If the space provided for an answer is not sufficient, please continue on the back or attach an additional sheet.

Name: .....

Term: ..... **Subject:** ..... **Machine Learning** .....

Teacher: A. Mhamdi

Do not write in this table.

Question:	1	2	3	4	5	6	7	8	9	10	Total
Points:	1	1	1	1	1	1	1	1	1	1	10
Score:											

1. (1 point) Import all required librairies `Numpy`, `Pandas` and `Pyplot` form `Matplotlib`.

[1]:

2. (1 point) Load the dataset *Weight_Height.csv*. Assign it to *df*.

[2]:

3. (1 point) Check the dataset head.

[3]:

[3]:

	Gender	Height	Weight
0	Male	73.847017	241.893563
1	Male	68.781904	162.310473
2	Male	74.110105	212.740856
3	Male	71.730978	220.042470
4	Male	69.881796	206.349801

4. (1 point) Check if there are null values in the dataset.

[4]:

5. (1 point) The height values are the features. Construct the target values using the weights.

[5]:

6. (1 point) Split the data into train and test sets using a ratio of 80 : 20.

[6]:

7. (1 point) Create and train a linear regression model. Name it *lr*.

[7]:

[7]: `LinearRegression()`

8. (1 point) Predict the test set.

[8]:

9. (1 point) Display the regressor coefficients.

[9]:

10. (1 point) Print and write down the mean squared error and the variance score.

[10]:

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