of all the second input values y_n from 1 to n. Alternatively, the output value z_n may be e.g. $[\sum_1^n y_n^2]$ or $[\sum_1^n x_n y_n]$, or the cumulative total of a different function p_n of the second input value y_n.

By providing a database in which the second input value y_n (e.g. the price of a stock) is stored in cumulative form within the output value z_n, the database stores the second input value in intermediate form, i.e. pre-computed or partially-processed form. This means that, in general, fewer operations are required to generate descriptive data from the database of the first aspect of the present invention, than is the case for conventional databases, in which the data is stored in raw, unprocessed form.

Thus, in a second aspect, the present invention provides a computer-implemented method of calculating a quantity from a set of second input values y_n corresponding to a portion of a sequence of first input values x_n extending from n=a to n=b, comprising extracting from a database according to ~~the first aspect of the invention~~any of the above mentioned at least an output value z_n, wherein n=b.

In general, the method of the second aspect of the invention also includes the step of extracting from the database a further output value z_n, wherein n=a.

Using the method of the second aspect of the invention in combination with a database according to the first aspect of the invention, it is typically possible to calculate the quantities shown in table 2 through the retrieval from the database of the output value z_b corresponding to the end of the data sequence of interest, and optionally also the output