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CSCI 2113

Module Exercises for C Module 3

Exercise 3.1*: Type up, compile and execute the above program. Add a second pointer variable that points to i and modifies i using only the second pointer variable. Can two pointers point to the same thing?*

Two pointers can not point to the same thing because attempting to do so results in a compiler error. (Segmentation fault: 11)

Exercise 3.2*: In addition to the value in j also print the address in charPtr in the first printf statement.*

```
Timothys-MacBook-Pro:Module3 timothylytkine$ pico Exercise3p2.c
Timothys-MacBook-Pro:Module3 timothylytkine$ gcc -o Exercise3p2 -
std=c99 Exercise3p2.c
Timothys-MacBook-Pro:Module3 timothylytkine$ ./Exercise3p2
First byte: 5
Address in charPtr: 0x7fff58ac7b20
Second byte: 0
Third byte: 0
Fourth byte: 0
```

Exercise 3.4: *Draw the "memory picture" for arrays B and B2 in the first arrays example above (arrays.c) just before the free() function calls are executed. That is, draw a picture with sample memory addresses that shows how these arrays are located in memory. Put this in the "answers" PDF for this module.*