

HW2.8. Strings

Consider the following code on a 32-bit system:

```
#include <string.h>
int main () {
    char *a = "hello";
    int len;
    // set len to a's length
}
```

Q1.1: What would the value of `sizeof(a)` return? Hint: Look at <https://en.wikipedia.org/wiki/Sizeof>

integer

?

Q1.2: Which of the following expressions could we add above to properly compute the length of a? (By convention, we don't include the null-byte in the length of the string.) You may find the following reference on [operator precedence](#) useful.

☐ (a) `len = a.length`

☐ (b) `len = sizeof(a)`

☐ (c) `len = strlen(a)`

☐ (d) `len = 0; while (++*a) { len++; }`

☐ (e) `len = 0; while (++*a) { ++len; }`

☐ (f) `len = 0; while (*a++) { len++; }`

☐ (g) `len = 0; while (*a++) { ++len; }`

Select all possible options that apply. ?

For the following strings, what would `strlen(a)` return? If this program would cause a compile-time error or the behavior is uncertain, enter "n/a".

Q2.1: 

`char* a = "foobar";`

?

Q2.2: 

`char a = 'f';`

?

Q2.3: 

`char a[] = {'f', 'o', 'o', 'b', 'a', 'r', '\0'};`

?

Q2.4: 

`char a[] = {'f', 'o', 'o', 'b', 'a', 'r'};`

?

Q2.5: 

`char* a = "foo\0bar";`

?

Save & Grade 20 attempts left

Save only

Additional attempts available with new variants ?

Homework 2

Assessment overview

Total points: 65/100

Score: 65%

Question

Value: 10

History:

Awarded points: 0/10

Report an error in this question ?

Previous question

Next question

Attached files

No attached files

Attach a file ?

Attach text ?