FSO – Lab session 6 – Questions

Surname …….. Name ……..

Surname …….. Name ……..

Question 1: Analyze the code and the result of the execution and answer the following:

1. What variables correspond to file descriptors in the proposed code?

2. Explain the number assigned by the system to the variable fda

3. Explain the number assigned by the system to the variable fdb

Question 2: Analyze the code and the result of the execution and answer the following:

1. What messages are printed on the screen?

2. Explain why are not printed every one of the missing messages

3. Fill the table of opened file descriptors corresponding to the process just before return (0)

0	
1	
2	
3	
4	

Question 3: Analyze the code and the result of the execution and answer the following:

1. What is the content of messages.txt file?

2. Both the parent process and the child process have written its message in messages.txt file. What mechanisms/calls made it possible?

3. Fill the tables of opened file descriptors corresponding to the process parent and child just before executing close (fd)

0	
1	
2	
3	
4	

0	
1	
2	
3	
4	

Question 4: Analyze the code and the result of the execution and answer the following:

1. Explain using the instructions in the code the contents of file “output.txt”

2. Explain why the open() function is called with flags "O_RDWR|O_CREAT"

3. Fill the opened file descriptors table corresponding to the process just before the "if (dup...)" sentence

0	
1	
2	
3	
4	

4. Fill the opened file descriptors table corresponding to the process just before return (0)

0	
1	
2	
3	
4	

Question 5: Analyze the code and the result of the execution and answer the following:

After the execution explain where is stored the contents of the working directory

Question 6: Analyze the code and the result of the execution and answer the following:

What has been necessary to change in the code of exercise 5 to carry out exercise 6?

Question 7: Analyze the code and the result of the execution and answer the following:

1. What shows the process in the standard output?

Question 8: Based on the scheme followed in exercise 7, develop a program called `two_pipes.c` that runs the following command line:

```
$ ls –la | grep ejemplo | wc –l > result.txt
```

Upload the program file to your Dropbox in PoliformaT, when done send me an e-mail with subject: `Question 8`