

Task 1: software design and development (part B)

Your teacher or lecturer will provide you with a CSV file called 'companies.csv'.

The file has data for 100 companies.

Each line of the CSV file stores the company name, the number of employees and the CEO salary as shown below:

```
Fidelity,319,582235
iShares,853,523579
Aviragen,548,636367
Aviragen Therapeutics,501,630486
Southern,269,369821
Southern First,141, 791140
Southern First Bancshares,623, 304523
Goldman,440,850580
Nuveen,599,834853
...
```

Program top level design (pseudocode)

A top level design for the main steps of the program is shown below.

Steps 2 and 3 will call the same function to return the position of the highest value.

1	Read from file into parallel arrays.	OUT: company(), numEmployees(), ceoSalary()
2	Find and display the difference between the chosen company's CEO salary and the highest CEO salary.	IN: company(), ceoSalary()
3	Find and display the highest number of employees employed by a single company, and the number of companies who employ within 10% of that figure.	IN: numEmployees()

- 1b Using a recognised design technique, design a function called `findMaxPos` that will return the **position** of the highest value in an array. This function will be used in steps 2 and 3 of the program.

(4 marks)

- ♦ Check your answers carefully, as you cannot return to part B after you hand it in.
- ♦ When you are ready, hand part A to your teacher or lecturer and collect part C.

Candidate name_____ Candidate number_____