

Files in C

Unix system calls dealing with files:

- open
- close
- read
- write

We want:

- something portable to non-unix
- buffering

Abstract data type “FILE”
(defined in `stdio.h`)

“fopen”

- file name
- permissions (“r” or “w”, mostly)
- returns item of type FILE*, or NULL for can’t open
- stashes the reason why...
 - perror(filename)
- fprintf: like printf, with extra FILE* arg

```
fprintf(fp, "...")  
putc(c, fp)  
fscanf(fp, "...")  
getc(fp)
```

In addition to "NULL", `stdio.h` defines

```
stdin  
stdout  
stderr
```

`getc()` is the same as `getc(stdin)`

`putc(c)` is the same as `putc(c, stdout)`

Remember that `getc()` and `getc()`
return `int`, not `char`!