# Computer Programming

*C Programming Assignment #1, 2006*

## Brief:

You are to write a program to store Names, Telephone numbers and Ages.

## Summary:

The program will use two text arrays in parallel with one numeric array. One array will store the names, one the numbers, one the ages. The program will repeatedly loop until instructed to exit. Valid commands are:

X – Exit
A – Add Name/Number/Age
D – Delete Name/Number/Age
L – List Names/Numbers/Ages

An example of the the three arrays with the program in use for a short while might be as shown here...

| **Array Element Number** | Array 1 - Names | Array 2 - Numbers | Array 3 - Ages |
|---|---|---|---|
| **0** | John | 98701 | 22 |
| **1** | Angie | 34256 | 23 |
| **2** | Joanne | 25433 | 24 |
| **3** | Mary | 22132 | 18 |
| **4** | Peter | 29018 | 35 |

...where the table columns represent the arrays; *the leftmost column represents the number of the element in the array*. The arrays used should be able to accommodate up to 10 names or numbers.

Essentially the purpose of this assignment is to create a database of personal facts, as a precursor to the next assignment.

## Destination:

It is intended to model the second computer programming assignment on this one; in that assignment, the data involved will represent bar codes, product descriptions and prices. From a pre-stored database, a bar code reader device will be used to scan products, and based on the data associated with the code, produce a bill of sale showing the items purchased and the total bill involved.

## Due Date:

20060310, 15:15

## Submission Mechanism:

Paper & online at the program submission link at on the Computer Programming page on http://webmail.cti-clonmel.ie

# Some Sample Data:

```
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: L
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: A
Enter Name Please: James
Enter Number Please: 25477
Enter Age Please: 22
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: A
Enter Name Please: Bill
Enter Number Please: 87002
Enter Age Please: 23
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: A
Enter Name Please: John
Enter Number Please: 34231
Enter Age Please: 22
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: L
0) James        25477   22
1) Bill 87002   23
2) John 34231   22
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: a
Enter Name Please: Louise
Enter Number Please: 45451
Enter Age Please: 24
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: l
0) James        25477   22
```

```
1) Bill 87002   23
2) John 34231   22
3) Louise       45451   24
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: d
Enter number to delete: 2
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: l
0) James        25477   22
1) Bill 87002   23
2) Louise       45451   24
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: d
Enter number to delete: 2
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: l
0) James        25477   22
1) Bill 87002   23
===============
Menu:
        X Exit
        A Add Number
        D Delete Number
        L List Numbers
Select, please: x
```

## Deletion:

In the event of a number being deleted, all other names and numbers should be moved up by one place.

## Presentation:

Marks are awarded for attractive presentation both of the screen output and the source code; however, note that in the sample data the names *etc* are not fully tabbed. Small errors like this will not accumulate excessive negative marking, even though such display issues are resolveable.