Partial 2007/2008 Duration: 1 hour Closed book examination

INFO 206 IMPERATIVE PROGRAMMING II

Exercise 1

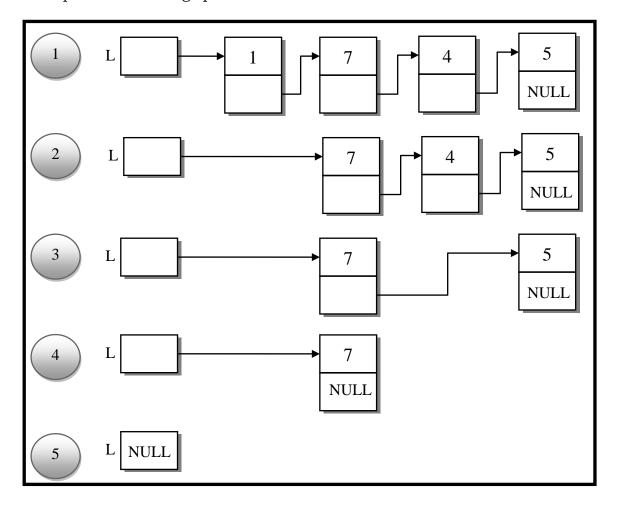
Consider the following definition:

```
typedef struct list{
    int elt;
    list * p;
}list;
```

Using this list type, we created and filled a simple linear chained list pointed by L.

1. Write the function int orderedDelete(list *L) that deletes and free the elements of the list by increased order of its elt members.

Example of the deleting operation:



Exercise 2

- 1. Write the function int createArray(int ** A) that creates using dynamic allocation through the pointer A, an array of integers of length given by the user, this function must return the length of the allocated array.
- 2. Write the function **void fillArray(int* A, int n)** that fills from the keyboard the array of integers pointed by A of length n.
- 3. Continue the following main program that creates an integer pointer and calls respectively the two upper functions to fill it.

```
void main(){
    int * anArray;
    int n;

//call the function createArray:
    ...

//call the function fillArray:
    ...
}
```

GOOD LUCK