

## Programming Exam Choice 10

Start by downloading the question 10 files from the moodle into a new directory on your machine. You will be changing the code in the question10.cpp file. You have a Makefile to handle building this code. (I have included my solution code for the unsorted int\_array here, but you can't easily read it because it's in an .o file. That's so you can trust the basic functions to work.)

### Part 1. 5 points

You will complete this function to find the largest number in an unsorted int\_array. If the array is empty, set empty to true; otherwise, set empty to false. Assuming the array's not empty, return the largest number as the max parameter.

Be sure that your code works no matter what range of numbers the array contains; this can be done by initializing your answer to any integer in the non-empty array and then updating if you see a bigger one.

```
void find_maximum(const int_array& arr, int& max, bool& empty)
{
}
}
```

### Part 2. 5 points

After that, complete this second function to find both the maximum and the minimum numbers in an array. Once again, set empty to true if the array's empty and to false if it's not.

```
void find_limits(const int_array& arr, int& min, int& max, bool& empty)
{
}
}
```

Logic of problem laid out in comments:	50%
Code compiles with no errors or warnings:	10%
Code has no run time errors:	10%
Code gives correct answers for all inputs:	20%
Code is clean and easy to read:	10%