Assignment 12
Title FRAMINGHAM Study dataset – 2
Data files 12_framdata.sav
Sample size 1406 Number of variables 6

The data for this assignment come from one of the most famous cohort studies performed in patients with cardiovascular disease, the *Farmingham Heart Study*. The study began in 1948 and is still ongoing, with the study's database being continuously updated. File **farmdata.sav** includes measurements in 1406 patients suffering from cardiovascular disease. Specifically, the variables included in the dataset are:

1. AGE: Patients' age
2. SBP: Systolic Blood Pressure
3. DBP: Diastolic Blood Pressure
4. CHOL: Total Cholesterol level
5. CIG: Number of cigarettes smoked per day
6. MALE: Gender, 0 for Females, 1 for Males

You are asked to answer the following questions by analyzing the data

a. Present suitable descriptive measures for all the variables individually, as well as for their (pairwise) associations
b. Is there a correlation between systolic and diastolic blood pressure?
c. Is the number of cigarettes associated with the patients' systolic pressure?
d. Estimate a linear model that examines the association of cholesterol levels with the rest of the variables in the dataset

References:
• R. Dawber, M.D., Gilcin F. Meadors, M.D., M.P.H., and Felix E. Moore, Jr., National Heart Institute, National Institues of Health, Public Health Service, Federal Security Agensy, Washington, D. C., Epidemiological Approaches to Heart Disease: The Framingham Study Presented at a Joint Session of the Epidemiology, Health Officers, Medical Care, and Statistics Sections of the American Public Health Association, at the Seventy-eighth Annual Meeting in St. Louis, Mo., November 3, 1950.
• Daniel Levy and Susan Brink. (2005). A Change of Heart: How the People of Framingham, Massachusetts, Helped Unravel the Mysteries of Cardiovascular Disease. Knopf. ISBN 0-375- 41275-1.