

summary.txt

C:\ProgramData\Anaconda3\python.exe  
D:/MashroomClassification\_ML-Project/MashroomClassifier.py  
GaussianNB(priors=None)

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Naive Byes accuracy score = 91.0992616899%  
Naive Byes precision score = 87.9089508823%  
Naive Byes recall score = 88.6030598701%  
Naive Byes f1 score = 88.2471909563%  
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SVC(C=1.0, cache\_size=1000, class\_weight=None, coef0=0.0,  
decision\_function\_shape=None, degree=3, gamma='auto', kernel='poly',  
max\_iter=-1, probability=False, random\_state=None, shrinking=True,  
tol=0.001, verbose=False)

-----VALIDATION-----  
SVM accuracy score = 97.7832512315%  
SVM precision score = 98.0760967369%  
SVM recall score = 96.1163406798%  
SVM f1 score = 97.0443349754%  
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-----TESTING-----  
SVM accuracy score = 97.2928630025%  
SVM precision score = 97.232777009%  
SVM recall score = 95.3298114315%  
SVM f1 score = 96.2357003495%  
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DecisionTreeClassifier(class\_weight='balanced', criterion='gini',  
max\_depth=15, max\_features=None, max\_leaf\_nodes=None,  
min\_impurity\_split=1e-07, min\_samples\_leaf=1,  
min\_samples\_split=2, min\_weight\_fraction\_leaf=0.0,  
presort=False, random\_state=None, splitter='best')

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Decision tree accuracy score = 96.0623461854%  
Decision tree precision score = 97.5051975052%  
Decision tree recall score = 92.131147541%  
Decision tree f1 score = 94.4502196693%  
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MLPClassifier(activation='relu', alpha=0.0001, batch\_size='auto', beta\_1=0.9,  
beta\_2=0.999, early\_stopping=False, epsilon=1e-08,  
hidden\_layer\_sizes=(100, 100), learning\_rate='constant',  
learning\_rate\_init=0.001, max\_iter=200, momentum=0.9,  
nesterovs\_momentum=True, power\_t=0.5, random\_state=1, shuffle=True,  
solver='adam', tol=0.0001, validation\_fraction=0.1, verbose=False,  
warm\_start=False)

-----VALIDATION-----  
Neural network accuracy score = 96.7159277504%  
Neural network precision score = 96.5360677292%  
Neural network recall score = 94.6731408017%  
Neural network f1 score = 95.5573387803%  
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-----TESTING-----  
Neural network accuracy score = 98.0311730927%  
Neural network precision score = 97.5668896321%  
Neural network recall score = 97.1439174485%  
Neural network f1 score = 97.353049747%  
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Process finished with exit code 0