

## src\main.c

```
1 // Practice Assignment 8, exercise 1
2
3
4 #include <stdio.h>
5 #include <avr/io.h>
6 #include <util/delay.h> //init libraries
7
8 #include "usart.h"
9
10 void swap(int *uno, int *dos) // define function, with two pointers as input
11 {
12     int tmp = *uno; //make variables for swap, copy value at first pointer's address
13     *uno = *dos; //set the value in the first pointer's address to the second's value
14     *dos = tmp; // finish swap
15 }
16
17
18
19 int main(void) {
20     uart_init(); // open the communication to the microcontroller
21     io_redirect(); // redirect input and output to the communication
22
23     int n1,n2;
24
25
26     while(1) { // start program loop
27         printf("First number:"); // print for user
28         scanf("%d",&n1); //get first number
29         printf("Second number:"); //again...
30         scanf("%d",&n2);
31
32         printf("%d and %d\n",n1,n2); //print numbers before change
33
34         swap(&n1,&n2); // call function to swap numbers
35
36         printf("%d and %d\n",n1,n2); //print numbers after change
37     }
38
39     return 0;
40 }
41
```