

AE1PGA Lab 4

Below are some tasks that will give you an opportunity to practice using the features and concepts we've discussed in the last few lectures. Often these tasks have some unexpected complications, so don't skip them just because they look easy when you read them.

In the last 40 minutes of the lab (xx:10-xx:50), the assessed exercise will be available on Moodle. You must complete and submit the exercise before the end of the lab.

Textbook 6.15 (Array intersection)

Write a program to work out the intersection of two sets of 10 integers entered by the user. Don't waste space by having unnecessarily large arrays but don't worry about working out the smallest theoretical array size to use.

Sorting algorithms: Bubble sort and Selection sort

Write two programs to implement bubble sort and selection sort respectively. The programs should sort the array of integers entered by the user.

Lecture slides: 2D text canvas

As shown in the 6th slide of the lecture on 13th OCT Thursday, we could have a 2D array of chars that represents the characters we want to show on the screen. We could then "draw" things into that array by changing the char values at different elements in the array. We could then "display" that array by printing each of the characters out to fill up the screen. Try implementing this idea and play around with drawing to the array then using printf to print the entire array.

End