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"C:\Users\comrades\PycharmProjects\pythonProject\Ford-
Fulkerson project\Scripts\python.exe" "C:\Users\
comrades\PycharmProjects\Ford-Fulkerson project\
mlupperfile.py"
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Program started running...
Reading data from the HW4-transaction-dataset.txt wait
..
    Data read successfully
Number of rows with missing values: 19361

Decision Tree 10-fold Cross Validation Scores: [0.
79487179 0.82051282 0.88888889 0.71794872 0.84482759 0.
82758621
    0.87068966 0.70689655 0.81896552 0.84482759]
    Mean Score: 0.8136015325670497

Naive Bayes 10-fold Cross Validation Scores: [0.
82051282 0.82051282 0.82051282 0.82051282 0.82758621 0.
82758621
    0.82758621 0.81034483 0.81896552 0.81896552]
    Mean Score:= 0.8213085764809902

SVM 10-fold Cross Validation Scores: [0.82051282 0.
82051282 0.82051282 0.82051282 0.82758621 0.82758621
    0.82758621 0.82758621 0.81896552 0.81896552]
    Mean Score:= 0.8230327144120247

KNN 10-fold Cross Validation Scores: [0.73504274 0.
74358974 0.74358974 0.74358974 0.78448276 0.81896552
    0.81034483 0.74137931 0.67241379 0.75862069]
    Mean Score:= 0.755201886236369

Random Forest 10-fold Cross Validation Scores: [0.
81196581 0.84615385 0.96581197 0.81196581 0.79310345 0.
76724138
    0.54310345 0.74137931 0.71551724 0.74137931]
    Mean Score:= 0.773762157382847
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Bagging with Decision Tree 10-fold Cross Validation
Scores: [0.86324786 0.82051282 0.92307692 0.70940171 0.
87068966 0.82758621
0.82758621 0.70689655 0.81896552 0.81896552]
Mean Score: 0.818692897141173
```

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Bagging with Random Forest 10-fold Cross Validation
Scores: [0.8034188 0.84615385 0.97435897 0.70940171 0.
80172414 0.79310345
0.61206897 0.75862069 0.73275862 0.76724138]
Mean Score: 0.7798850574712644
```

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##-- comparison test starting__##
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Gradient Boosting 10-fold Cross Validation Scores: [0.
82051282 0.79487179 0.88888889 0.70940171 0.84482759 0.
78448276
0.59482759 0.77586207 0.81896552 0.82758621]
Mean Score: 0.7860226937813144
```

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Bagging with Decision Tree Mean Score: 0.
818692897141173
Gradient Boosting Mean Score: 0.7860226937813144
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Bagging with Decision Tree performs better than
Gradient Boosting.
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Process finished with exit code 0
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