

CT103

Lab Exam

Group 1

2-4 pm

Tuesday 24th March 2015

Instructions

- This lab exam is open book – you may use all printed materials (books, lecture notes) as well as accessing Blackboard (lecture notes, past labs,..)
- **The use of mobile devices is forbidden**
- **The use of messaging, email, chat or other communications is forbidden**
- **Do not waste your time on Google – you won't find the solutions, and all the information you need is on Blackboard already.**
- Submit your program (using the normal method) as a .zip file, where the name of the file is your student ID number.

Instructions

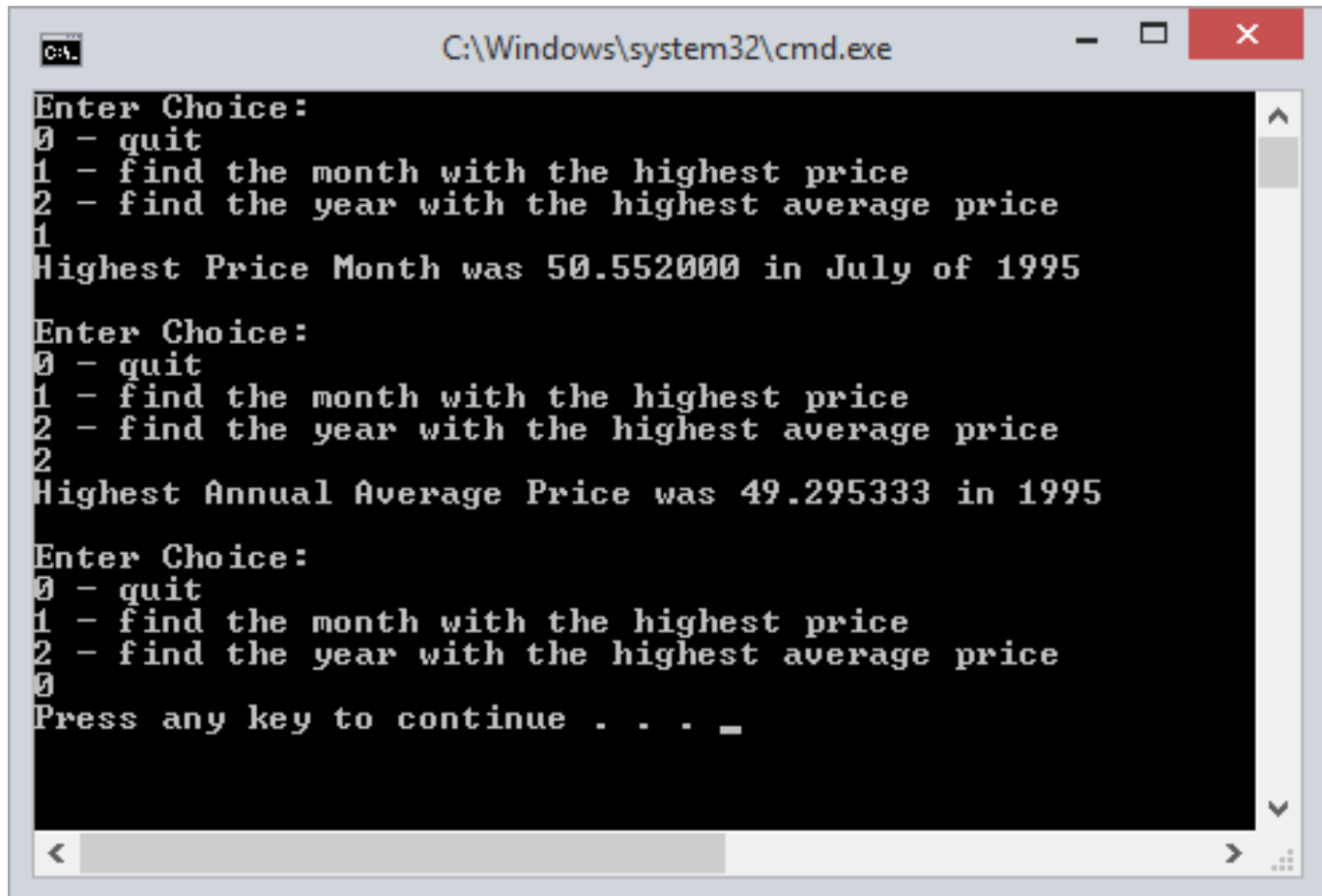
- You are given a delimited file containing electricity price records from the US
- Your program must read the data into an array of appropriate data structure, e.g.

```
typedef struct
{
    int year;
    double price[12];
    double average;
} electricity;

electricity records[30];
```

- Your program must calculate the average for the year for a specific record using the monthly data read in from the file.
- The program gives the user the option of finding the month with the highest price, or the year with the highest average price

Sample input / output



```
C:\Windows\system32\cmd.exe

Enter Choice:
0 - quit
1 - find the month with the highest price
2 - find the year with the highest average price
1
Highest Price Month was 50.552000 in July of 1995

Enter Choice:
0 - quit
1 - find the month with the highest price
2 - find the year with the highest average price
2
Highest Annual Average Price was 49.295333 in 1995

Enter Choice:
0 - quit
1 - find the month with the highest price
2 - find the year with the highest average price
0
Press any key to continue . . . _
```