Labelling and indexing in R

Exercises

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Sections 1-2

1. Create a named vector `myvec` with values corresponding to numbers 2, 7, and 3 and names corresponding to the three first letters of the alphabet.
2. Load the dataset ESOPH into the session, display it in a viewer and open its help page. Then show the names of its variables and observations (perform this task by treating the object storing the dataset either as a matrix or a list of variables).
3. Load the dataset BIRTHS from the package EPI into the session (you might have to download and load the package first). Then display it in a viewer and open its help page. Then create a vector in the global environment corresponding to the variable `bweight`, using the same name.
4. List the first 10 observations of `bweight`, and then the observations of `bweight` when its value is less than the 25th percentile of its distribution (hint: use the function `quantile()`).

Sections 3-5

5. Create a 5×8 matrix `mat` of random numbers (hint: among others, you can use the function `rnorm()`). Display its first column.
6. Display the sub-matrix of `mat` corresponding to rows from second to fourth and to the columns from the fifth on.
7. Print the first 10 observations of age group and number of controls in the data frame `esoph`.
8. Using indexing, select the information in the data frame related to the number of controls and tobacco consumption group for the subjects younger than 55 years old in `esoph`.