**Continuous Activity (November 2019) Statistics-I, group AR**

Several researchers wanted to examine whether we implicitly assign gender stereotypes when reading a story about a person. To test this question, they wrote a brief gender-neutral story focused on a character. 200 men of ages between 35-40 y.o. read the story. For half of them (assigned at random), the name of the character was John (male) and for the other half, the name of the character was Joana (female); other than that the stories were exactly the same. After reading the story, the students had to respond to questions on extraversion, agreeableness, openness, conscientiousness, and neuroticism attributed to the character of the story.

**Question 1.**

1. Which are the independent and dependent variables in the study?

b) Is this a between-subjects or a within-subject design? Justify your decision

**Question 2.**

1. What is the number of rows and columns in the SPSS datafile? Justify why.
2. Let’s assume that the researchers found substantial differences between the personality of the characters in three of the tests. Can you think of a (reasonable) follow-up study?

We have a database (<https://www.uv.es/mperea/college2.sav>) with information on student grades with different data: music training in music school (yes / no), sex, introversion, aptitude, grade in Mathematics, grade in Science, and grade in Language.

**Question 3.** We want to identify the poor readers (from the Language score) in the sample so that they can attend some extra classes to improve their reading abilities. To that end, we want to know the cutoff point that separates the 10% worse readers from the rest. What is the cutoff point? Justify your answer. (Copy/Paste this info from SPSS)

**Question 4.** Select the individuals who attended music school. Do you think the variable “Sex” (male/female) is well balanced in the remaining sample of students? Justify your answer using charts and/or stats. (Copy/Paste this info from SPSS)