

Ex-4(b) Basic Operations in data frame

MASS package contains a data frame called ‘survey’ which contains the responses of 237 Statistics I students at the University of Adelaide to a number of questions.

The components of the data frame are:

- Sex The sex of the student. (Factor with levels "Male" and "Female".)
- Wr.Hnd span (distance from tip of thumb to tip of little finger of spread hand) of writing hand, in centimetres.
- NW.Hnd span of non-writing hand.
- W.Hnd writing hand of student. (Factor, with levels "Left" and "Right".)
- Fold “Fold your arms! Which is on top?” (Factor, with levels "R on L", "L on R", "Neither".)
- Pulse pulse rate of student (beats per minute).
- Clap ‘Clap your hands! Which hand is on top?’ (Factor, with levels "Right", "Left", "Neither".)
- Exer how often the student exercises. (Factor, with levels "Freq" (frequently), "Some", "None".)
- Smoke how much the student smokes. (Factor, levels "Heavy", "Regul" (regularly), "Occas" (occasionally), "Never".)
- Height height of the student in centimetres. M.I whether the student expressed height in imperial (feet/inches) or metric (centimetres/metres) units. (Factor, levels "Metric", "Imperial".)
- Age age of the student in years.

Do the following:

1. Install the package MASS.
2. Import the package MASS.
3. Display the structure of the data survey.
4. Check the class and type of the data set survey in MASS.
5. Get the number of rows and columns of the survey data frame.
6. Get the dimension of the survey data frame.
7. Provide the statistical summary of the data frame.
8. Display the column names of the survey data frame
9. Retrieve the top 3 rows from the data frame.
10. Extract the bottom 2 rows from the data frame.