

## COEN 11- Practice II

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], in2.string);
    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.