DECISION TREE:

For the model using scikit learn :

Report:	class	precision	recall	f1-score	support
	0.0	0.18	0.09	0.12	22
	1.0	0.83	0.92	0.88	392
	2.0	0.36	0.20	0.25	66
accuracy			0.78		480
macro avg		0.46	0.40	0.42	480
weighted avg		0.74	0.78	0.76	480

Accuracy: 78.33333333333333%

Results after 3_Fold_Cross-Validation:

Report for 1st validation set :

class	precision	recall	f1-score	support
0.0	0.00	0.00	0.00	18
1.0	0.85	0.93	0.89	446
2.0	0.38	0.17	0.24	69
accuracy			0.80	533
macro avg	0.41	0.37	0.38	533
weighted avg	0.76	0.80	0.77	533

Report for 2nd validation set :

class	precision	recall	f1-score	support
0.0	0.00	0.00	0.00	19
1.0	0.81	0.89	0.85	429
2.0	0.36	0.18	0.24	85
accuracy			0.74	533
macro avg	0.39	0.35	0.36	533
weighted avg	0.71	0.74	0.72	533

Report for 3rd validation set :

class	precision	recall	f1-score	support
0.0	0.15	0.08	0.10	26
1.0	0.84	0.82	0.83	444
2.0	0.20	0.27	0.23	63
accuracy			0.72	533
macro avg	0.40	0.39	0.39	533
weighted avg	0.73	0.72	0.73	533

For the model without using scikit learn :

mean accuracy = 78.61163227016885%
mean precision = 38.85600080955272%
mean recall = 37.099370600913154%

For the model using scikit learn :

mean accuracy = 75.42213883677299%
mean precision = 39.85352041195949%
mean recall = 37.062033997089955%

LOGISTIC REGRESSION :

Accuracy using complete dataset:
Accuracy: 84.24015009380864%
Accuracy using scikit-learn: 89.16666666666667%

_____After 3-Fold_Cross_Validation_____

For classifier without using scikit learn:
mean accuracy : 84.24015009380864%
mean precision : 51.01651338095571%
mean recall : 52.12288225802618%

For classifier using scikit learn:
mean accuracy_scikit : 86.6166353971232%
mean precision_scikit: 74.0610745874649%
mean recall_scikit : 55.027712683963856%