

The function `bsearch ()` in C

Void function `* bsearch (const void * key, const void * base, nitems, size, int (* compar) (const void *, const void *))` looks for an array of `nitems` objects, its original member is point to by `base`, for a member that connects the object pointed to by the `key`. The size of each array element is determined by `size`.

The function `bsearch ()` in C

Void function `* bsearch (const void * key, const void * base, nitems, size, int (* compar) (const void *, const void *))` looks for an array of **nitems** objects, its original member is point to by **base** , for a member that connects the object pointed to by the **key** . The size of each array element is determined by **size** .

The contents of the array should be in ascending order corresponding to the comparison function referenced by `compar`.

The `bsearch ()` function, which stands for Binary Search, is based on the idea of Binary Search algorithm (Binary Search), you can refer to this algorithm in Binary Search Algorithm.

Declare the function `bsearch ()` in C

Below is the declaration for `bsearch ()` in C:

```
void * bsearch ( const void * key , const void * base , size_t nitems , size_t
```

Parameters

key : This is the pointer to an object that acts as a key to search, is cast as a `void *`.

base : This is the pointer to the first object of the array, where the search is performed, cast in the form of a `void *`.

nitems : This is the number of elements in the array pointed to by the `base`.

size : This is the size (byte value) of each element in the array.

compare : This is a function to compare two elements.

Returns the value

This function returns a pointer to an entry in the array that connects to the search key. If the key is not found, the function returns a NULL pointer.

For example

The following C program illustrates the usage of `bsearch ()` in C:

```
#include #include int cmpfunc ( const void * a , const void * b ) { return (
```

Compiling and running the above C program will result:

```
Da tim thay phan tu co gia tri = 32
```

According to Tutorialspoint

Previous lesson: `Function system ()` in C

Next lesson: `qsort ()` function in C

You finished reading the article "**The function `bsearch ()` in C**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.