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04-02-2020			#
elixthunder 🏻	Using bsearch to search for a string in an array of strings.		
Registered User Join Date: Mar 2020 Posts: 10	Sing Bearch to Search for a string in an a	I have an arra strings called I want to sear array in it with function bsear provided by < But I think I a something wro it cannot find Is my code wr	y of tab. ch for an the ch() stdlib.h>. m doing ong, since "delta".

```
#include <st
 1
 2
     #include <st
 3
     #include <st
4
5
     #define LEN(
6
     char *tab[]
7
          "alfa",
8
9
          "delta"
10
          "epsilon
11
          "gama",
12
          "zeta",
13
14
     };
15
     int
16
17
     main(int arg
18
          char **t
19
20
          char s[]
21
22
          t = bsea
23
          if (t !=
24
              prin
25
26
          return E
     }
27
```

Last edited by felixthunder; 04-02-2020 at 10:05 AM.

04-02-2020 #2

Salem o

and the hat of int overfl



Join Date: Aug 2001 Location: The edge of the

known universe Posts: 39,604 This works.

Code:

```
1
2
     main(int argc, char *argv[])
3
     {
         char **t;
4
         char *s = "delta";
5
6
7
         t = bsearch(&s, tab, LEN(tab), sizeof *tab, (int
8
         if (t != NULL)
             printf("%s\n", *t);
9
10
         return EXIT_SUCCESS;
11
     }
```

s needs to be the same type as the things you're comparing against.

If you dance barefoot on the broken glass of undefined behaviour, you've got to expect the occasional cut.

If at first you don't succeed, try writing your phone number on the exam paper.

04-02-2020 #3

felixthunder •

Registered User

Join Date: Mar 2020

And what if I want to search for argv[1] instead of s. The following also does not work.

Posts: 10

Code:

```
1
     int
 2
     main(int argc, char *argv[])
 3
 4
         char **t;
 5
 6
         argc--;
 7
         argv++;
         if (argc != 1)
 8
              return EXIT_FAILURE;
9
10
11
         t = bsearch(argv, tab, LEN(tab), sizeof *tab, (i)
         if (t != NULL)
12
13
             printf("%s\n", *t);
14
15
         return EXIT_SUCCESS;
16
     }
```

04-02-2020 #4

Salem o

and the hat of int overfl



Join Date: Aug 2001 Location: The edge of the

known universe Posts: 39,604 You also can't use strcmp directly.

The compar routine is expected to have two arguments which **point** to the key

object and to an array member, in that order, and should return an integer less than, equal to, or greater than zero if the key object is found, respectively, to be less than, to match, or be greater than the array member.

The compare function gets pointers to pointers. So it needs a simple wrapper to do one level of dereferencing to get to something strcmp can use.

Code:

```
1
     #include <stdio.h>
 2
     #include <stdlib.h>
 3
     #include <string.h>
 4
 5
     #define LEN(x) (sizeof (x) / sizeof (x[0]))
 6
 7
     char *tab[] = {
          "alfa",
"beta",
 8
 9
          "delta<sup>"</sup>,
10
          "epsilon",
11
          "gama",
12
          "zeta",
13
14
     };
15
      int mycmp(const void *a, const void *b) {
16
17
        const char * const *pa = a;
        const char * const *pb = b;
18
19
        return strcmp(*pa,*pb);
20
     }
21
22
23
     main(int argc, char *argv[])
24
     {
25
          char **t;
26
27
          argc--;
28
          argv++;
          if (argc != 1)
29
              return EXIT_FAILURE;
30
31
```

If you dance barefoot on the broken glass of undefined behaviour, you've got to expect the occasional cut.

If at first you don't succeed, try writing your phone number on the exam paper.

04-02-2020 #5

felixthunder o

Registered User

Join Date: Mar 2020

Posts: 10

R Originally Posted by Salem

The compare function gets pointers to pointers. So it needs a simple wrapper to do one level of dereferencing to

get to something strcmp can use.

It worked, thanks.

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search numbers in an innuted string [array of strings]

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