

readline():

prints a prompt and then reads and returns a single line of text from the user. The line readline returns is allocated with malloc (); you should free () the line when you are done with it.

```
char *line = readline ("Enter a line: ");
```

```
1  #include <stdio.h>
2  #include <readline/readline.h>
3  #include <readline/history.h>
4  #include <stdlib.h>
5
6  int main(void)
7  {
8      char *line;
9
10     line = readline("enter your name :");
11     printf("your name : %s\n", line);
12     free(line);
13     return (0);
14 }
```

```
cc -Wall -Wextra -Werror main.c -lreadline
```

rl_clear_history():

rl_on_new_line():

Tell the update routines that we have moved onto a new (empty) line, usually after outputting a newline.

rl_replace_line():

```
int rl_replace_line(const char *text, int clear_undo);
```

The `rl_replace_line` function replaces the current line buffer with the string provided

in the `text` parameter. If `clear_undo` is non-zero, the undo list is cleared, meaning that the replaced line cannot be undone.

evaluation :

- after a command give back the prompt
- if the command doesn't exist it must return a proper error
- support the original command path
- support multiple flag
 1. like `ls -la`
 2. like `ls -l -a`
 3. like `ls -l` `-a`
 4. like `/bin/ls` `-l` `-a`
- `exit` : quit the shell
- `echo` must supports " " ou not , erro if one "
- `cd -` : return to last directory
- `env` : display as `key=value`
- `setenv FOO bar` or `setenv FOO=bar` : create a new `key=value` in `env`
- `echo $FOO` : display the value of the key `FOO`
- `/usr/bin/env`. Minishell must send the appropriate environment to ran binaries.
`/usr/bin/env` must display environment including `FOO` and its value `bar`
- `unsetenv FOO` : remove the `key=value` in `env` ... if not in `env` , do nothing
- if `unsetenv PATH` the command shouldn't work , but if we `"$> setenv PATH "/bin:/usr/bin"` or `"$> setenv "PATH=/bin:/usr/bin"` , the command should rework
- `emacs` must run `/usr/bin/emacs` ... if `unsetenv PATH` , it shouldn't work
- but even if `unsetenv PATH` , `/bin/ls` should work
- if nothing , do nothing , give back the prompt
- single space , do nothing , the command must give back the prompt
- space and tabulation , do nothing and give back the prompt

bonus :

- `ctrl+c` give stop the current cmd process then give back the prompt ... if not cmd running or just prompt , just give back the prompt ...
- - Create a new folder `/tmp/bin/` and add this folder to the `PATH` environment variable. Create a program named 'test_exec_rights' inside that folder that will just display 'KO'. Give this program the following rights 644 (meaning no execution

rights). From another folder, run the following command "\$> test_exec_rights". Check that the minishell refuses to run the program because of the missing execution rights.

- Type the following beginning of command "\$> ec", then press tabulation. The minishell must complete the command into "\$> echo"
- - Run the following command "\$> echo TOP ; ls ; echo MIDDLE ; ls ; echo BOTTOM". The 5 commands must be executed without any errors in the order they were written. - Run the following command "\$> ;". The minishell must either do nothing and give the prompt back or display a syntax error and give the prompt back.
- If the project has other operational bonuses, you can evaluate them and grade them in this section : ex color etc ...

```
ferafano@minishell ~ $ cd ~/.config/nvim
ferafano@minishell ~/.config/nvim $
```