**2nd Continuous Evaluation, December 2023 (Group A)**

We have the following dataset (<https://www.uv.es/mperea/MRC2data.jasp>) with data from a large sample of participants in several variables.

1. Is there an association between reading level and the grades in literature when we control for the anxiety of the participants? Compute the appropriate index and indicate what that means.

2. We want to predict the Anxiety scores from the scores in Loneliness, reading level, and the grades in literature using a regression equation. The questions are: (a) What is the percentage of variance of Anxiety that can be explained by the regression equation? (b) would all predictors be included in the equation when running a “stepwise” regression (and what would that mean)?

3. We have the following probability density function, f(x)=d from 0<X<4. (a) What is f(3) and what does it mean?; (b) What is F(3) and what does it mean?

4. We tossed a coin 1000 times and got 550 tails. Is this outcome compatible (following the criterion of P95) with the hypothesis that the coin is well-balanced?



