## **Applied Databases**

## **Topic 8 Exercise Sheet**

- 1. Write a Python program that has 2 arrays in the main function:
  - One containing several elements which are numbers.
  - The other empty.

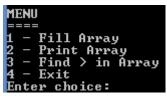
Write another function which accepts a number as a parameter and returns the number doubled.

The main function should call this function for each element of the 1<sup>st</sup> array and populate the 2<sup>nd</sup> array with the doubled values.

When the 2<sup>nd</sup> array is full it should be printed out.

2. Download Q2.py from moodle and add code to it to make it behave as follows:

When run a main menu is shown as follows:



If the user chooses:

• 1

He/She should be prompted to keep entering numbers until -1 is entered. All numbers up to but not including -1 should be stored in an array:

Enter	choice:	1
Enter	Number:	9
Enter	Number:	23
Enter	Number:	14
Enter	Number:	7
Enter	Number:	14
Enter	Number:	1
Enter	Number:	-1

• 2

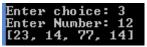
The contents of the array should be printed:

Enter	choi	ce: :	2		
[1, 9,	23,	14,	77,	14,	1]

• 3

He/She should be prompted to enter a number.

Any numbers in the array greater than the number entered should be printed:



- **4** The program should end.
- Anything Else

The program menu should be displayed again.

The *main()* function should not be changed.

The definition of the functions *fill\_array()* and *find\_gt\_in\_array()* should not be changed.

The necessary code should be written in the functions *fill\_array()* and *find\_gt\_in\_array()* so that the program performs as described.