

Claims

1. A method for generating a random character string, comprising:

acquiring a value of a sequence variable in a database, wherein the acquired value of the sequence variable is a sequence comprising basic numerals from a predetermined basic numeral set, and the currently acquired value of the sequence variable is incremented from a previous value of the sequence variable, the acquired value being different from values of the sequence variable acquired at any other times; and

mapping the sequence variable into a character string as a generated random character string according to a preset one-to-one mapping relationship between characters contained in a character set and the basic numerals contained in the basic numeral set.

2. The method according to claim 1, wherein the acquiring a value of a sequence variable in a database comprises:

receiving a request for generating a random character string;

according to a type of the generation request, determining a preset sequence variable that corresponds to the type from at least one sequence variable in the database; and

acquiring a value of the sequence variable corresponding to the type, wherein the currently acquired value of the sequence variable is different from values of the sequence variable corresponding to the type that are acquired at any other times.

3. The method according to claim 1, wherein, when a number of the characters contained in the character set is N , the predetermined basic numeral set is a basic numeral set corresponding to a base N numeral system, comprising the basic numerals of integers 0 to $N-1$, wherein N is an integer no smaller than 2; and

the acquiring a value of a sequence variable in a database, wherein the value of the sequence variable is a sequence comprising basic numerals from a predetermined basic numeral set comprises:

acquiring the value of the sequence variable in the database; and

in response to determining that the acquired value of the sequence variable is not a base- N number, converting the value of the sequence variable to a base- N number, the base- N number being a sequence comprising the basic numerals in the basic numeral set corresponding to the base N numeral system.

4. The method according to claim 1, wherein the mapping the sequence into a character string comprises:

converting each basic numeral in the sequence to a character comprised in the character set and mapped to the basic numeral; and

according to a sequence of the converted characters in the sequence after conversion, connecting the characters in series to form a character string.

5. The method according to any one of the preceding claims 1 to 3, wherein the acquiring a value of the sequence variable comprises:

acquiring the value of the sequence variable by using an instruction that allows an auto increment of the sequence variable and then acquires the value of the sequence variable.

6. An apparatus for generating a random character string, comprising:

an acquiring module configured to acquire a value of a sequence variable in a database, wherein the acquired value of the sequence variable is a sequence comprising basic numerals in a predetermined basic numeral set, and the currently acquired value of the sequence variable is incremented from a previous value of the sequence variable, the acquired value being different from values of the sequence variable acquired at any other times; and

a generating module configured to map the sequence variable into a character string as a generated random character string according to a preset one-to-one mapping relationship between characters contained in a character set and the basic numerals contained in the basic numeral set.

7. The apparatus according to claim 6, wherein the acquiring module is configured to receive a request for generating a random character string; according to a type of the generation request, determine a preset sequence variable that corresponds to the type from at least one sequence variable in the database; and acquire a value of the sequence variable corresponding to the type, wherein the currently acquired value of the sequence variable is different from values of the sequence variable corresponding to the type that are acquired at any other times.

8. The apparatus according to claim 6, wherein, when a number of the characters contained in the character set is N, the predetermined basic numeral set is a basic numeral set corresponding to a base N numeral system, comprising the basic numerals of integers 0 to N-

1, wherein N is an integer no smaller than 2; and

the acquiring module is configured to acquire the value of the sequence variable in the database; and in response to determining that the acquired value of the sequence variable is not a base-N number, convert the value of the sequence variable to a base-N number, the base-N number being a sequence comprising the basic numerals in the basic numeral set corresponding to the base N numeral system.

9. The apparatus according to claim 6, wherein the generating module is configured to convert each basic numeral in the sequence to a character comprised in the character set and mapped to the basic numeral; and according to a sequence of the converted characters in the sequence after conversion, connect the characters in series to form a character string.

10. The apparatus according to any one of the preceding claims 6 to 8, wherein the acquiring module is configured to acquire the value of the sequence variable by using an instruction that allows an auto increment of the sequence variable and then acquires the value of the sequence variable.