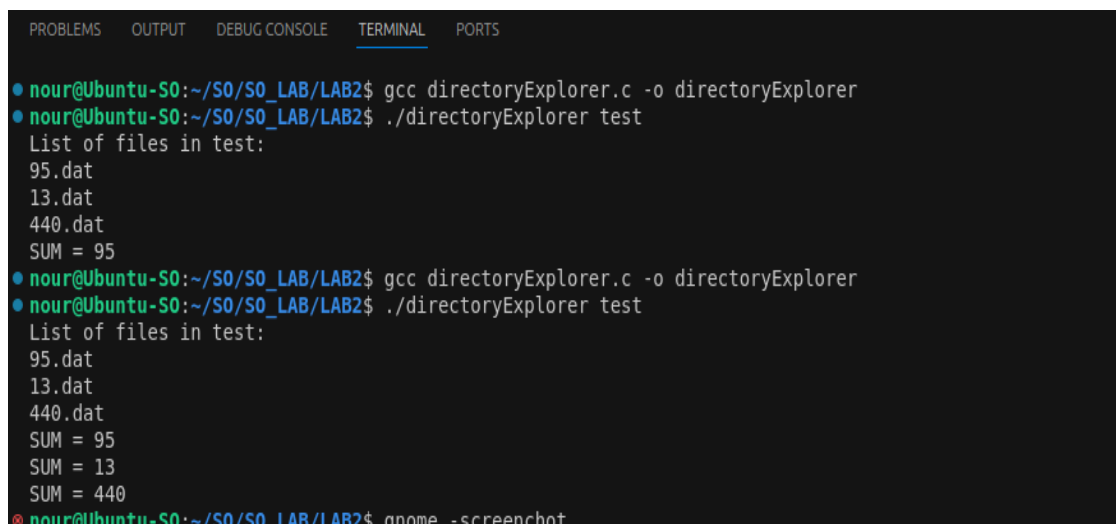


## OPERATING SYSTEMS. LABORATORY NO.2

We used auxiliary programs `check.c` and `createBinary.c` to write binary files (and supervise if their content was correct) with *known* integers in order to perform tests on `directoryExplorer.c`. For simplicity, the name of the `.dat` files represents the total sum of the integers the file has. For further tests, one can create more files with `createBinary.c` and add them to the 'test' folder, which is the directory passed through CLI.

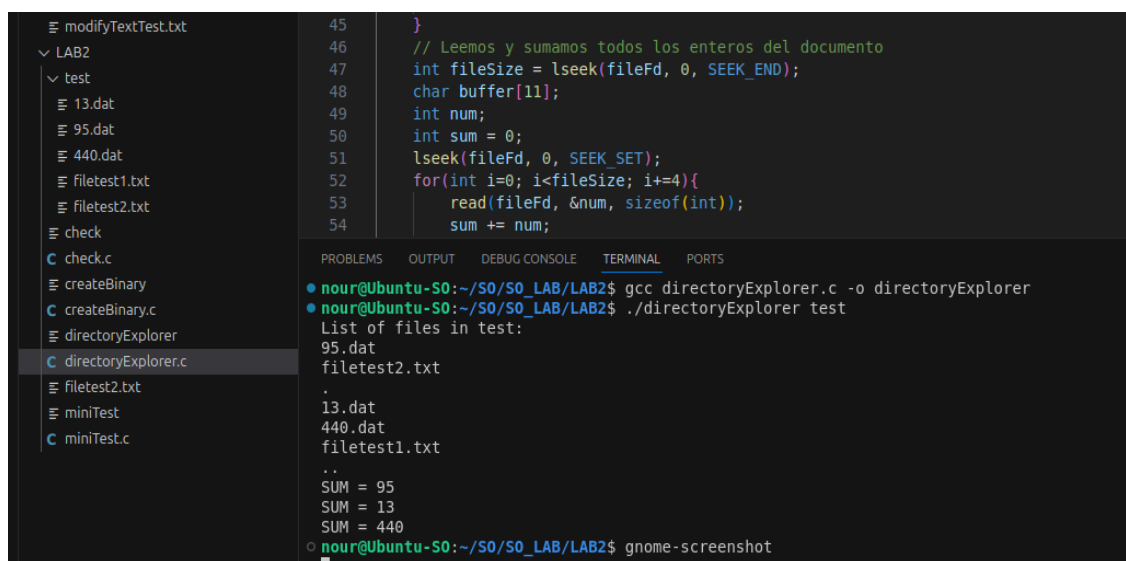
### Screenshots

At first it only retrieved the sum of the file processed by the first child. This is why we decided to adapt the code such that each child was related to a unique pipe (before, we only had one pipe).



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ gcc directoryExplorer.c -o directoryExplorer
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ ./directoryExplorer test
List of files in test:
95.dat
13.dat
440.dat
SUM = 95
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ gcc directoryExplorer.c -o directoryExplorer
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ ./directoryExplorer test
List of files in test:
95.dat
13.dat
440.dat
SUM = 95
SUM = 13
SUM = 440
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ gnome -screenshot
```

Then we added more files that were not `.txt` to check if the identification was correct:



```

45     }
46     // Leemos y sumamos todos los enteros del documento
47     int fileSize = lseek(fileFd, 0, SEEK_END);
48     char buffer[11];
49     int num;
50     int sum = 0;
51     lseek(fileFd, 0, SEEK_SET);
52     for(int i=0; i<fileSize; i+=4){
53         read(fileFd, &num, sizeof(int));
54         sum += num;
    }
    // Leemos y sumamos todos los enteros del documento
    int fileSize = lseek(fileFd, 0, SEEK_END);
    char buffer[11];
    int num;
    int sum = 0;
    lseek(fileFd, 0, SEEK_SET);
    for(int i=0; i<fileSize; i+=4){
        read(fileFd, &num, sizeof(int));
        sum += num;
    }
    printf("SUM = %d\n", sum);
    return 0;
}

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ gcc directoryExplorer.c -o directoryExplorer
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ ./directoryExplorer test
List of files in test:
95.dat
filetest2.txt
.
13.dat
440.dat
filetest1.txt
..
SUM = 95
SUM = 13
SUM = 440
nour@Ubuntu-S0:~/S0/S0_LAB/LAB2$ gnome-screenshot
```