Problem NO: 2

Problem Name: Solve a problem of any OJ (Online Judge) using both pointer and normal way.

 Adam and Chef have some number of sticks and they want to swap their sticks.

Sample Input Output:

Input	Output
1 2	Values after swapping using pointers: num1: 2 num2: 1 Values after swapping without using pointers: num1: 2 num2: 1

source code:

```c
#include <stdio.h>

void swapWithPointers(int *a, int *b)
  {
  int temp = *a;
   *a = *b;
   *b = temp;
  }


void swapWithoutPointers(int a, int b)
{
  int temp = a;
   a = b;
```

```c
        b = temp;
    }

int main() {
    int num1, num2;
    scanf("%d%d", &num1,&num2);
    swapWithPointers(&num1, &num2);
    printf("\nValues after swapping using pointers:\n");
    printf("num1: %d\n", num1);
    printf("num2: %d\n", num2);
    swapWithoutPointers(num1, num2);
    printf("\nValues after swapping without using pointers:\n");
    printf("num1: %d\n", num1);
    printf("num2: %d\n", num2);

    return 0;
}
```

Result and Analysis:

When swapping with pointers the values of the variables return the addresses of the value and when swapping without pointers or normal way the function directly returns the value.