

We claim:

1. A computer implemented method comprising:
parsing a data block of an ordered set of data blocks collectively forming a data file;
detecting a parse error occurring during the parsing of the data block;
generating an error message for the detected parse error, the generated error message
including unresolved location information indicating a location of the detected parse
error in the data block;
determining whether the unresolved location information can be resolved responsive to
parsing of one or more other data blocks in the set;
in response to a determination that the unresolved location information can be resolved,
generating resolved location information indicating the location of the detected parse
error in the data file;
updating the stored error message with the resolved location information to produce an
updated error message; and
outputting the updated error message including the resolved location information indicating
the location of the detected parse error in the data file.
2. The method of claim 1, further comprising:
parsing the data blocks in the ordered set of data blocks out of order.
3. The method of claim 1, wherein generating an error message for the detected parse error, the
generated error message including unresolved location information representing a location of
the detected parse error in the data block comprises:
determining a line number referencing a line in the data block where the detected parse error
occurs.
4. The method of claim 1, wherein determining whether the unresolved location information
can be resolved responsive to parsing of one or more other data blocks in the set comprises:
determining whether one or more preceding data blocks have been parsed, the one or more
preceding data blocks preceding the data block in the ordered set.
5. The method of claim 4, wherein determining whether the one or more preceding data blocks
have been parsed comprises:

- determining whether the data block is a lowest numbered data block in the sequence for which parsing has not been completed.
6. The method of claim 1, wherein generating the resolved location information indicating the location of the detected parse error in the data file comprises:
generating the resolved location information based on the unresolved location information, result of the parsing of the data block, and result of the parsing of the one or more other data blocks.
7. The method of claim 1, wherein outputting the updated error message including the resolved location information indicating the location of the detected parse error in the data file comprises:
outputting the updated error message and one or more other error messages for errors detected during parsing of one or more additional data blocks preceding the data block in the ordered set of data blocks.
8. A non-transitory computer-readable memory storing executable computer program instructions, the instructions executable to perform operations comprising:
parsing a data block of an ordered set of data blocks collectively forming a data file;
detecting a parse error occurring during the parsing of the data block;
generating an error message for the detected parse error, the generated error message including unresolved location information indicating a location of the detected parse error in the data block;
determining whether the unresolved location information can be resolved responsive to parsing of one or more other data blocks in the set;
in response to a determination that the unresolved location information can be resolved, generating resolved location information indicating the location of the detected parse error in the data file;
updating the stored error message with the resolved location information to produce an updated error message; and
outputting the updated error message including the resolved location information indicating the location of the detected parse error in the data file.
9. The non-transitory computer-readable memory of claim 9, further comprising:

- parsing the data blocks in the ordered set of data blocks out of order.
10. The non-transitory computer-readable memory of claim 8, wherein generating an error message for the detected parse error, the generated error message including unresolved location information representing a location of the detected parse error in the data block comprises:
determining a line number referencing a line in the data block where the detected parse error occurs.
 11. The non-transitory computer-readable memory of claim 8, wherein determining whether the unresolved location information can be resolved responsive to parsing of one or more other data blocks in the set comprises:
determining whether one or more preceding data blocks have been parsed, the one or more preceding data blocks preceding the data block in the ordered set.
 12. The non-transitory computer-readable memory of claim 11, wherein determining whether the one or more preceding data blocks have been parsed comprises:
determining whether the data block is a lowest numbered data block in the sequence for which parsing has not been completed.
 13. The non-transitory computer-readable memory of claim 8, wherein generating the resolved location information indicating the location of the detected parse error in the data file comprises:
generating the resolved location information based on the unresolved location information, result of the parsing of the data block, and result of the parsing of the one or more other data blocks.
 14. The non-transitory computer-readable memory of claim 8, wherein outputting the updated error message including the resolved location information indicating the location of the detected parse error in the data file comprises:
outputting the updated error message and one or more other error messages for errors detected during parsing of one or more additional data blocks preceding the data block in the ordered set of data blocks.
 15. A computer-implemented data analytics system for processing data blocks, comprising:

a computer processor for executing computer program instructions; and
a non-transitory computer-readable memory storing computer program instructions executable by the computer processor to perform operations comprising:

- parsing a data block of an ordered set of data blocks collectively forming a data file;
- detecting a parse error occurring during the parsing of the data block;
- generating an error message for the detected parse error, the generated error message including unresolved location information indicating a location of the detected parse error in the data block;
- determining whether the unresolved location information can be resolved responsive to parsing of one or more other data blocks in the set;
- in response to a determination that the unresolved location information can be resolved, generating resolved location information indicating the location of the detected parse error in the data file;
- updating the stored error message with the resolved location information to produce an updated error message; and
- outputting the updated error message including the resolved location information indicating the location of the detected parse error in the data file.

16. The system of claim 15, further comprising:
parsing the data blocks in the ordered set of data blocks out of order.
17. The system of claim 15, wherein generating an error message for the detected parse error, the generated error message including unresolved location information representing a location of the detected parse error in the data block comprises:
determining a line number referencing a line in the data block where the detected parse error occurs.
18. The system of claim 15, wherein determining whether the unresolved location information can be resolved responsive to parsing of one or more other data blocks in the set comprises:
determining whether one or more preceding data blocks have been parsed, the one or more preceding data blocks preceding the data block in the ordered set.

19. The system of claim 18, wherein determining whether the one or more preceding data blocks have been parsed comprises:
determining whether the data block is a lowest numbered data block in the sequence for
which parsing has not been completed.
20. The system of claim 15, wherein generating the resolved location information indicating the location of the detected parse error in the data file comprises:
generating the resolved location information based on the unresolved location information,
result of the parsing of the data block, and result of the parsing of the one or more
other data blocks.