COEN 11- Practice II

Solutions on Wednesday

1. What does function main output?

```
//
//      types
//
struct info
{
        char    string[10];
        int     array[10];
};

//
//      functions
//
void b (struct info, struct info *);

//
//      main
//
int
main ( )
{
        struct info     in1, in2;
        struct info     *p;
        int             i;

        p = &in1;
        strcpy (p->string, "abc");
        for (i = 0; i < 10; i++)
                p->array[i] = i;

        b (in1, &in2);

        printf ("%s, %d, %d\n", p->string, p->array[0], in2.array[0]);
        return 0;
}

//
//      function b
//
void
b (struct info x, struct info *y)
{
        x.string[0] = 'Z';
        *y = x;
        y->array[0]++;
        return;
}
```

2. Write a void function to initialize an array of structs, in which the members are a string (size STR_SIZE) and a positive integer number, with data obtained from the keyboard. The array has ARRAY_SIZE entries, and the array is global. Define the struct and declare the global array.

3. Write an int function to traverse the array from question 2, searching for a string received as an argument. If the string is found in one of the structs, the function returns the corresponding number. If the string is not found, the function returns -1.

4. Write a void function to output the string and number in each struct of the array defined in question 2.

5. Write a void function to output the value of each member of each struct nonsense in array useless, which is global. Use loops when necessary.

```
struct nonsense
{
        float   any_number;
        int     nonsense_array[10];
};

struct nonsense useless[10];
```

6. Write a void function to traverse the array declared in Question 5 searching for a float number received as an argument. Use a struct nonsense pointer to traverse the array. If the number is found, the function outputs the corresponding int array. If not, it notifies the user.