

CLAIMS

1. A method for processing data in a data processing system, the method including:
 - receiving input data records by the data processing system;
 - identifying, by a first data processing program, a dynamic sub-program from multiple available dynamic sub-programs, based on a characteristic of one or more input data records, for processing the one or more input data records, the multiple available dynamic sub-programs being stored in a data storage system;
 - selecting a data store from among one or more persistent data stores and one or more shared memory data stores, wherein the selected data store reduces a performance impact in writing performance metrics, relative to a performance impact in writing performance metrics to another one of the one or more persistent data stores and the one or more shared memory data stores;
 - processing the one or more input data records with the identified dynamic sub-program, the identified dynamic sub-program being loaded from the data storage system into the first data processing program;
 - determining one or more performance metrics indicative of performance of processing the one or more input data records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage system into the first data processing program;
 - writing the one or more performance metrics to the selected data store;
 - selecting, from among a plurality of performance metrics that are written to the selected data store and that are indicative of performances of the multiple available dynamic sub-programs, one or more performance metrics associated with an identifier of the identified dynamic sub-program loaded into the first data processing program and one or more other performance metrics associated with the identifier of the identified dynamic sub-program loaded into the first data processing program or into a second data processing program; and
 - aggregating (i) the one or more performance metrics that are selected from the selected data store and that are indicative of performance of the processing of the one or more input data

records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage system into the first data processing program, with (ii) the other one or more performance metrics that are selected from the selected data store and that are indicative of performance of processing one or more other input data records with the identified dynamic sub-program that is loaded from the data storage system into the first data processing program or into the second data processing program.

2. The method of claim 1, wherein the processing further includes storing the one or more performance metrics in an in-memory data store.

3. The method of claim 2, wherein the processing further includes transferring the stored one or more performance metrics to a persistent data store.

4. The method of claim 1, further including displaying the one or more performance metrics to a user.

5. A non-transitory computer-readable storage medium storing a computer program for processing data in a data processing system, the computer program including instructions for causing a computing system to:

receive input data records by the data processing system;

identify, by a first data processing program, a dynamic sub-program from multiple available dynamic sub-programs, based on a characteristic of one or more input data records, for processing the one or more input data records, the multiple available dynamic sub-programs being stored in a data storage system;

select a data store from among one or more persistent data stores and one or more shared memory data stores, wherein the selected data store reduces a performance impact in writing performance metrics, relative to a performance impact in writing performance metrics to another one of the one or more persistent data stores and the one or more shared memory data stores;

process the one or more input data records with the identified dynamic sub-program, the identified dynamic sub-program being loaded from the data storage system into the first data processing program;

determine one or more performance metrics indicative of performance of processing the one or more input data records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage system into the first data processing program;

write the one or more performance metrics to the selected data store;

select, from among a plurality of performance metrics that are written to the selected data store and that are indicative of performances of the multiple available dynamic sub-programs, one or more performance metrics associated with an identifier of the identified dynamic sub-program loaded into the first data processing program and one or more other performance metrics associated with the identifier of the identified dynamic sub-program loaded into the first data processing program or into a second data processing program; and

aggregate (i) the one or more performance metrics that are selected from the selected data store and that are indicative of performance of the processing of the one or more input data records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage system into the first data processing program, with (ii) the other one or more performance metrics that are selected from the selected data store and that are indicative of performance of processing one or more other input data records with the identified dynamic sub-program that is loaded from the data storage system into the first data processing program or into the second data processing program.

6. The medium of claim 5, wherein the processing further includes storing the one or more performance metrics in an in-memory data store.

7. The medium of claim 6, wherein the processing further includes transferring the stored one or more performance metrics to a persistent data store.

8. The medium of claim 5, further including displaying the one or more performance metrics to a user.

9. A computing system for processing data, the computing system including:
at least one processor; and

one or more machine-readable hardware storage devices storing instructions that are executable by the at least one processor to perform operations including:

- receiving input data records by the data processing system;

- identifying, by a first data processing program, a dynamic sub-program from multiple available dynamic sub-programs, based on a characteristic of one or more input data records, for processing the one or more input data records, the multiple available dynamic sub-programs being stored in a data storage system;

- selecting a data store from among one or more persistent data stores and one or more shared memory data stores, wherein the selected data store improves a performance impact in writing performance metrics, relative to a performance impact in writing performance metrics to another one of the one or more persistent data stores and the one or more shared memory data stores;

- processing the one or more input data records with the identified dynamic sub-program, the identified dynamic sub-program being loaded from the data storage system into the first data processing program;

- determining one or more performance metrics indicative of performance of processing the one or more input data records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage system into the first data processing program;

- writing the one or more performance metrics to the selected data store;

- selecting, from among a plurality of performance metrics that are written to the selected data store and that are indicative of performances of the multiple available dynamic sub-programs, one or more performance metrics associated with an identifier of the identified dynamic sub-program loaded into the first data processing program and one or more other performance metrics associated with the identifier of the identified dynamic sub-program loaded into the first data processing program or into a second data processing program; and

- aggregating (i) the one or more performance metrics that are selected from the selected data store and that are indicative of performance of the processing of the one or more input data records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage

system into the first data processing program, with (ii) the other one or more performance metrics that are selected from the selected data store and that are indicative of performance of processing one or more other input data records with the identified dynamic sub-program that is loaded from the data storage system into the first data processing program or into the second data processing program.

10. The system of claim 9, wherein the processing further includes storing the one or more performance metrics in an in-memory data store.

11. The system of claim 10, wherein the processing further includes transferring the stored one or more performance metrics to a persistent data store.

12. The system of claim 9, further including displaying the one or more performance metrics to a user.

13. The computing system of claim 9, wherein the selected data store improves the performance impact in writing performance metrics by reducing the performance impact in writing performance metrics, relative to the performance impact in writing performance metrics to another one of the one or more persistent data stores and the one or more shared memory data stores.

14. A computing system for processing data, the computing system including:
means for receiving input data records by the data processing system;
means for identifying, by a first data processing program, a dynamic sub-program from multiple available dynamic sub-programs, based on a characteristic of one or more input data records, for processing the one or more input data records, the multiple available dynamic sub-programs being stored in a data storage system;
means for selecting a data store from among one or more persistent data stores and one or more shared memory data stores, wherein the selected data store reduces a performance impact in writing performance metrics, relative to a performance impact in writing performance metrics

to another one of the one or more persistent data stores and the one or more shared memory data stores;

means for processing the one or more input data records with the identified dynamic sub-program, the identified dynamic sub-program being loaded from the data storage system into the first data processing program;

means for determining one or more performance metrics indicative of performance of processing the one or more input data records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage system into the first data processing program;

means for writing the one or more performance metrics to the selected data store;

means for selecting, from among a plurality of performance metrics that are written to the selected data store and that are indicative of performances of the multiple available dynamic sub-programs, one or more performance metrics associated with an identifier of the identified dynamic sub-program loaded into the first data processing program and one or more other performance metrics associated with the identifier of the identified dynamic sub-program loaded into the first data processing program or into a second data processing program; and

means for aggregating (i) the one or more performance metrics that are selected from the selected data store and that are indicative of performance of the processing of the one or more input data records with the dynamic sub-program identified based on the characteristic of the one or more input data records and loaded from the data storage system into the first data processing program, with (ii) the other one or more performance metrics that are selected from the selected data store and that are indicative of performance of processing one or more other input data records with the identified dynamic sub-program that is loaded from the data storage system into the first data processing program or into the second data processing program.