```
TEST 122: KO
 Input: [cat 42 > not_executable_file]
 Bash $?: [1]
 Minishell $?: [0]
TEST 123: KO
 Input: [cat 42 > not_existing_file]
 Bash $?: [1]
 Minishell $?: [0]
TEST 124: KO
 Input: [./not_executable_file]
 Bash $?: [126]
 Minishell $?: [0]
_____
TEST 125: KO
 Input: [not_existing_command]
 Bash $?: [127]
 Minishell $?: [0]
_____
TEST 126: KO
 Input: [< not_existing_file]
 Bash $?: [1]
 Minishell $?: [0]
TEST 129: KO
 Input: [< not_existing_file > not_existing_file2]
 Bash $?: [1]
 Minishell $?: [0]
TEST 130: KO
       [< not_existing_file >> not_existing_file2]
 Bash $?: [1]
 Minishell $?: [0]
```

```
TEST 131: KO
  Input: [| echo 1]
  Bash $?: [1]
  Minishell $?: [0]
TEST 132: KO
  Input: [| echo 1 | echo 2]
  Bash $?: [1]
  Minishell $?: [0]
TEST 133: KO
  Input:
         [Is not_existing_file]
  Bash $?: [2]
  Minishell $?: [0]
TEST 136: KO
  Input: [ls -al -i < /etc/passwd]
  Bash:
            [total 44\n1716681 drwx----- 2 adi-nata 2022_firenze 4096 Sep 5 17:55 .\n
20 drwxrwxrwt 35 root root
                                  20480 Sep 5 17:55 ..\n1716679 -rw-r--r-- 1 adi-nata
2022 firenze 2 Sep 5 17:55 file1\n1716683 -rw-r--r- 1 adi-nata 2022 firenze
17:55 file2\n1716685 -rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file3\n1716687
-rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file4]
  Minishell: [/etc/passwd: No such file or directory\nadi-nata@zeShell > ]
  Lab creation:
    cat 1 > file1
    cat 2 > file2
    cat 3 > file3
    cat 4 > file4
  Files content - Bash:
    file1: [1]
    file2: [2]
    file3: [3]
    file4: [4]
  Files content - Minishell:
    file1: [1]
    file2: [2]
    file3: [3]
    file4: [4]
```

TEST 137: KO Input: [ls -al -i < /etc/passwd > file1] Bash: Minishell: [] Lab creation: cat 1 > file1 cat 2 > file2 cat 3 > file3 cat 4 > file4 Files content - Bash: file1: [total 40\n1716679 drwx----- 2 adi-nata 2022_firenze 4096 Sep 5 17:55 .\n 20 drwxrwxrwt 35 root root 20480 Sep 5 17:55 ..\n1716683 -rw-r--r-- 1 adi-nata 2022 firenze 0 Sep 5 17:55 file1\n1716685 -rw-r--r-- 1 adi-nata 2022_firenze 17:55 file2\n1716687 -rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file3\n1716688 -rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file4] file2: [2] file3: [3] file4: [4] Files content - Minishell: file1: [1] file2: [2] file3: [3] file4: [4] **TEST 138: KO** Input: [ls -al -i < /etc/passwd > file1 > file2] Bash: Minishell: [] Lab creation: cat 1 > file1 cat 2 > file2 cat 3 > file3 cat 4 > file4 Files content - Bash: file1: [] file2: [total 36\n1716683 drwx----- 2 adi-nata 2022_firenze 4096 Sep 5 17:55 .\n 20480 Sep 5 17:55 ..\n1716685 -rw-r--r-- 1 adi-nata drwxrwxrwt 35 root root

```
17:55 file2\n1716688 -rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file3\n1716689
-rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file4]
    file3: [3]
    file4: [4]
  Files content - Minishell:
    file1: [1]
    file2: [2]
    file3: [3]
    file4: [4]
TEST 139: KO
  Input:
          [ls -al -i < /etc/passwd > file1 > file2 > file3]
  Bash:
  Minishell: []
  Lab creation:
    cat 1 > file1
    cat 2 > file2
    cat 3 > file3
    cat 4 > file4
  Files content - Bash:
    file1: []
    file2: []
    file3: [total 32\n1716685 drwx----- 2 adi-nata 2022_firenze 4096 Sep 5 17:55 .\n
drwxrwxrwt 35 root root
                             20480 Sep 5 17:55 ..\n1716687 -rw-r--r-- 1 adi-nata
2022 firenze
              0 Sep 5 17:55 file1\n1716688 -rw-r--r- 1 adi-nata 2022_firenze
-rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file4]
    file4: [4]
  Files content - Minishell:
    file1: [1]
    file2: [2]
    file3: [3]
    file4: [4]
TEST 140: KO
  Input:
           [ls -al -i < /etc/passwd > file1 > file2 > file3 > file4]
  Bash:
            Minishell: []
  Lab creation:
```

```
cat 1 > file1
    cat 2 > file2
    cat 3 > file3
    cat 4 > file4
  Files content - Bash:
    file1: []
    file2: []
    file3: []
    file4: [total 28\n1716687 drwx----- 2 adi-nata 2022 firenze 4096 Sep 5 17:55 .\n
                                                                               20
                           20480 Sep 5 17:55 ..\n1716688 -rw-r--r-- 1 adi-nata
drwxrwxrwt 35 root
                   root
2022 firenze
             0 Sep 5 17:55 file1\n1716689 -rw-r--r-- 1 adi-nata 2022_firenze
Files content - Minishell:
    file1: [1]
    file2: [2]
    file3: [3]
    file4: [4]
TEST 141: KO
  Input:
           [wc -l < /etc/passwd]
  Bash:
            [56]
  Minishell: [/etc/passwd: No such file or directory]
  Lab creation:
    cat 1 > file1
    cat 2 > file2
    cat 3 > file3
    cat 4 > file4
  Files content - Bash:
    file1: [1]
    file2: [2]
    file3: [3]
    file4: [4]
  Files content - Minishell:
    file1: [1]
    file2: [2]
    file3: [3]
    file4: [4]
```

```
TEST 142: KO
              [wc -l < /etc/passwd > file1 | wc -l]
  Input:
  Bash:
  Minishell: [/etc/passwd: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [56]
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 143: KO
              [wc -l < /etc/passwd > file1 > file2 > file3 > file4]
  Input:
  Bash:
               []
  Minishell: []
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: []
     file2: []
     file3: []
     file4: [56]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
```

