

Stderr and Stdout

What are Stderr and Stdout?

Usage in C

```
fprintf(file, format, ...)
```

Use `stdout` and `stderr` as files.

C Code:

```
fprintf(stdout, "%s", "stdout gets piped!\n");  
fprintf(stderr, "%s", "ERROR doesn't get piped\n");  
fprintf(stdout, "%s", "stdout gets piped again!\n");
```

Output:

```
stdout gets piped!  
ERROR doesn't get piped  
stdout gets piped again!
```

Redirects

```
$ ./prog [redirect] output.txt
```

- `>`: Stdout of program is put into file
- `2>`: Stderr of program is put into file
- `3>`: Stdout and stderr is put into file

Can be chained:

```
$ ./ prog > output.txt 2> errors.txt
```

Pipes

```
$ ./prog | grep -n "pipe"
```

Output:

```
ERROR doesn't get piped  
1:stdout gets piped!  
2:stdout gets piped again!
```