Lucas Madeira Maranho

76990@student.dorset-college.ie

Lecturer: [Meabh Loughman](https://moodle.dorset.ie/user/profile.php?id=3725)

Computer Science – Artificial Intelligence Basics

Group: BSC109224 A

Semester 2

Computer Science

Assignment 2

Week beginning 3rd February 2025

1. Use the link provided for in topic 2 to run the linear regression code
2. Comment this code to explain what is happening
3. Print the model coefficients to the screen.
4. Print the r\_sq value to the screen.
5. Is this an over/under/well fitted model?
6. Plot a figure of relevant data and explain the plot.

Provide a screenshot/print screen of your code working.

Provide your python file.

Provide a document for answers E and F.

1. Print the model coefficients to the screen.

A screen shot of a computer screen

AI-generated content may be incorrect.

1. Print the r\_sq value to the screen.

A screen shot of a computer screen

AI-generated content may be incorrect.

1. Is this an over/under/well fitted model?

Based on data set, it is possible to say that is over fitted, However, it is a basic linear regression with a single X, fitting a straight line, it wrong in saying overfit, unless there are some feature engineering or data manipulation.

I would say the dataset given is well fitted, but because dataset is small, its difficult to say for sure.

1. Plot a figure of relevant data and explain the plot.