



## Introduction to Data Analysis

Week 7 - Tutorial

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## Workshop objectives

- ✓ Introduction to Linear models
- ✓ Investigate elements of linear models
- ✓ Visualise Linear models

### 1 Instructions

1. Follow this link [here](#) and log in into Rstudio Cloud as explained in the workshop video in Moodle.
2. In each question you will replace '\_\_\_\_' with your answer. Knit the document once you've answered all the questions. Remember to go to `knitr::opts_chunk` at the beginning of Rmd, change `eval = TRUE`, then knit the document.

### 2 Exercise 1: Introduction to data modeling [Est. time: 20 min]

1. Once you have logged in into the cloud space, open `Ex1-intro.Rmd`
2. This file is split into 2 sections, A and B.
  - Section A: Practice with Paintings dataset [Est. time: 12 min]
  - Section B: Your turn with Categorical Predictor variable [Est. time: 8 min]
3. Answer Q1-Q3.

### 3 Exercise 2: CO2 modeling [Est. time: 20 min]

1. Open `Ex2-co2.Rmd`.
2. Answer Q1-Q15.
3. There are 2 Extension Exercises to be done at a later time, for additional practice.

### 4 Exercise 3: Gapminder [Est. time: 25 min]

1. Open `Ex3-gapminder.Rmd`.
2. Answer the questions Q1-Q11.
3. There is an Extension Exercise to be done at a later time, for additional practice.

Inside folder- "ExtraPractice", there's `Ex-4-fertility.Rmd`, which is additional practice data for linear modeling.