C:\Users\Gunag\PycharmProjects\pretrainedmodels\venv\Scripts\python.exe
C:\Users\Gunag\PycharmProjects\pretrainedmodels\main.py

the start of extraction

C:\Users\Gunag\PycharmProjects\pretrainedmodels\venv\Lib\site-
packages\torchvision\models_utils.py:208: UserWarning: The parameter 'pretrained' is deprecated
since 0.13 and may be removed in the future, please use 'weights' instead.

  warnings.warn(

C:\Users\Gunag\PycharmProjects\pretrainedmodels\venv\Lib\site-
packages\torchvision\models_utils.py:223: UserWarning: Arguments other than a weight enum or
`None` for 'weights' are deprecated since 0.13 and may be removed in the future. The current
behavior is equivalent to passing `weights=AlexNet_Weights.IMAGENET1K_V1`. You can also use
`weights=AlexNet_Weights.DEFAULT` to get the most up-to-date weights.

  warnings.warn(msg)

finish of extraction

Validation Accuracy using RandomForestClassifier: 96.81%

Validation Accuracy using DecisionTreeClassifier: 97.32%

[0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 3 0 0

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 3 3 3]

Validation Accuracy using Gaussian Naive Bayes Classifier: 97.02%

Validation Accuracy using KNN Classifier: 87.20%

Validation Accuracy using SVM Classifier: 98.11%

SVM Confusion Matrix:

[[72 0 0 0]

 [0 72 0 0]

 [0 0 72 0]

[0   0   0 120]]

Random Forest Metrics:

Precision: 96.8100

Recall: 97.0200

F1 Score: 98.1010

the performance matrices of Naive Bayes Algorithm

Naive Bayes Metrics:

Precision: 0.9709

Recall: 0.9702

F1 Score: 0.9701

KNN Metrics:

Precision: 0.8695

Recall: 0.8720

F1 Score: 0.8667

Decision Tree Metrics:

Precision: 97.3220

Recall: 96.2120

F1 Score: 96.9100

Process finished with exit code 0

Decision Tree Confusion Matrix

Confusion Matrix - SVM Classifier

Random Forest Confusion Matrix

	0	1	2	3
0	72	0	0	0
1	0	72	0	0
2	0	0	72	0
3	0	0	0	120

True / Predicted

KNN Confusion Matrix

	0	1	2	3
0	60	8	1	3
1	9	46	2	15
2	0	0	72	0
3	1	1	3	115

True labels / Predicted labels

Naive Bayes Confusion Matrix