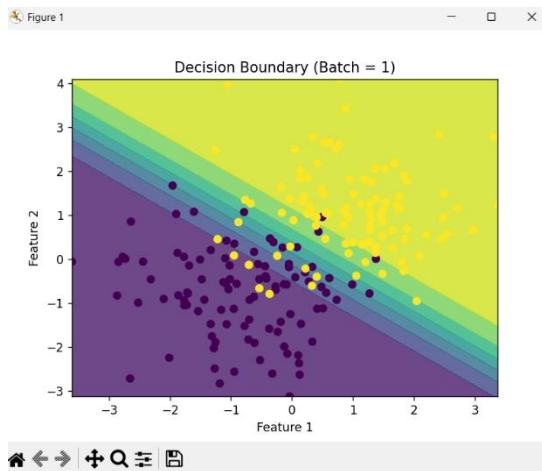
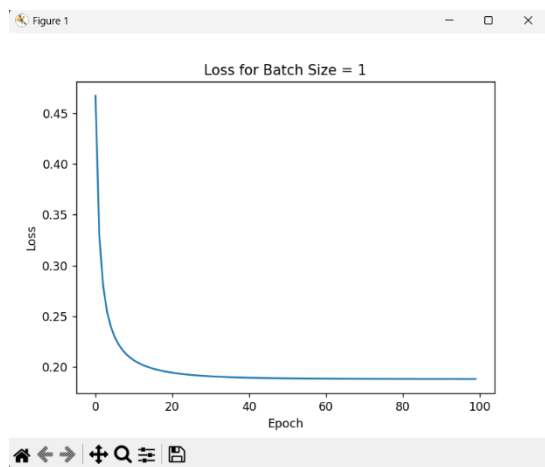
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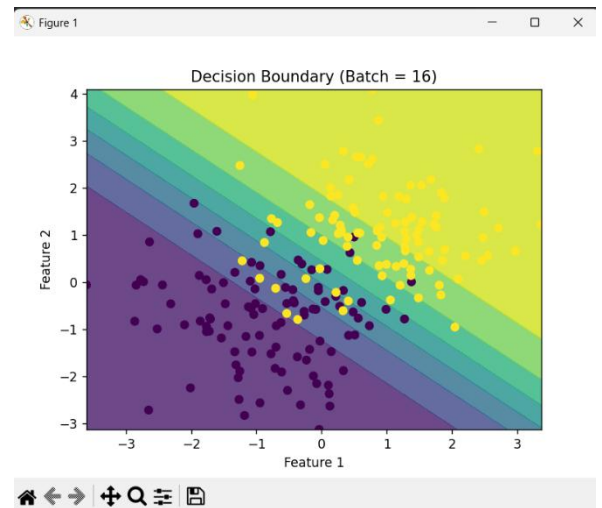
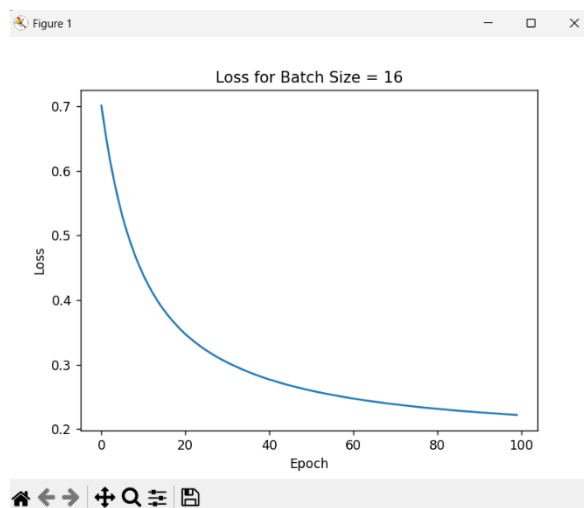
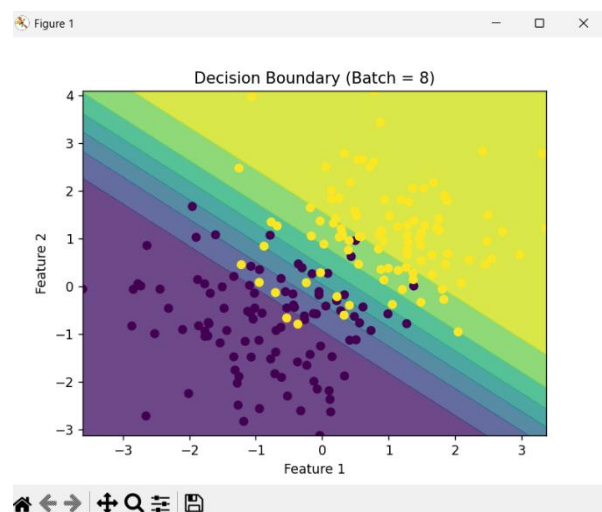
