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 15 Nov 2022

Assignment 10 - Arrays/Pointers

5. Before running your program, write down which values you expect to match, and why. Account for any discrepancies between your expected answers and observed results.

--- Prediction:

I expect the values to be different between the addresses printed local to the functions and the address printed in the main function.

--- Reality:

&ca, &pa, &ga in func 1 and 2, were all the same. I did not realize at first, but this makes sense. This is not getting the pointer value itself, it is the address where the pointer value is stored. Additionally, the address for ga element zero and one is the same in the functions and in main. This is because the address of the value stored at these indices is the same.

Results

```
Running func 1 with ca
Function 1:
&val      = 0x7ffe83a897d8
&(val[0]) = 0x7ffe83a897fc
&(val[1]) = 0x7ffe83a897fd
Running func 2 with pa
Function 2:
&val      = 0x7ffe83a897d8
&(val[0]) = 0x5597ba5b907b
&(val[1]) = 0x5597ba5b907c
++val     = 0x5597ba5b907c
Now running one() and two() with global alphabet
Function 1:
&val      = 0x7ffe83a897d8
&(val[0]) = 0x5597ba5b9008
&(val[1]) = 0x5597ba5b9009
Function 2:
&val      = 0x7ffe83a897d8
&(val[0]) = 0x5597ba5b9008
&(val[1]) = 0x5597ba5b9009
++val     = 0x5597ba5b9009
```

```
Now printing in main global alphabet:  
&val      = 0x5597ba5bb010  
&(val[0]) = 0x5597ba5b9008  
&(val[1]) = 0x5597ba5b9009
```