# REPORT

- **Exercise1**

In the first exercise is requested to Write a C program that creates a subdirectory and in which it will create **n** files, each of one including a set of random integers.
In order to create a new directory, it is used the following instruction:

```
system("mkdir ./data");
```

When the system call *system()* is called, the shell performs a *fork()* and opens a new shell in which the command line between brackets will be executed.
Then, to create **n** files are used two nested for-loop in which are called the instruction *fopen(),* to create and open new files, and the instruction *rand()* to generate random integers.

```
for(i=0; i<n; i++){
          sprintf(str, "./data/f%02X", i);
          fp = fopen(str, "w+");
          x = (rand()%(k-1))+1;

          for(j=0; j<x; j++){
               y = (rand()%(k-1))+1;
               fprintf(fp, "%d\n", y);
          }

          fclose(fp);
     }
```