

# C Programming

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TP 00

## Exercise 1:

Write a function which return a line read from a file descriptor.  
your function must be declared as follows:

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```
char* get_next_line(int fd);
```

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Input: is a file descriptor to read from.

Output: next line, or **NULL** if nothing else to read, or an error occurred.

### Behavior:

- Calling your function **get\_next\_line** in a loop will then allow you to read the text available on the file descriptor one line at a time until the end of it.
- Your function should return the line that has just been read. If there is nothing else to read or if an error has occurred it should return **NULL**.
- Make sure that your function behaves well when it reads from a file and when it reads from the standard input.
- Your program must compile with the flag **-D BUFFER\_SIZE=xx** which will be used as the buffer size for the read calls in your **get\_next\_line**. This value will be modified.
- Your read must use the **BUFFER\_SIZE** defined during compilation to read from a file or from **stdin**. This value will be modified.
- you can only use the following external functions: **malloc**, **free**, **read**

*Note: consider using static variables*