



# COMPUTER SCIENCE

## Assignment 2

Lecturer: [Meabh Loughman](#)

Computer Science – Artificial Intelligence Basics

Group: BSC109224 A

Semester 2

Lucas Madeira Maranhão

76990@student.dorset-college.ie

Week beginning 3<sup>rd</sup> February 2025

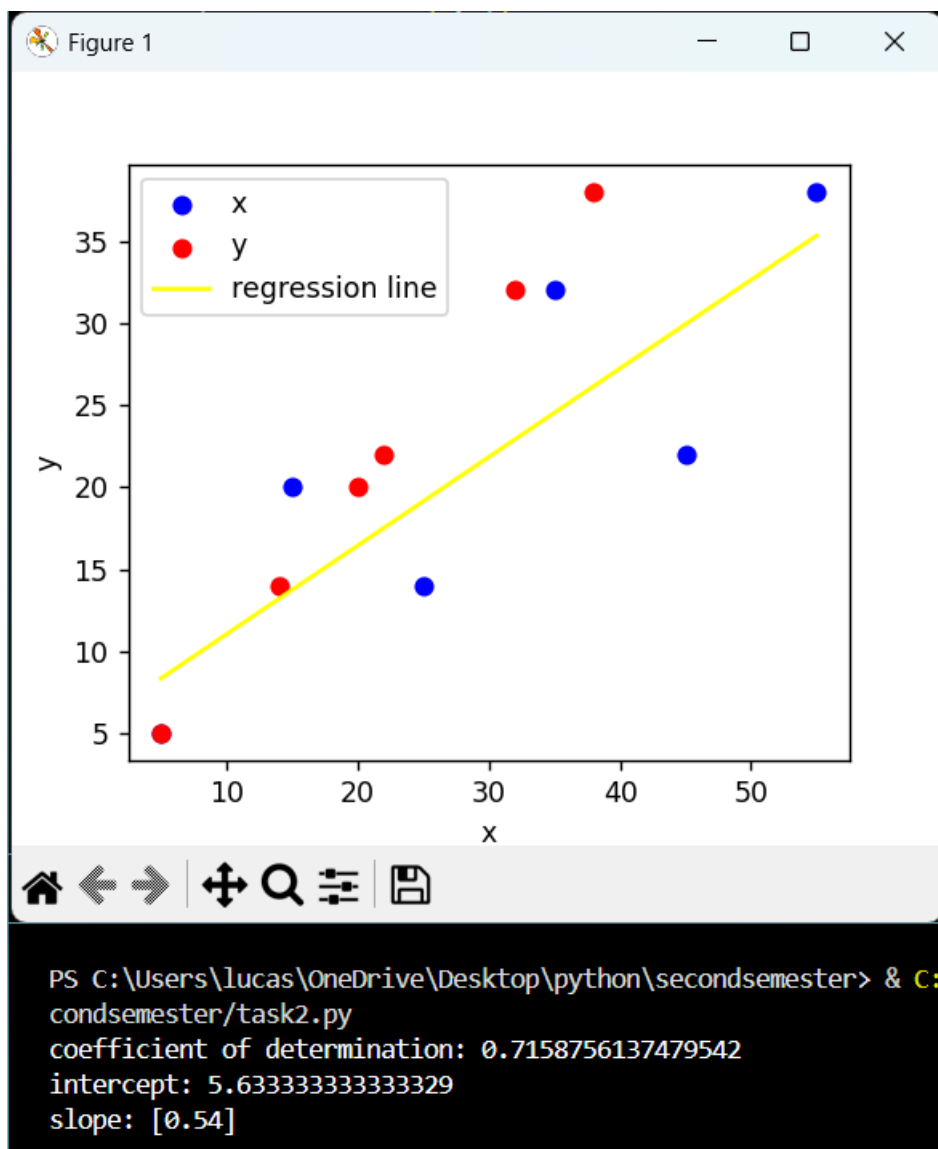
- A) Use the link provided for in topic 2 to run the linear regression code
- B) Comment this code to explain what is happening
- C) Print the model coefficients to the screen.
- D) Print the `r_sq` value to the screen.
- E) Is this an over/under/well fitted model?
- F) Plot a figure of relevant data and explain the plot.

