0522042 Programlama Dilleri II
Lab Session Week 5
17/03/2011

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Write and test a C code that searches a given integer, \( m \) in the list of \( n \) integers by using binary search algorithm. Output should be either “found” or “not found” as well as the total number of iterations done in binary search.

\( m \), \( n \) and the list of \( (n) \) integers will be entered by the user therefore, no array usage is allowed. Binary search function must be implemented as a recursive function. (Note that Binary search works on the sorted lists. For details refer to http://en.wikipedia.org/wiki/Binary_search_algorithm)
The goal of today’s session:
- To practice and learn how to define structures and their usage in the C programming language

Today’s Example problem to work on:
- Write and test a C code that operates (sums, subtracts, multiply and divides) on rational numbers. Rational numbers are represented as a division of two integers such as a/b where b is not equal to zero.

```c
typedef int Arman;
typedef struct fraction
{
    Arman x;
    Arman y;
} KESIR;
typedef KESIR * KESIRPTR;
KESIR addition(KESIRPTR, KESIRPTR);
KESIR substraction(KESIRPTR, KESIRPTR);
KESIR multiplication(KESIRPTR, KESIRPTR);
KESIR division(KESIRPTR, KESIRPTR);
void KesirPrint(KESIR);
```
Homeworks

No homework this week!!!

Be ready for the first midterm exam next week