Python Programming

Machine Learning Assignment : 13

There is one data set of advertisement agency.

Consider below Dataset as

	TV	radio	newspaper	sales
1	230.1	37.8	69.2	22.1
2	44.5	39.3	45.1	10.4
3	17.2	45.9	69.3	9.3
4	151.5	41.3	58.5	18.5
5	180.8	10.8	58.4	12.9
6	8.7	48.9	75	7.2
7	57.5	32.8	23.5	11.8
8	120.2	19.6	11.6	13.2
9	8.6	2.1	1	4.8
10	199.8	2.6	21.2	10.6

Dataset contains multiple records about the customers who invest in multiple advertisement options.
Depends on that sales feature indicates the the increased amount in there sales

This data set contains 4 features as
TV
Radio
Television

Depends on the above three features Sales feature indicates the increased sale amount.

We have to design Machine Learning application which uses Classification technique.

Design machine learning application which follows below steps as

Step 1:
Get Data
Load data from MarvellousAdvertising.csv file into python application.

Step 2:
Clean, Prepare and Manipulate data
As we want to use the above data into machine learning application we have prepare that in the format which is accepted by the algorithms.

Step 3:
Train Data
Now we want to train our data for that we have to select the Machine learning algorithm.
For that we select Linear Regression algorithm.
In this case we have to define our own linear regression algorithm.
Display value of R square for trained data.