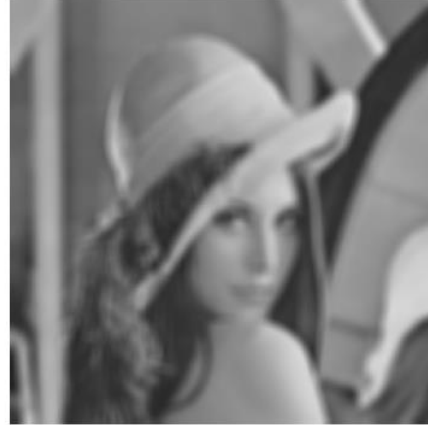


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TASK-1

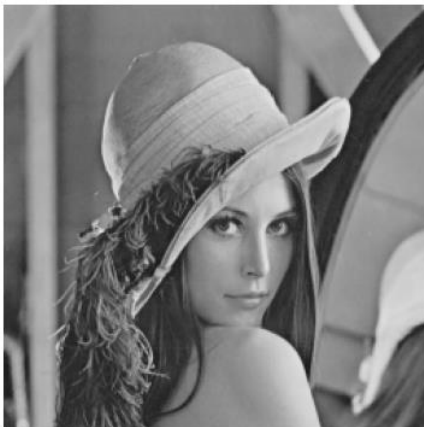
Original Image



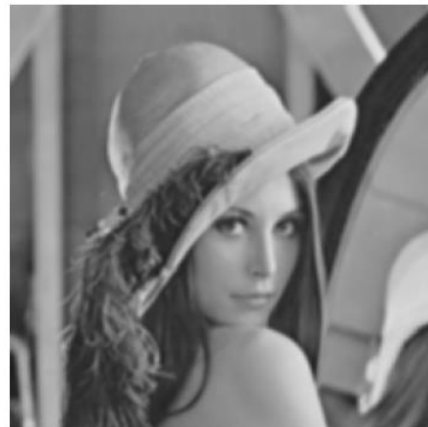
Box Blurring



Original Image



Gaussian Blurring



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Original Image



Adaptive Blurring



Original Image



Resized (Linear)



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Original Image



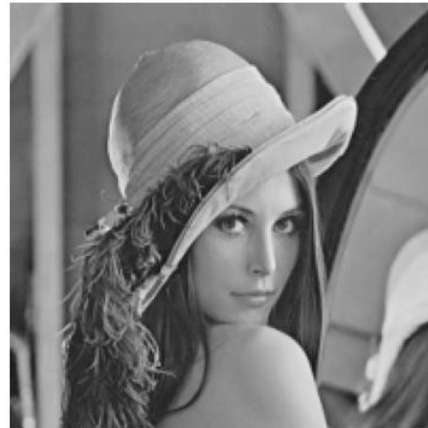
Resized (Nearest)



