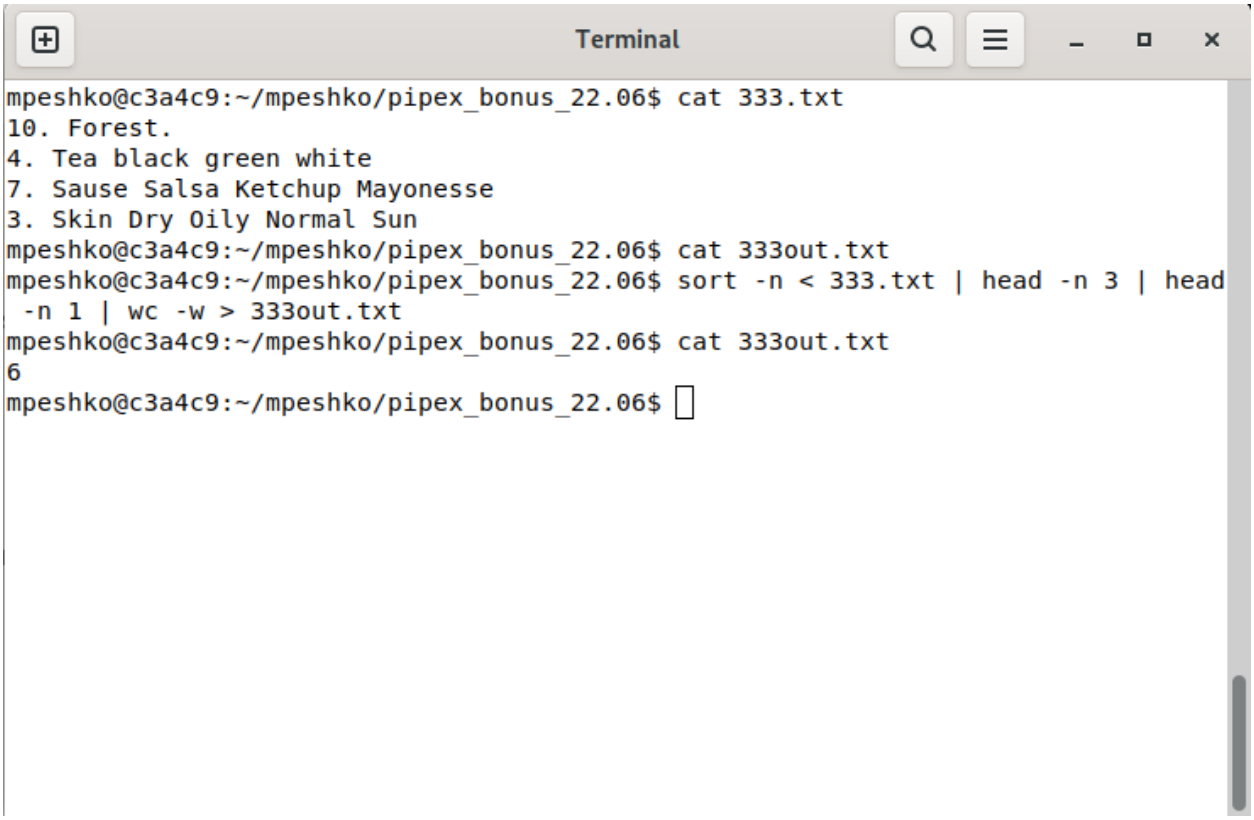
Pipex_bonus

Bash

```
sort -n < 333.txt | head -n 3 | head -n 1 | wc -w > 333out.txt
```



Code

```
int main(int argc, char **argv, char **envp)
{
    int cmd;
    int write_to;
    int read_from;

    if (argc >= 5)
```

```
    {
        cmd = 2;
        write_to = open_file(argv[argc - 1], 1);
        read_from = open_file(argv[1], 2);
        dup2(read_from, STDIN_FILENO);
        close(read_from);
    }
    while (cmd < argc - 2)
    {
        read_from = child_process(argv[cmd++], envp, read_from);
    }
    close(read_from);
    dup2(write_to, STDOUT_FILENO);
    close(write_to);
    execute(argv[argc - 2], envp);
}
```

```
int child_process(char *argv, char **envp, int read_from)
{
    pid_t   pid;
    int     fd[2];

    if (pipe(fd) == -1)
        error();
    pid = fork();
    if (pid == -1)
        error_fork();
    if (pid == 0)
    {
        close(fd[0]);
        dup2(fd[1], STDOUT_FILENO);
        execute(argv, envp);
    }
    else
```

