

What is claimed is:

1. A computer-implemented method of reviewing structured query language (SQL) using at least one processor, comprising:

obtaining slow log data;

extracting a SQL sentence to be reviewed and basic information matched with the SQL sentence from the slow log data;

identifying and parsing the SQL sentence to obtain a parsed result;

reviewing the parsed result and the basic information in accordance with review items in a preset review template one by one to obtain a review result; and

generating a review result set according to the review result,

wherein the preset review template comprises a SQL grammar review template, the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result comprises:

analyzing the parsed result grammatically in accordance with review items in the SQL grammar review template one by one.

2. The method of claim 1, wherein the extracting the SQL sentence to be reviewed and basic information matched with the SQL sentence from the slow log data comprises:

analyzing the slow log data according to a preset format and generating a slow log data list; and

extracting the SQL sentence to be reviewed and the basic information matched with the SQL sentence from the slow log data list according to a field name in the slow log data list.

3. The method of claim 1, wherein the preset review template further comprises an execution plan review template;

the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result further

comprises:

extracting data matched with review items in the execution plan review template in the basic information in accordance with the review items one by one, and reviewing the data to obtain the review result.

4. The method of claim 1 or 3, wherein the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result further comprises:

reviewing the parsed result according to the analyzed result to obtain the review result.

5. The method of claim 1, wherein after the generating the review result set according to the review result, the method further comprises:

extracting a SQL sentence the review result of which is not passed in the review result set to establish a SQL baseline; and

analyzing the SQL baseline to obtain SQL review data, and displaying the SQL review data.

6. The method of claim 5, wherein the extracting the SQL sentence the review result of which is not passed in the review result set to establish the SQL baseline comprises:

extracting the SQL sentence the review result of which is not passed in the review result set;

obtaining a SQL number of the SQL sentence the review result of which is not passed and an unpassed review item number; and

determining whether there exists a matched SQL baseline according to the SQL number and the unpassed review item number; if yes, marking a status of the SQL baseline as non-pass; or else, establishing the SQL baseline according to the SQL number and the unpassed review item number.

7. A device of reviewing SQL, comprising:

an obtaining module configured to obtain slow log data;

an extracting module configured to extract a SQL sentence to be reviewed and basic information matched with the SQL sentence from the slow log data;

a parsing module configured to identify and parse the SQL sentence to obtain a parsed result;

a reviewing module configured to review the parsed result and the basic information in accordance with review items in a preset review template one by one to obtain a review result; and

a generating module configured to generate a review result set according to the review result,

wherein the preset review template comprises a SQL grammar review template, and the reviewing module is further configured to analyze the parsed result grammatically in accordance with review items in the SQL grammar review template one by one.

8. The device of claim 7, wherein the extracting module comprises:

a list generation unit configured to analyze the slow log data according to a preset format and generate a slow log data list; and

an information extraction unit configured to extract the SQL sentence to be reviewed and the basic information matched with the SQL sentence from the slow log data list according to a field name in the slow log data list.

9. The device of claim 7, wherein the preset review template further comprises an execution plan review template;

the reviewing module is further configured to extract data matched with review items in the execution plan review template in the basic information in accordance with the review items one by one, and review the data to obtain the review result; and

the reviewing module is further configured to review the parsed result according to the analyzed result to obtain the review result.

10. The device of any one of claims 7 to 9, wherein the device further comprises:
an establishing module configured to extract a SQL sentence the review result of which is not passed in the review result set to establish a SQL baseline; and
a displaying module configured to analyze the SQL baseline to obtain SQL review data, and display the SQL review data.

11. The device of claim 10, wherein the establishing module comprises:
a sentence extraction unit configured to extract the SQL sentence the review result of which is not passed in the review result set;
an obtainment unit configured to obtain a SQL number of the SQL sentence the review result of which is not passed and an unpassed review item number; and
an determination unit configured to determine whether there is a matched SQL baseline according to the SQL number and the unpassed review item number; if yes, marking a status of the SQL baseline as non-pass; or else, establishing the SQL baseline according to the SQL number and the unpassed review item number.

12. A server, comprising a processor and a memory storing computer executable instructions that, when executed by the processor, cause the processor to perform operations comprising:
obtaining slow log data;
extracting a SQL sentence to be reviewed and basic information matched with the SQL sentence from the slow log data;
identifying and parsing the SQL sentence to obtain a parsed result;
reviewing the parsed result and the basic information in accordance with review items in a preset review template one by one to obtain a review result; and
generating a review result set according to the review result,

wherein the preset review template comprises a SQL grammar review template, the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result comprises:

analyzing the parsed result grammatically in accordance with review items in the SQL grammar review template one by one.

13. The server of claim 12, wherein the extracting the SQL sentence to be reviewed and basic information matched with the SQL sentence from the slow log data comprises:

analyzing the slow log data according to a preset format and generating a slow log data list; and

extracting the SQL sentence to be reviewed and the basic information matched with the SQL sentence from the slow log data list according to a field name in the slow log data list.

14. The server of claim 12, wherein the preset review template further comprises an execution plan review template;

the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result further comprises:

extracting data matched with review items in the execution plan review template in the basic information in accordance with the review items one by one, and reviewing the data to obtain the review result.

15. The server of claim 14, wherein the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result further comprises:

reviewing the parsed result according to the analyzed result to obtain the review result.

16. The server of claim 12, wherein after the step of generating the review result set according to the review result, the computer executable instructions, when executed by the processor, further cause the processor to perform operations comprising:

extracting a SQL sentence the review result of which is not passed in the review result set to establish a SQL baseline; and
analyzing the SQL baseline to obtain SQL review data, and displaying the SQL review data.

17. The server of claim 16, wherein the extracting the SQL sentence the review result of which is not passed in the review result set to establish the SQL baseline comprises:

extracting the SQL sentence the review result of which is not passed in the review result set;

obtaining a SQL number of the SQL sentence the review result of which is not passed and an unpassed review item number; and

determining whether there is a matched SQL baseline according to the SQL number and the unpassed review item number; if yes, marking a status of the SQL baseline as non-pass; or else, establishing the SQL baseline according to the SQL number and the unpassed review item number.

18. One or more storage apparatus storing computer executable instructions that, when executed by the one or more processors, cause the one or more processors to perform the steps as follows:

obtaining slow log data;

extracting a SQL sentence to be reviewed and basic information matched with the SQL sentence from the slow log data;

identifying and parsing the SQL sentence to obtain a parsed result;

reviewing the parsed result and the basic information in accordance with review items in a preset review template one by one to obtain a review result; and

generating a review result set according to the review result,

wherein the preset review template comprises a SQL grammar review template, the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result comprises:

analyzing the parsed result grammatically in accordance with review items in the SQL grammar review template one by one.

19. The storage apparatus of claim 18, wherein the extracting the SQL sentence to be reviewed and basic information matched with the SQL sentence from the slow log data comprises:

analyzing the slow log data according to a preset format and generating a slow log data list; and

extracting the SQL sentence to be reviewed and the basic information matched with the SQL sentence from the slow log data list according to a field name in the slow log data list.

20. The storage apparatus of claim 18, wherein the preset review template further comprises an execution plan review template;

the reviewing the parsed result and the basic information in accordance with review items in the preset review template one by one to obtain the review result further comprises:

extracting data matched with review items in the execution plan review template in the basic information in accordance with the review items one by one, and reviewing the data to obtain the review result; and

reviewing the parsed result according to the analyzed result to obtain the review result.