Original Image

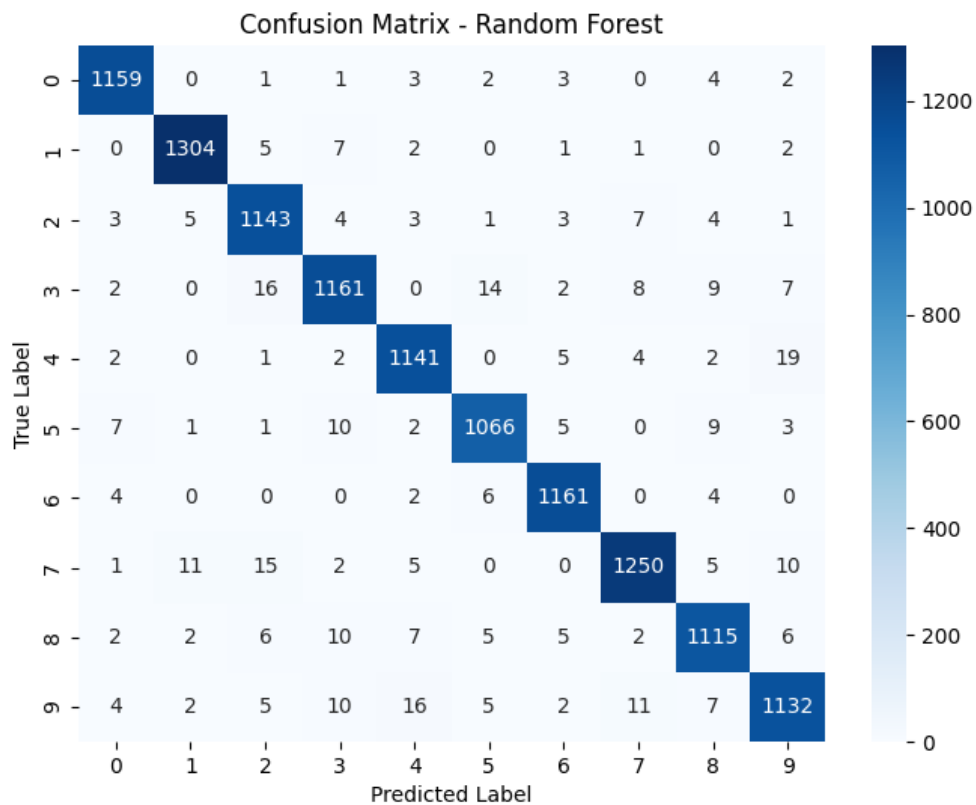
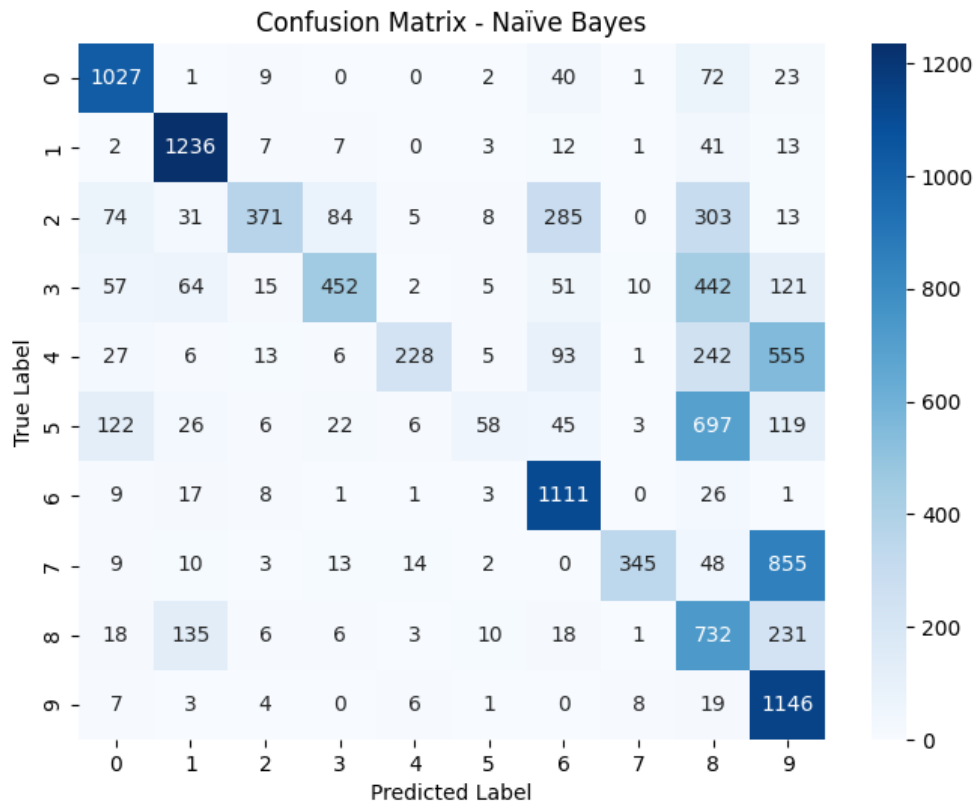


Resized (Cubic)



TASK-2

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LAB-2



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LAB-2

```
PS C:\Users\cchan\OneDrive\Documents\COLLEGE\SEMESTERS\Semester 6\340 1\lab\lab2> & "C:/Program Files/Python312/python.exe" "c:/Users/cchan/OneDrive/Document
s/COLLEGE/SEMESTERS/Semester 6/340 1/lab/lab2/task2.py"
2025-02-28 15:56:03.084036: I tensorflow/core/util/port.cc:113] oneDNN custom operations are on. You may see slightly different numerical results due to floa
ting-point round-off errors from different computation orders. To turn them off, set the environment variable `TF_ENABLE_ONEDNN_OPTS=0`.
2025-02-28 15:56:05.382739: I tensorflow/core/util/port.cc:113] oneDNN custom operations are on. You may see slightly different numerical results due to floa
ting-point round-off errors from different computation orders. To turn them off, set the environment variable `TF_ENABLE_ONEDNN_OPTS=0`.

Naïve Bayes Model Results:
Accuracy: 0.5588
Classification Report:
      precision    recall  f1-score   support

     0       0.76       0.87       0.81       1175
     1       0.81       0.93       0.87       1322
     2       0.84       0.32       0.46       1174
     3       0.76       0.37       0.50       1219
     4       0.86       0.19       0.32       1176
     5       0.60       0.05       0.10       1184
     6       0.67       0.94       0.78       1177
     7       0.93       0.27       0.41       1299
     8       0.28       0.63       0.39       1160
     9       0.37       0.96       0.54       1194

 accuracy          0.56       12000
 macro avg         0.69       0.55       0.52       12000
 weighted avg      0.69       0.56       0.52       12000
```

Random Forest Model Results:

Accuracy: 0.9693

Classification Report:

	precision	recall	f1-score	support
0	0.98	0.99	0.98	1175
1	0.98	0.99	0.99	1322
2	0.96	0.97	0.97	1174
3	0.96	0.95	0.96	1219
4	0.97	0.97	0.97	1176
5	0.97	0.97	0.97	1104
6	0.98	0.99	0.98	1177
7	0.97	0.96	0.97	1299
8	0.96	0.96	0.96	1160
9	0.96	0.95	0.95	1194
accuracy			0.97	12000
macro avg	0.97	0.97	0.97	12000
weighted avg	0.97	0.97	0.97	12000