BLG221E - DATA STRUCTURES
HOMEWORK 2
STARTING DATE: 13.03.2013 DURATION: 2 WEEKS

In this homework, you will write a program to create two linked lists that contain words and their frequency counts.

EXAMPLE INPUT FILE

Your program should read words from a text file named **"FRUITS.TXT"**which contains words repeated several times.

```
Elma Kiraz Cilek Elma Elma Cilek . . .
```

PROGRAM IMPLEMENTATION

You should define and use the following node struct.

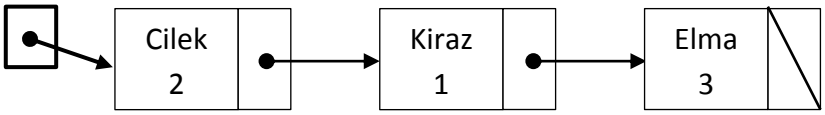
```
#define LEN 20
struct Node {
 char word[LEN];
 int count;
 Node * next;
};
```

You should implement the following functions, and call them from main.

Function Prototype	Explanation
`Node * build_linked_list (char array[][LEN], int N);`	This function takes an array of words (character strings) and size N (number of elements) as input parameters, and returns the head of a linked list representing words and their frequencies. Node insertion will be made always at head in linked list.
`Node * make_ordered_copy (Node * head);`	This function takes the head pointer of a linked list as input parameter, and returns the head of a second a linked list (nodes copied) which should be in descending order by frequencies. Node insertion will be made at appropriate location in linked list.
`void print_list(Node * head);`	This function traverses the given list and displays node informations.

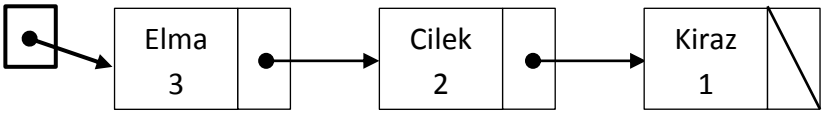
LINKED LIST 1 (UNORDERED):

Head1



LINKED LIST 2 (ORDERED):

Head2



EXAMPLE SCREEN OUTPUT

```
LINKED LIST 1 (UNORDERED):
Cilek = 2
Kiraz = 1
Elma = 3


LINKED LIST 2 (ORDERED):
Elma = 3
Cilek = 2
Kiraz = 1

Devam etmek için bir tuşa basın . . .
```