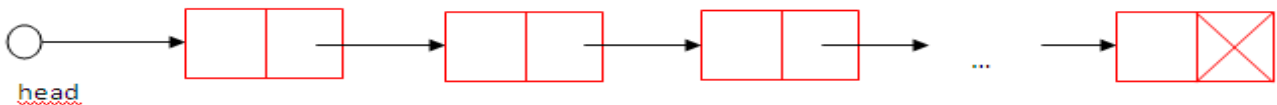# Ankara University
## Computer Engineering
## COM2067 LAB 2
## Deadline: 30.10.2022 23:59

In this lab, we have given you a main.c and function.h files. The main.c file contains only the int main() function, while the function.h file will consist of the definitions of all the other functions you will use in this application. Complete the function.h file so that the main.cpp file works without error to generate the expected output. First, check the main.c file carefully. You can examine SimpleTutorial.pdf document to define functions in a separate file.
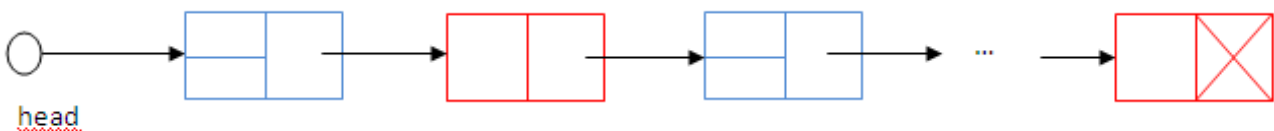
Fenerbahce and Galatasaray supporters are waiting in separate lines to get tickets. For each group of fans, get the related information (id and age for FB fans, id for GS fans) from the user and create the following link lists. FB fans will be inserted to link list in increasing order, GS fans in decreasing order with respect to their IDs. The number of fans in both link lists will be the same. The node structures to be used in the link list are given below.





```
struct nodeFB                          struct nodeGS
{                                      {
    int id;                                int id;
    int age;                               struct nodeGS *next;
    struct nodeFB *next;               };
};
```

You are then asked to combine these two linked lists using the following way. Use the new node structures when you are doing this placement.



```
struct newNodeFB                       struct newNodeGS
{                                      {
    int id;                                int id;
    int age;                               struct newNodeFB *next;
    struct newNodeGS *next;            };
};
```

| Input: | Output: |
|---|---|
| 456  45<br>561  41<br>821  20<br>193  25<br>882  37<br>-1<br>872<br>272<br>345<br>892<br>764<br>-1 | Id:193 Age:25<br>Id:456 Age:45<br>Id:561 Age:41<br>Id:821 Age:20<br>Id:882 Age:37<br><br>Id:892<br>Id:872<br>Id:764<br>Id:345<br>Id:272<br><br>Id:193 Age:25<br>Id:892<br>Id:456 Age:45<br>Id:872<br>Id:561 Age:41<br>Id:764<br>Id:821 Age:20<br>Id:345<br>Id:882 Age:37<br>Id:272 |