

# README

## How to compile & run (In Ubuntu)

- Compile: `javac Assignment1/SimpleShell.java`
- Run: `java Assignment1/SimpleShell`

## How to use

1. You can type linux command when program start.

**Ex) `jsh>pwd`**

2. If you want to terminate this program,

**`Jsh>quit` or `jsh>exit`**

3. You can enter the directory with `cd` command.

**Ex) `jsh>cd <directory>` or `jsh> cd <directory>/<directory>/---`**

4. You can return back to the directory with **`jsh>cd ..`**

5. You can return your user home with **`jsh>cd`**

6. If you type misdirectory, don't worry. We just do error handling.

## <history>

1. If you want to check your log, doing **jsh>history**

2. If you want to operate previous command, **jsh>history!!**

If there is no log at history, this return **You have not initiate program.**

But this also we do error handling, don't worry about it.

3. If you want to operate the specific history, you can do that with **jsh>history!<index>**

If you enter outbound index, we do error handling, so you just follow our direction

4. **Caution!!** History command do not allow space between history and !!(or !<index>)

Ex) jsh>history !! is not working.

5. **Caution!!** History itself is recorded at history, but history!! ,and history!<index> is not recorded at history. (because Linux system do not, so this program also do not support that.)

## Results of test cases

ps case

```
hyoan@ubuntu:~$ javac Assignment1/SimpleShell.java
hyoan@ubuntu:~$ java Assignment1/SimpleShell
jsh>ps
[ps]
  PID TTY          TIME CMD
 15207 pts/0        00:00:00 bash
 15463 pts/0        00:00:00 java
 15511 pts/0        00:00:00 ps
```

ls case

```
jsh>ls
[ps, ls]
a.out
Assignment1
cmdline_basic
cmdline_basic.c
cmdlines_basic
Desktop
Documents
Downloads
exam1
exam1.c
exam2
exam2.c
exam3
exam3.c
Lab_0
Lab_0.cpp
Music
Pictures
Public
Templates
try
try.c
Videos
```

cat case

```
jsh>cat exam1.c
[ps, ls, cat exam1.c]
#include<stdio.h>

int main()
{
    printf("\n\n\t\tStudytonight - Best place to learn\n\n\n");
    int array[100], position, c, n, value;

    printf("\n\nEnter number of elements in array:");
    scanf("%d", &n);

    printf("\n\nEnter %d elements\n", n);
    for(c = 0; c < n; c++)
        scanf("%d", &array[c]);

    printf("\n\nEnter the location where you want to insert new element: ");
    scanf("%d", &position);

    printf("\n\nEnter the value to insert: ");
    scanf("%d", &value);

    for(c = n-1; c>=position-1; c--)
        array[c+1]=array[c];

    array[position - 1] = value;

    printf("\n\nResultant array is: ");
```

pwd case

```
jsh>pwd
[ps, ls, cat exam1.c, pwd]
/home/hyoan
```

cd, cd .., cd fake case

```
jsh>cd
[ps, ls, cat exam1.c, pwd, cd Music, cd hyoan, cd /hyoan, cd]
/home/hyoan
jsh>cd ..
[ps, ls, cat exam1.c, pwd, cd Music, cd hyoan, cd /hyoan, cd, cd ..]
/home
jsh>cd fake
[ps, ls, cat exam1.c, pwd, cd Music, cd hyoan, cd /hyoan, cd, cd .., cd fake]
fake: No such file or directory
```

history, history!!, history!<Integer> case

```
jsh>history
[ps, ls, cat exam1.c, pwd, cd Music, cd hyoan, cd /hyoan, cd, cd .., cd fake, history]
0 ps
1 ls
2 cat exam1.c
3 pwd
4 cd Music
5 cd hyoan
6 cd /hyoan
7 cd
8 cd ..
9 cd fake
10 history
jsh>history!!
0 ps
1 ls
2 cat exam1.c
3 pwd
4 cd Music
5 cd hyoan
6 cd /hyoan
7 cd
8 cd ..
9 cd fake
10 history
jsh>history!7
/home/hyoan
```

Quit (exit) case

```
jsh>quit
Goodbye
```

→ All case is working!