TEST 144: KO [ls -al -i < /etc/passwd > file1 | wc -l | echo 42] Input: Bash: Minishell: [/etc/passwd: No such file or directory] Lab creation: cat 1 > file1 cat 2 > file2 cat 3 > file3 cat 4 > file4 Files content - Bash: file1: [total 40\n1716691 drwx----- 2 adi-nata 2022 firenze 4096 Sep 5 17:55 .\n 20 20480 Sep 5 17:55 ..\n1716692 -rw-r--r-- 1 adi-nata drwxrwxrwt 35 root root 0 Sep 5 17:55 file1\n1716693 -rw-r--r-- 1 adi-nata 2022_firenze 17:55 file2\n1716694 -rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file3\n1716695 -rw-r--r-- 1 adi-nata 2022_firenze 2 Sep 5 17:55 file4] file2: [2] file3: [3] file4: [4] Files content - Minishell: file1: [1] file2: [2] file3: [3] file4: [4] **TEST 145: KO** Input: [cat < file1 | cat > file2] Bash: Minishell: [] Lab creation: cat 1 > file1 cat 2 > file2 cat 3 > file3 cat 4 > file4 Files content - Bash: file1: [1]

file2: [1] file3: [3] file4: [4]

```
Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 146: KO
  Input:
              [cat < file1 | grep 1 > file2 | wc -l]
  Bash:
               [0]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [1]
     file2: [1]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 147: KO
  Input:
             [cat < file1 | grep 1 > file2 | wc -l | echo 42]
  Bash:
               [42]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [1]
     file2: [1]
     file3: [3]
```

```
file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 148: KO
  Input:
            [cat < file1 | grep 1 > file2 | wc -l | echo 42 | echo 21]
  Bash:
               [21]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [1]
     file2: [1]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 149: KO
              [> file1 | echo 42 | cat < file1 | grep 1 > file2 | wc -l]
  Input:
  Bash:
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: []
```

```
file2: []
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 150: KO
  Input:
             [< file1 | echo 42 > file2 | grep 1 | wc -l]
  Bash:
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [1]
     file2: [42]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 151: KO
  Input:
            [cat < file1 | cat > file2 < file1 | wc -l]
  Bash:
               [0]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
```

```
Files content - Bash:
     file1: [1]
     file2: [1]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 152: KO
              [echo 42 > file1 | cat | wc -l]
  Input:
  Bash:
               [0]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [42]
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 153: KO
  Input:
            [echo 42 < file1 | cat | wc -l]
  Bash:
               [1]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
```

```
Files content - Bash:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 155: KO
  Input:
            [>> file1 | echo 42]
  Bash:
             [42]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 156: KO
  Input:
              [> file1 | cat < file1]
  Bash:
               Minishell: []
  Lab creation:
```

cat 4 > file4

cat 1 > file1

```
cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: []
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 157: KO
  Input:
              [> file1 | echo 42 < file1 | cat file1]
  Bash:
  Minishell: []
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: []
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 161: KO
  Input:
              [cat < file1 >> file2 > file1 | cat]
  Bash:
  Minishell: []
```

```
Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: []
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 162: KO
  Input:
            [cat < file1 >> file2 > file1 | cat | echo 21]
  Bash:
              [21]
  Minishell: [file1: No such file or directory]
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: []
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 163: KO
            [ls / | grep c | cat > file1]
  Input:
  Bash:
              []
```

```
Minishell: []
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [etc\nproc]
     file2: [2]
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
TEST 165: KO
  Input:
              [ls / | grep home | wc -l | < file1 > file2 | cat]
  Bash:
               []
  Minishell: []
  Lab creation:
     cat 1 > file1
     cat 2 > file2
     cat 3 > file3
     cat 4 > file4
  Files content - Bash:
     file1: [1]
     file2: []
     file3: [3]
     file4: [4]
  Files content - Minishell:
     file1: [1]
     file2: [2]
     file3: [3]
     file4: [4]
```