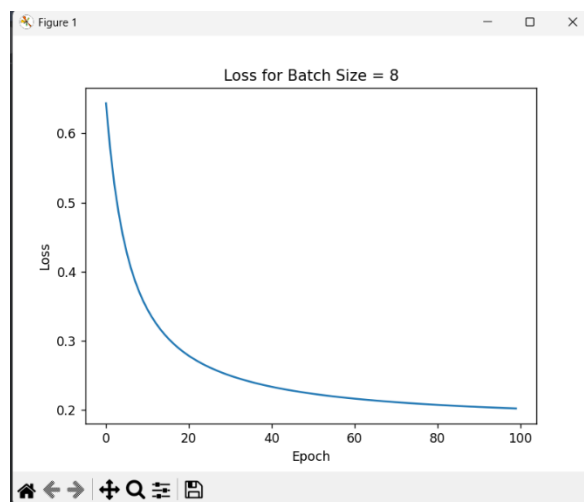
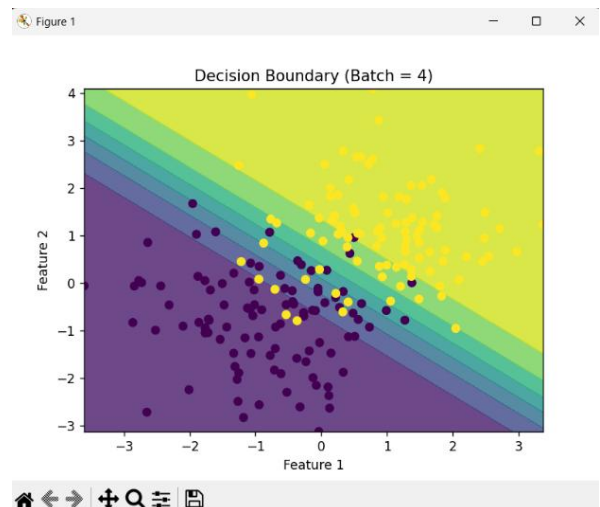
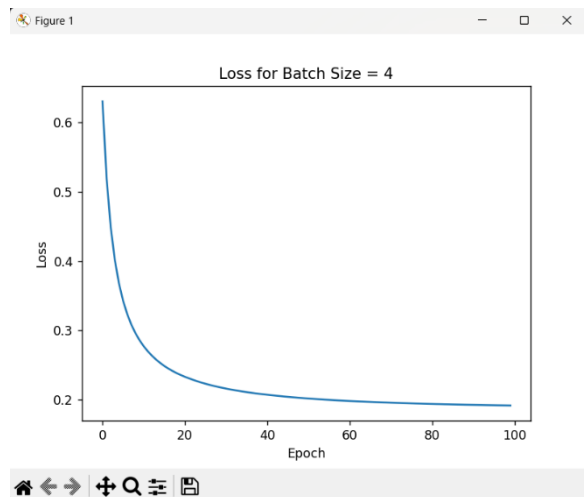
**Dr. Nuri BenBarka**

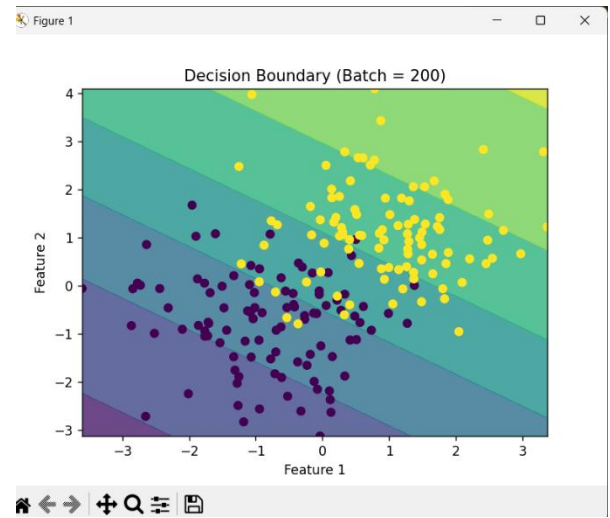
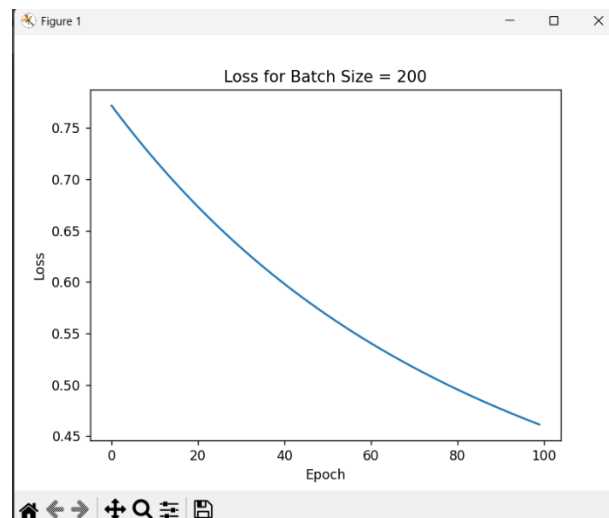
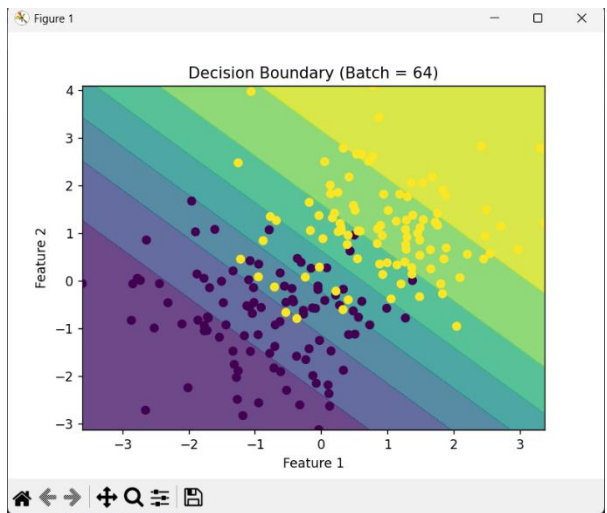
