PROFIT-PREDCTION-AI-PROJECT

1.MULTIPLE LINEAR REGRESSION (R^2 value)=0.935)

2.SUPPORT VECTOR MACHINE:

S.NO	HYPER PARAMETER	LINEAR (r value)	RBF (NON-LINER) (r value)	POLY (r value)	SIGMOID (r value)
1	C10	-0.0396	-0.0568	-0.0536	-0.0547
2	C100	0.1064	-0.0507	-0.0198	-0.0304
3	C500	0.5928	-0.0243	0.1146	0.0705
4	C1000	0.7802	-0.0067	0.2661	0.1850
5	C2000	0.8767	0.0675	0.4826	0.3970
6	C3000	0.8956	0.1232	0.6370	0.5913

The SVM REGRESSION use R^2 value (nonlinear (RBF) and hyper parameter (c=3000)=0.8956

3.DECISION TREE:

S.NO	**CRITERION**	R^2
1.	*Friedman mse*	0.9234
2.	*Absolute error*	0.9649
3.	*Poisson*	0.7242
S.NO	**Splitter**	R^2
1.	*best*	*0.8991*
2.	*random*	*0.9087*
S.NO	**MAX_FEATURES**	R^2
1.	auto	*0.8941*
2.	*sqrt*	*-0.5029*
3.	*log2*	*0.3207*

The DECISION TREE use R^2 value (criterion) and hyper parameter (Absolute error)=0.9649

Decision tree is good model giving good result……..