

Before bug is fixed:

```
143     int i, j;
144     int min, minIndex;
145
146     for(i = 0; i < size; i++)
147     {
148         minIndex = i;
149
150         for(j = i + 1; j < size; j++)
151         {
152             if(my_strcmpOrder(words[i], words[j]) == 1)
153             {
154                 minIndex = j;
155             }
156         }
157
158         if(minIndex != j)
159         {
160             swap(&words[i], &words[minIndex]);
161         }
162     }
163 }
164
```

Reading symbols from C:\Users\nihal\VSCode\COE2SH4\Labs\Lab3\lab-3-inela0\Lab3.exe...done.

(gdb) run

Starting program: C:\Users\nihal\VSCode\COE2SH4\Labs\Lab3\lab-3-inela0\./Lab3.exe

[New Thread 7688.0x1e8c]

[New Thread 7688.0x22e4]

.....F.....

There was 1 failure:

1) TestQ2\_readandSort2: testCases.c:346: expected <milan> but was <hello>

!!!FAILURES!!!

Runs: 34 Passes: 33 Fails: 1

[Inferior 1 (process 7688) exited normally]

(gdb) b Question2.c:152

```

(gdb) b Question2.c:152
Breakpoint 1 at 0x403cb8: file Question2.c, line 152.
(gdb) run
Starting program: C:\Users\nihal\VSCode\COE2SH4\Labs\Lab3\lab-3-
inela0\./Lab3.exe
[New Thread 16476.0x4358]
[New Thread 16476.0x620]

Breakpoint 1, sort_words_Selection (words=0x25828, size=6)
  at Question2.c:152
152             if(my_strcmpOrder(words[i], words[j]) == 1)
(gdb) c
Continuing.

Breakpoint 1, sort_words_Selection (words=0x25828, size=6)
  at Question2.c:152
152             if(my_strcmpOrder(words[i], words[j]) == 1)
(gdb) i locals
i = 0
j = 2
minIndex = 1

```

```

152             if(my_strcmpOrder(words[i], words[j]) == 1)
(gdb) next
155                 minIndex = j;
(gdb) info locals
i = 0
j = 5
minIndex = 3
(gdb) next
150             for(j = i + 1; j < size; j++)
(gdb) info locals
i = 0
j = 5
minIndex = 5
(gdb) next
159                 if(minIndex != j)
(gdb) info locals
i = 0
j = 6
minIndex = 5
(gdb) next
162                 swap(&words[i], &words[minIndex]);
(gdb) info locals

```

```

(gdb) next
162                 swap(&words[i], &words[minIndex]);
(gdb) info locals
i = 0
j = 6
minIndex = 5
(gdb) next
146             for(i = 0; i < size; i++)
(gdb) i locals
i = 0
j = 6
minIndex = 5
(gdb)

```

After bug is fixed:

```
142
143     int i, j;
144     int min, minIndex;
145
146     for(i = 0; i < size; i++)
147     {
148         minIndex = i;
149
150         for(j = i + 1; j < size; j++)
151         {
152             //if(my_strcmpOrder(words[i], words[j]) == 1)
153             if(my_strcmpOrder(words[minIndex], words[j]) == 1)
154             {
155                 minIndex = j;
156             }
157         }
158
159         //if(minIndex != i)
160         if(minIndex != i)
161         {
162             swap(&words[i], &words[minIndex]);
163         }
164     }
165 }
166
```

```
PS C:\Users\nihal\VSCode\COE2SH4\Labs\Lab3\lab-3-inela0> gdb ./Lab3.exe
GNU gdb (GDB) 7.6.1
Copyright (C) 2013 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law. Type "show copying"
and "show warranty" for details.
This GDB was configured as "mingw32".
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>...
Reading symbols from C:\Users\nihal\VSCode\COE2SH4\Labs\Lab3\lab-3-inela0\Lab3.exe...done.
(gdb) run
Starting program: C:\Users\nihal\VSCode\COE2SH4\Labs\Lab3\lab-3-inela0\./Lab3.exe
[New Thread 3536.0x4664]
[New Thread 3536.0x3140]
.....

OK (34 tests)

[Inferior 1 (process 3536) exited normally]
(gdb) quit
```

```

Breakpoint 1, sort_words_Selection (words=0x9e5830, size=6) at Question2.c:153
153         if(my_strcmpOrder(words[minIndex], words[j]) == 1)
(gdb) i locals
i = 0
j = 1
minIndex = 0
(gdb) c
Continuing.

Breakpoint 1, sort_words_Selection (words=0x9e5830, size=6) at Question2.c:153
153         if(my_strcmpOrder(words[minIndex], words[j]) == 1)
(gdb) i locals
i = 0
j = 2
minIndex = 1
(gdb) next
150         for(j = i + 1; j < size; j++)
(gdb) i locals
i = 0
j = 2
minIndex = 1
(gdb) next

Breakpoint 1, sort_words_Selection (words=0x9e5830, size=6) at Question2.c:153
153         if(my_strcmpOrder(words[minIndex], words[j]) == 1)

```

```

(gdb) i locals
i = 0
j = 1
minIndex = 0
(gdb) c
Continuing.

Breakpoint 1, sort_words_Selection (words=0x9e5830, size=6) at Question2.c:153
153         if(my_strcmpOrder(words[minIndex], words[j]) == 1)
(gdb) i locals
i = 0
j = 2
minIndex = 1
(gdb) next
150         for(j = i + 1; j < size; j++)
(gdb) i locals
i = 0
j = 2
minIndex = 1
(gdb) next

Breakpoint 1, sort_words_Selection (words=0x9e5830, size=6) at Question2.c:153
153         if(my_strcmpOrder(words[minIndex], words[j]) == 1)
(gdb) i locals
i = 0
j = 3

```

```

j = 3
minIndex = 1
(gdb) next
155         minIndex = j;
(gdb) i locals
i = 0
j = 3
minIndex = 1
(gdb) next
150         for(j = i + 1; j < size; j++)
(gdb) i locals
i = 0
j = 3
minIndex = 3
(gdb) next

Breakpoint 1, sort_words_Selection (words=0x9e5830, size=6) at Question2.c:153
153         if(my_strcmpOrder(words[minIndex], words[j]) == 1)
(gdb) i locals
i = 0
j = 4
minIndex = 3
(gdb) next
150         for(j = i + 1; j < size; j++)
(gdb) i locals
i = 0

```