

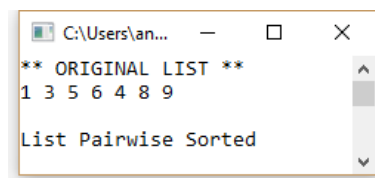
I2204 - INFO 216
Imperative Programming
Lab Exam
Group II #1

Full name: _____ File number: _____

*Check the website 192.168.0.1 Use the following username: **info** and password **info**. Open folder **Student** then open folder **i2204 Group2 English**.
You should code your answer in the file named **i2204-1.c** contained in the supplementary folder **i2204#1**.
Rename the file **i2204-1.c** as follows: **XXXXX.c**, where **XXXXX** designate your file number.
Put the renamed file under the **d:** directory in a new folder named **i2204**.
You should write on this sheet only the required function, not the whole solution.*

Given a linked list of integers. The task is to check if the linked list is pairwise sorted or not.

A linked list is considered pairwise sorted if each successive pair of numbers is in sorted (non-decreasing) order. In the case of odd number of nodes, the last node is ignored and the result is based on remaining even number of nodes.



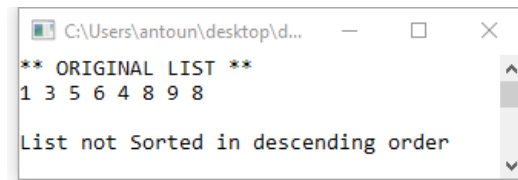
```
C:\Users\an...  
** ORIGINAL LIST **  
1 3 5 6 4 8 9  
List Pairwise Sorted
```

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Imperative Programming
Lab Exam
Group II #2

Full name: _____ File number: _____

*Check the website 192.168.0.1 Use the following username: **info** and password **info**. Open folder **Student** then open folder **i2204 Group2 English**.
You should code your answer in the file named **i2204-2.c** contained in the supplementary folder **i2204#2**.
Rename the file **i2204-2.c** as follows: **XXXXX.c**, where **XXXXX** designate your file number.
Put the renamed file under the **d:** directory in a new folder named **i2204**.
You should write on this sheet only the required function, not the whole solution.*

Given a linked list of integers, write an iterative function to check whether the linked list is sorted in descending order or not.



```
C:\Users\antoun\desktop\d...
** ORIGINAL LIST **
1 3 5 6 4 8 9 8
List not Sorted in descending order
```

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Lab Exam
Group II #3

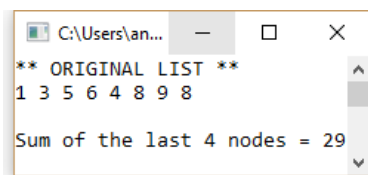
Full name: _____ File number: _____

Check the website 192.168.0.1 Use the following username: *info* and password *info*. Open folder *Student* then open folder *i2204 Group2 English*.
You should code your answer in the file named *i2204-3.c* contained in the supplementary folder *i2204#3*.
Rename the file *i2204-3.c* as follows: *XXXXX.c*, where *XXXXX* designate your file number.
Put the renamed file under the *d:* directory in a new folder named *i2204*.
You should write on this sheet only the required function, not the whole solution.

Given a linked list of integers and a number n , write a function that finds the sum of the last n nodes of the linked list.
Constraints:

- $0 \leq n \leq$ number of nodes in the linked list.
- you may iterate on the list less than 2 times.

PS: for geeks, write both recursive and iterative versions.



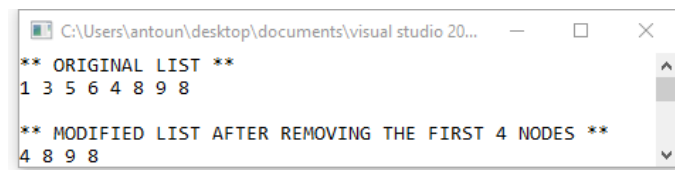
```
C:\Users\an...  
** ORIGINAL LIST **  
1 3 5 6 4 8 9 8  
Sum of the last 4 nodes = 29
```

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Imperative Programming
Lab Exam
Group II #4

Full name: _____ File number: _____

*Check the website 192.168.0.1 Use the following username: **info** and password **info**. Open folder **Student** then open folder **i2204 Group2 English**.
You should code your answer in the file named **i2204-4.c** contained in the supplementary folder **i2204#4**.
Rename the file **i2204-4.c** as follows: **XXXXX.c**, where **XXXXX** designate your file number.
Put the renamed file under the **d:** directory in a new folder named **i2204**.
You should write on this sheet only the required function, not the whole solution.*

Given a linked list of integers, write a function that removes and frees its first k nodes.



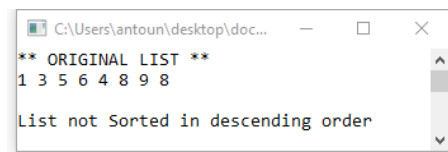
```
C:\Users\antoun\Desktop\documents\visual studio 20...  
** ORIGINAL LIST **  
1 3 5 6 4 8 9 8  
  
** MODIFIED LIST AFTER REMOVING THE FIRST 4 NODES **  
4 8 9 8
```

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Imperative Programming
Lab Exam
Group II #5

Full name: _____ File number: _____

Check the website 192.168.0.1 Use the following username: *info* and password *info*. Open folder *Student* then open folder *i2204 Group2 English*.
You should code your answer in the file named *i2204-5.c* contained in the supplementary folder *i2204#5*.
Rename the file *i2204-5.c* as follows: *XXXXX.c*, where *XXXXX* designate your file number.
Put the renamed file under the *d:* directory in a new folder named *i2204*.
You should write on this sheet only the required function, not the whole solution.

Given a linked list of integers, write a recursive function to check whether the linked list is sorted in descending order or not.



```
** ORIGINAL LIST **  
1 3 5 6 4 8 9 8  
List not Sorted in descending order
```