

Machine Learning - 1100-MLOENG (Ćwiczenia informatyczne Z-23/24)

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Creating small data sets - task


We begin by working with an amount of data that is small enough to type into R. We use a dataset containing morphometric measurements of eight birds. **The symbol NA stands for a missing value.** The measured variables are the lengths of the **wing** (measured as the wing chord), **leg** (a standard measure of the tarsus), **head** (from the bill tip to the back of the skull), and **weight**.

https://en.wikipedia.org/wiki/Bird_measurement



Wingcrd	Tarsus	Head	Wt
59	22.3	31.2	9.5
55	19.7	30.4	13.8
53.5	20.8	30.6	14.8
55	20.3	30.3	15.2
52.5	20.8	30.3	15.5
57.5	21.5	30.8	15.6
53	20.6	32.5	15.6
55	21.5	NA	15.7

```
Wingcrd <- c(59, 55, 53.5, 55, 52.5, 57.5, 53, 55)
Wingcrd
Tarsus <- c(22.3, 19.7, 20.8, 20.3, 20.8, 21.5, 20.6, 21.5)
Tarsus
Wt <- c(9.5, 13.8, 14.8, 15.2, 15.5, 15.6, 15.6, 15.7)
Wt
```

Do it yourself

Create the vector: Head from the above table.

Now we can use several functions (sum, mean, max, min, median, var, sd, sort and more).
For instance we can calculate the sum of length of wings.

```
S.win <- sum(Wingcrd)
S.win
```

What about Head? Depending on the function, the presence of an NA may, or may not, cause trouble. For example

```
sum(Head)
```

You will get the same result with the mean, min, max, and many other functions.
Apparently, the default **na.rm = FALSE** option causes the R function sum to return an NA if there is a missing value in the vector (rm refers to remove). To avoid this, use **na.rm = TRUE**.

```
sum(Head, na.rm = TRUE)
```

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Accessibility settings

Przetwarzanie danych osobowych

Platformą administruje Komisja ds. Doskonalenia Dydaktyki wraz z Centrum Informatyki Uniwersytetu Łódzkiego [Więcej](#)

Informacje na temat logowania

Na platformie jest wykorzystywana metoda logowania za pośrednictwem Centralnego Systemu Logowania.

Studentów i pracowników Uniwersytetu Łódzkiego obowiązuje nazwa użytkownika i hasło wykorzystywane podczas logowania się do systemu USOSweb.

Deklaracja dostępności