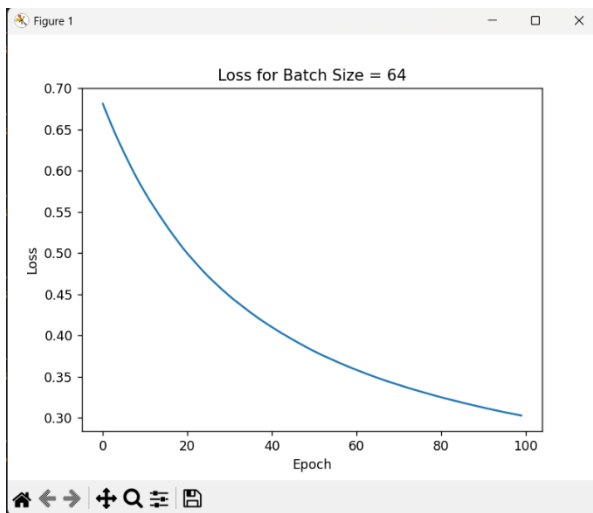
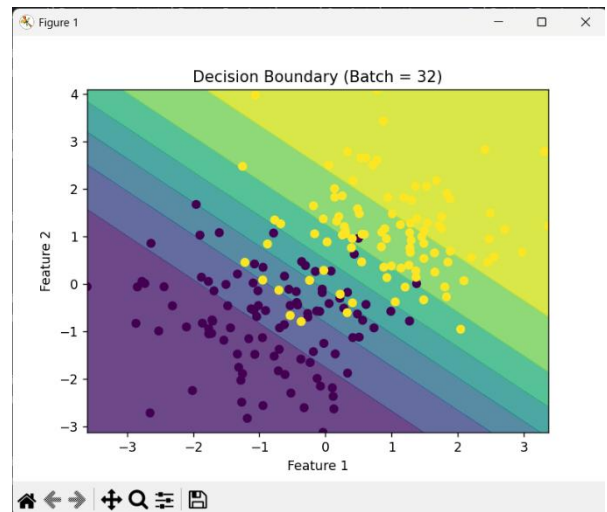
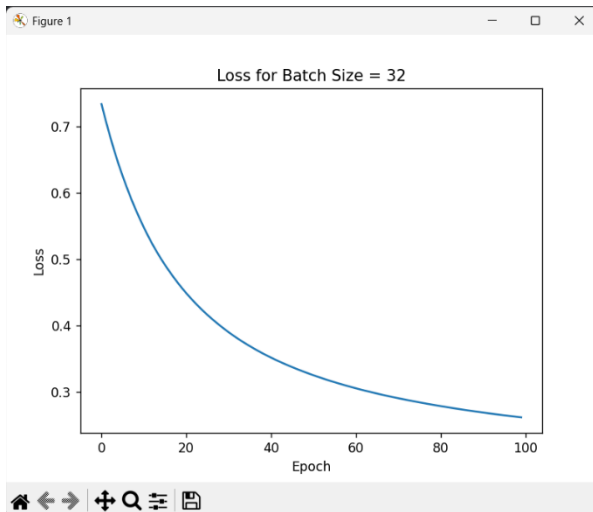
## Generated Dataset:

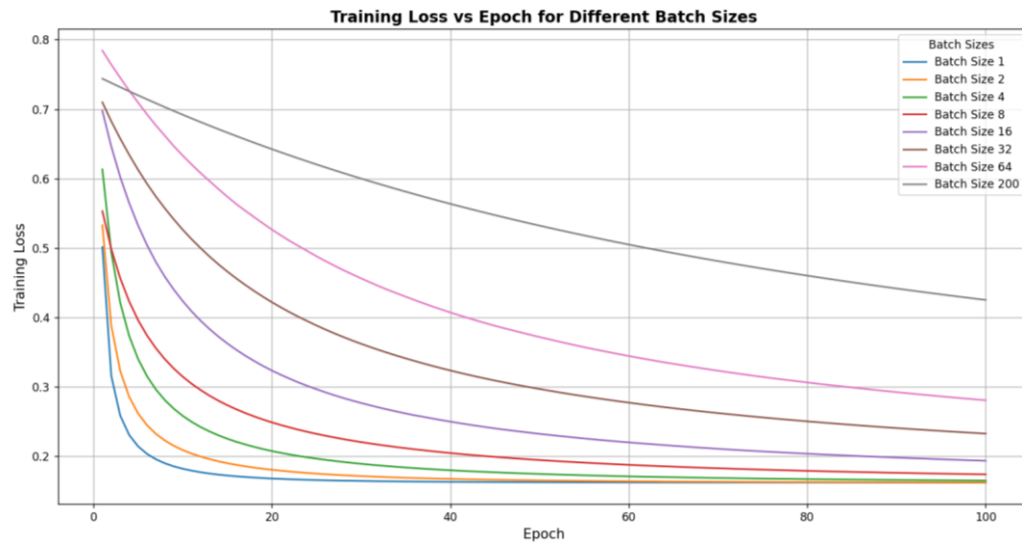


## Effect of Batch Size on Model Training Performance:









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

```

Run try x
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
PythonProject > try.py
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24°C
سواء صافية
8:26 PM
10/22/2025

```