

**23748310****Date:** 10/7/2023 6:00:15 PM**Duration:** 0:50:57**Index**

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Kyle

[0:00:00] How do I use reference parameters to return the customerNames and customerCarColors arrays from addNewOrder() function into main()? [File > https://lhh.tutor.com/SharedSessionFiles/737d7488-52be-4e37-bb2b-aae30208f958_M06_Part_A_Programming_Assignment_2.txt]

Calvin F (Tutor)

[0:00:12] Welcome! I hope you're doing well.

Whiteboard 1

C-Like Editor 1

Calvin F (Tutor)

[0:01:40] let me take a look at your code and see if I can help you with that question.

C-Like Editor 2

C-Like Editor 1

[0:06:12] Can you explain the addNewOrder function parameters to me?

Calvin F (Tutor)

[0:08:22] Arrays do not need to be explicitly passed as references, they're already passed as pointers.

Kyle

[0:08:33] I tried to input customerNames and customerCarColors as a normal array for the function to do it's work upon. names and colors arrays are my attempt at making reference parameters that I could reference outside of the addNewOrder function with main() and quit()

Kyle

[0:10:02] Basically, you can only return one thing out of a value returning function, so I initialized addNewOrder() as void so I could try to pass the arrays as reference parameters outside the function.

Calvin F (Tutor)

[0:11:41] Arrays can be changed inside void functions just by calling them, yes?

Kyle

[0:13:18] You can change array's values inside of the void function, the problem is returning those changes to the main function when multiple arrays are being changed at the same time.

Calvin F (Tutor)

[0:14:04] What issue are you running into specifically?

Calvin F (Tutor)

[0:14:41] Multiple arrays should be able to change and be called into the same function.

Kyle

[0:16:03] Whenever I try to initialize the reference arrays, I get lots of error messages telling me that I can't initialize them with normal arrays or elements of arrays.

Calvin F (Tutor)

[0:16:45] Initializing them in the main or in the function?

Kyle

[0:16:45] Severity Code Description Project File Line Suppression State
Error C2664 'void addNewOrder(std::string [],carColorType [][][3],std::string (&)[],carColorType (&)[][3])': cannot convert argument 3 from 'std::string' to 'std::string (&[])' M06_Part_A_Programming_Assignment_2 C:\Users\spect\source\repos\M06_Part_A_Programming_Assignment_2\M06_Part_A_Programming_Assignment_2
M06_Part_A_Programming_Assignment_2.cpp 80

Kyle

[0:17:38] I've tried initializing them in the main, although I might need to initialize them in the function.

Calvin F (Tutor)

[0:18:10] Go ahead and remove the (&names)[] and (&colors)[][3]

Calvin F (Tutor)

[0:18:40]

```
void addNewOrder(string customerNames[], carColorType customerCarColors[][3]);
```

Calvin F (Tutor)

[0:23:25] If you're running into an issue adding the data, I would double check the logic of the code you're using to add it.

Calvin F (Tutor)

[0:23:39] The current way you're doing things should work.

Calvin F (Tutor)

[0:25:53] If you're not sure how many customers you're going to have before you run the code, you should also be using dynamic memory for these arrays as well.

Calvin F (Tutor)

```
[0:26:40] string* customerNames = new string[customerCount];  
carColorType (*customerCarColors)[3] = new carColorType[customerCount][3];
```

Calvin F (Tutor)

[0:26:54] this is how you can build the arrays with dynamic memory instead.

Kyle

[0:28:44] I know that the number of customers I will have will be up to 10 customers, which is why it is initialized at 10.

Calvin F (Tutor)

[0:28:51] Gotchya.

Kyle

[0:34:11] To summarize, what I am trying to do is to take customerNames and customerCarColors into the void addNewOrder function. I then input the customer name into the customerNames array and the body, top, and trim colors into a parallel two dimensional array called customerCarColors and input those 3 values into the 2nd index. From there, the part I am having trouble with is to then get customerNames and customerCarColors out of the addNewOrder() function and into the main() function and then as input to quit() function. I cannot just return the values, since you can only return 1 value out of a value returning function. I need to get two whole arrays out of the function.

Calvin F (Tutor)

[0:36:33] Once the addNewOrder function is complete and it returns to main, customerNames and customerCarColors should be populated with a new order.

Calvin F (Tutor)

[0:36:42] There is no need to return anything with addNewOrder

Calvin F (Tutor)

[0:36:51] Access the members of the array you declared in main

Calvin F (Tutor)

[0:38:02] your "readExistingOrders" function is likely the problem here if that's where you're stuck.

Kyle

[0:39:55] I'm not stuck with the readExistingOrders function, I am stuck at the addNewOrder function. readExistingOrders works fine.

Calvin F (Tutor)

[0:40:31] Are you trying to get addNewOrder to write to the file that readExistingOrder reads from?

Kyle

[0:41:14] It could be that calling main function right after addNewOrder is resetting the main function, resetting the array

Calvin F (Tutor)

[0:42:22] Generally it's bad practice to recursively call the main function, yes.

Calvin F (Tutor)

[0:42:41] Actually, yes. Recalling your main function would redeclare your arrays as empty.

Calvin F (Tutor)

[0:44:03] You could declare the arrays globally, or use a goto to jump back to a higher point in main before their declaration.

Calvin F (Tutor)

[0:44:42] on line 28 I put a jumping: goto point

Calvin F (Tutor)

[0:45:02] every time you call main, instead do goto jumping;

Calvin F (Tutor)

[0:45:08] goto jumping;

Calvin F (Tutor)

[0:46:32] so that would be line 65 and 74

Kyle

[0:48:34] It worked!

Kyle

[0:48:40] Thank you so much!

Calvin F (Tutor)

[0:48:41] Awesome!

Kyle

[0:48:53] Goodbye.

Calvin F (Tutor)

[0:48:59] Have a good day!

C-Like Editor 1