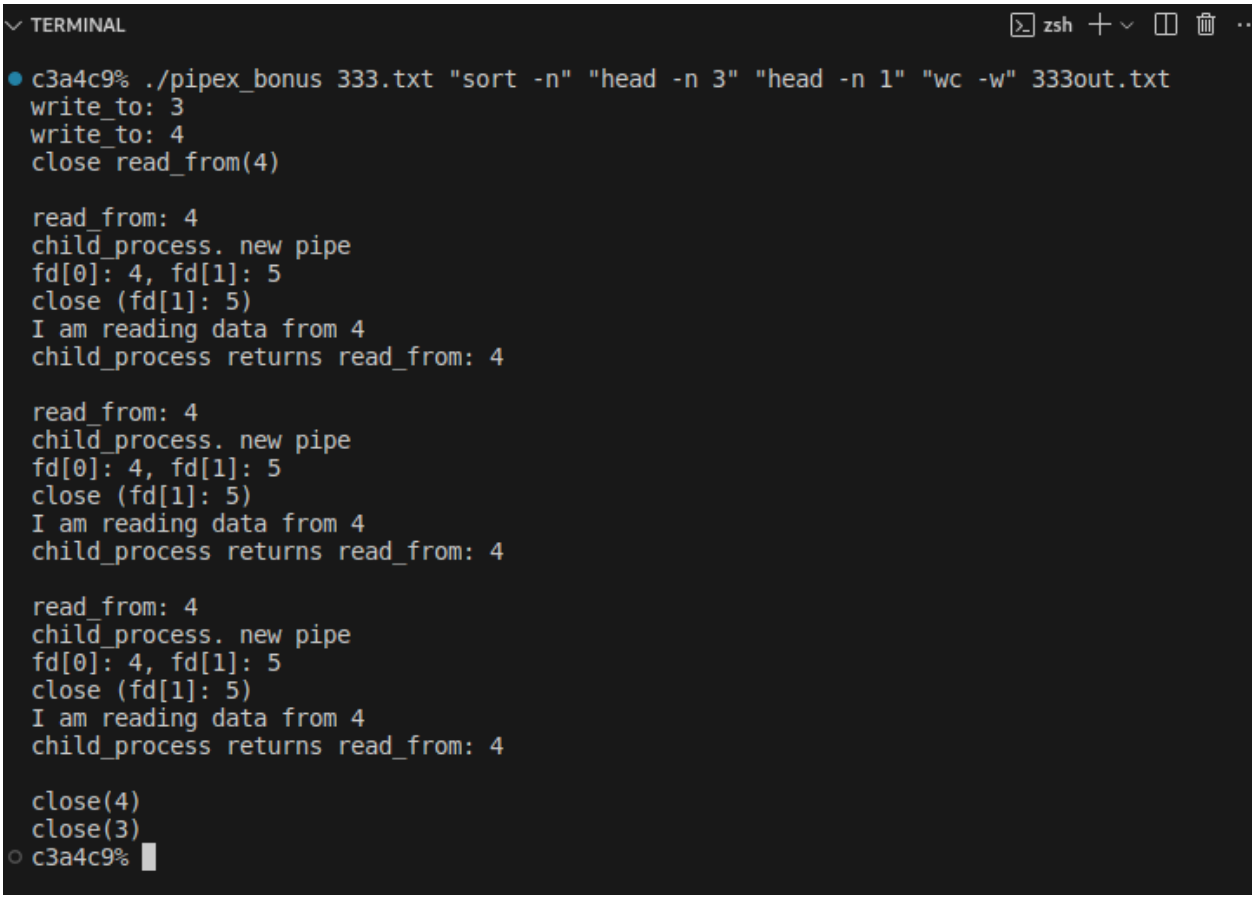
```
    {
        close(fd[1]);
        dup2(read_from, STDIN_FILENO);
        close(read_from);
        waitpid(pid, NULL, 0);
    }
    return(fd[0]);
}
```

333.txt

> 1. Forest.
> 2. Tea black green white
> 3. Sause Salsa Ketchup Mayonesse
> 4. Skin Dry Oily Normal Sun

333out.txt

> 6


TERMINAL
zsh
c3a4c9% ./pipex_bonus 333.txt "sort -n" "head -n 3" "head -n 1" "wc -w" 333out.txt
write_to: 3
write_to: 4
close read_from(4)
read_from: 4
child_process. new pipe
fd[0]: 4, fd[1]: 5
close (fd[1]: 5)
I am reading data from 4
child_process returns read_from: 4
read_from: 4
child_process. new pipe
fd[0]: 4, fd[1]: 5
close (fd[1]: 5)
I am reading data from 4
child_process returns read_from: 4
read_from: 4
child_process. new pipe
fd[0]: 4, fd[1]: 5
close (fd[1]: 5)
I am reading data from 4
child_process returns read_from: 4
close(4)
close(3)
c3a4c9%