0522042 Programlama Dilleri II
Lab Session Week 4
17/03/2011

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Write and test a function that reorders the number of n integers in an ascending order? (n and the numbers to reorder will be entered by the user therefore, no array usage is allowed)

1. Get n (total number of integers).
2. Allocate memory for n integers.
3. Get n integers.
4. Sort given integers
5. Display the sorted list of integers.
Pointers: illustrative Examples

1: #include<stdio.h>
2: #define N 4
3: main()
4: {
5:     int i, a[N]={1,2,3,4};
6:     for(i=0;i<N;i++)
7:         printf("\n a[%d]=%p",i,&(a[i]));
8:     printf("\n a=%p\n",a); // a dizisi a[0] elemanının adresini tutuyor.
9:     //dizi bir gösterge gibi adres tutuyor!
10:     return 0;
11: }
12: 
13: #include<stdio.h>
14: main()
15: {
16:     int *a[2];
17:     int c=2,d=3;
18:     a[0]=&c;
20:     printf("\n %p %p %p %p %p %d %d\n", a[0], a[1] , a, &a, *a, *(a+1), *a[0], *a[1]);
21:     printf("\n %d %d\n", *a, &a);
23:     return 0;
24: }
The goal of today’s session:
- To practice and learn how to use pointers in C programming language

Today’s Example problem to work on:
- Write and test a C code that searches a given integer, m in the list, the 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](http://en.wikipedia.org/wiki/Binary_search_algorithm))
Homeworks

No homework this week!!!

Be a pointer my friend !!!!