

Dataset

1 Why

We want language to talk about a list of elements from a set.

2 Definition

A dataset is a finite sequence of elements from a set. We say that the data set is in the set. We refer to the length of the sequence as the *size* of the data set and we refer to an element of the sequence as a record of the data set.

2.1 Notation

Let A be a non-empty set. We usually denote sequences by (a_1, \ldots, a_n) , but for data sets we will use a superscript, (a^1, \ldots, a^n) . Often A is itself a set of sequences, and we will want to refer to the ith component of a^1 by a_i^1 .