

```

1  /* Program H Checking the dictionary for a word*/
2  #include <stdio.h>
3  #include <stdlib.h>
4  #include <string.h>
5  #define NUMWORDS 80368
6  #define MAXLENGTH 25
7  int main (void)
8  {
9      char dictionary[NUMWORDS][MAXLENGTH];
10     char inputString[MAXLENGTH];
11     int i;
12     int wordFound=0;
13     float percent;
14     //This section of the code reads the contents
15     //of Dictionary1.txt into dictionary[][].
16     freopen("./Dictionary1.txt", "r", stdin);
17     for (i=0; i<NUMWORDS; i++) scanf("%s", &dictionary[i]);
18     freopen("CON", "r", stdin);
19     fflush(stdin);
20     //End of file access section of the program.
21
22     printf("Please enter a word:");
23     scanf(" %s", &inputString);
24
25     for (i=0; i<NUMWORDS; i++) //search through all words in the dictionary
26     {
27         if(strcmp(dictionary[i],inputString)==0)
28         {
29             wordFound=1;
30             break;
31         }
32     }
33     if(wordFound==0)
34     {
35         printf("Sorry, that word is not in the dictionary.");
36     }
37     else {
38         percent = (float)i/NUMWORDS*100;
39         printf("Yes, that word is in the dictionary.\n");
40         printf("It is number #i out of %d\n", (i+1), NUMWORDS);
41         printf("That is %.2f%% of the way through the dictionary\n", percent);
42         printf("The word before it is \"%s\"\n", dictionary[i-1]);
43         printf("The word after it is \"%s\"\n", dictionary[i+1]);
44     }
45 }
46

```

```

$ 10a
Please enter a word:test
Yes, that word is in the dictionary.
It is number #70498 out of 80368
That is 87.72% of the way through the dictionary
The word before it is "tesserae"
The word after it is "testa"

dbrown22@GEm-0162-025698 /c/users/dbrown22/documents/github/ece-251/project10
$ 10a
Please enter a word:guard
Yes, that word is in the dictionary.
It is number #30432 out of 80368
That is 37.86% of the way through the dictionary
The word before it is "guaranty"
The word after it is "guardant"

dbrown22@GEm-0162-025698 /c/users/dbrown22/documents/github/ece-251/project10
$

```

10b.c

10a.c

puzzle.c

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4 #define NUMWORDS 80368
5 #define MAXLENGTH 25
6 int main (void)
7 {
8     char dictionary[NUMWORDS][MAXLENGTH];
9     char inputString[MAXLENGTH];
10    int i;
11    int j;
12    int wordFound=0;
13    char temp[MAXLENGTH];
14    //This section of the code reads the contents
15    //of Dictionary1.txt into dictionary[][].
16    freopen("./Dictionary1.txt", "r", stdin);
17    for (i=0; i<NUMWORDS; i++) scanf("%s", &dictionary[i]);
18    freopen("CON", "r", stdin);
19    fflush(stdin);
20    //End of file access section of the program.
21
22    printf("Please enter a word, with unknown letters as '-':");
23    scanf(" %s", &inputString);
24
25    for (i=0; i<NUMWORDS; i++) //search through all words in the dictionary
26    {
27        if (strlen(inputString) == strlen(dictionary[i]))
28        {
29            strcpy(temp, inputString);
30            for (j=0; j<=strlen(temp); j++)
31            {
32                if (temp[j] == '-'){
33                    temp[j] = dictionary[i][j];
34                }
35            }
36            if(strcmp(dictionary[i], temp)==0)
37            {
38                printf("%s\n", dictionary[i]);
39            }
40            else{
41                continue;
42            }
43        }
44    }
45    return 0;
46 }
47
```

MINGW32:/c/users/dbrown22/documents/github/ece-251/project10

```
dbrown22@GEm-0162-025698 /c/users/dbrown22/documents/github/ece-251/project10
$ gcc -o 10b 10b.c
```

```
dbrown22@GEm-0162-025698 /c/users/dbrown22/documents/github/ece-251/project10
$ 10b
Please enter a word, with unknown letters as '-':-t--s-
attest
otiose
strass
stress
utmost
```

```
dbrown22@GEm-0162-025698 /c/users/dbrown22/documents/github/ece-251/project10
$
```