Provide a screenshot/print screen of your code working.

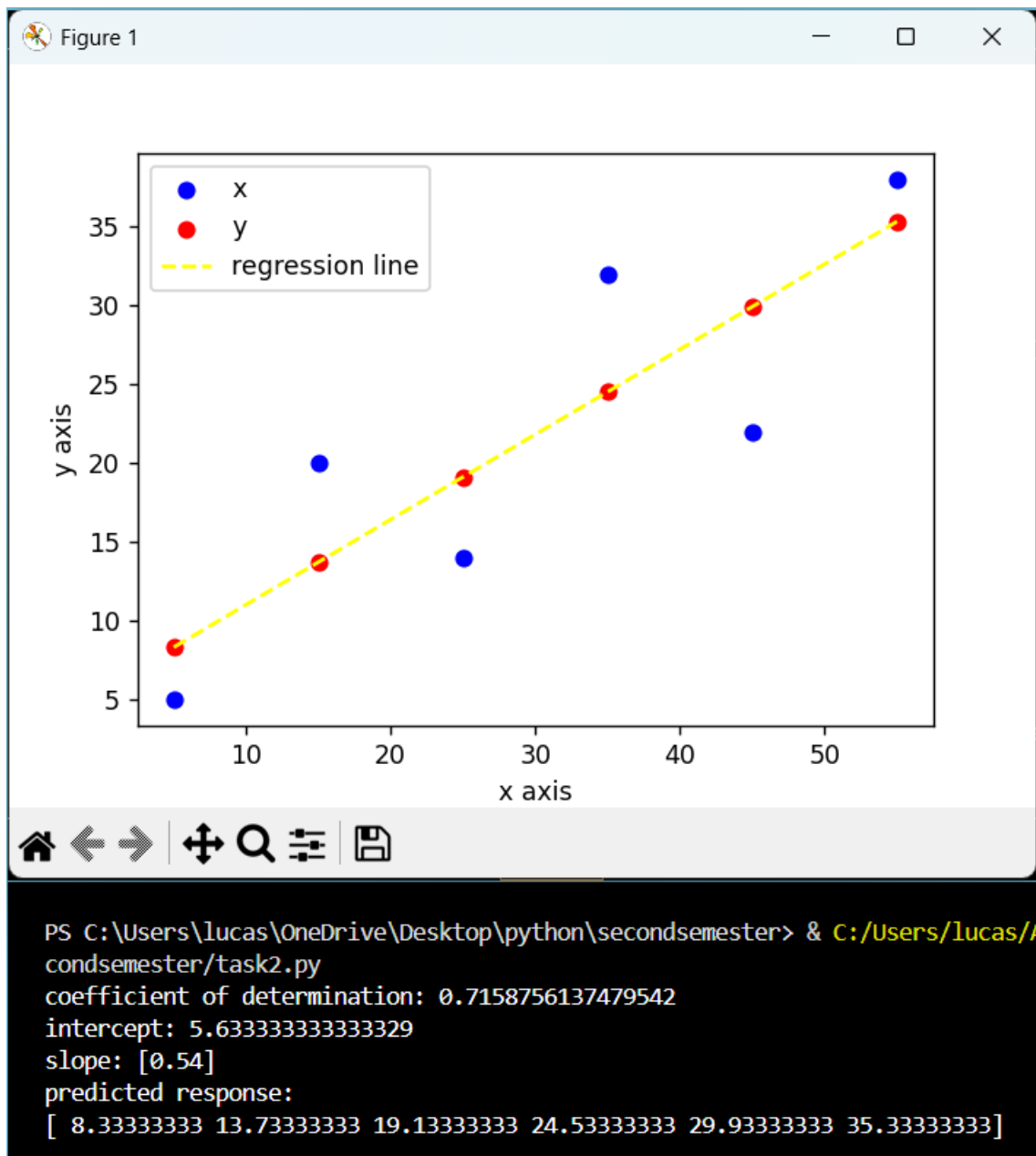
Provide your python file.

Provide a document for answers E and F.

C) Print the model coefficients to the screen.



D) Print the `r_sq` value to the screen.



E) 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.

F) Plot a figure of relevant data and explain the plot.