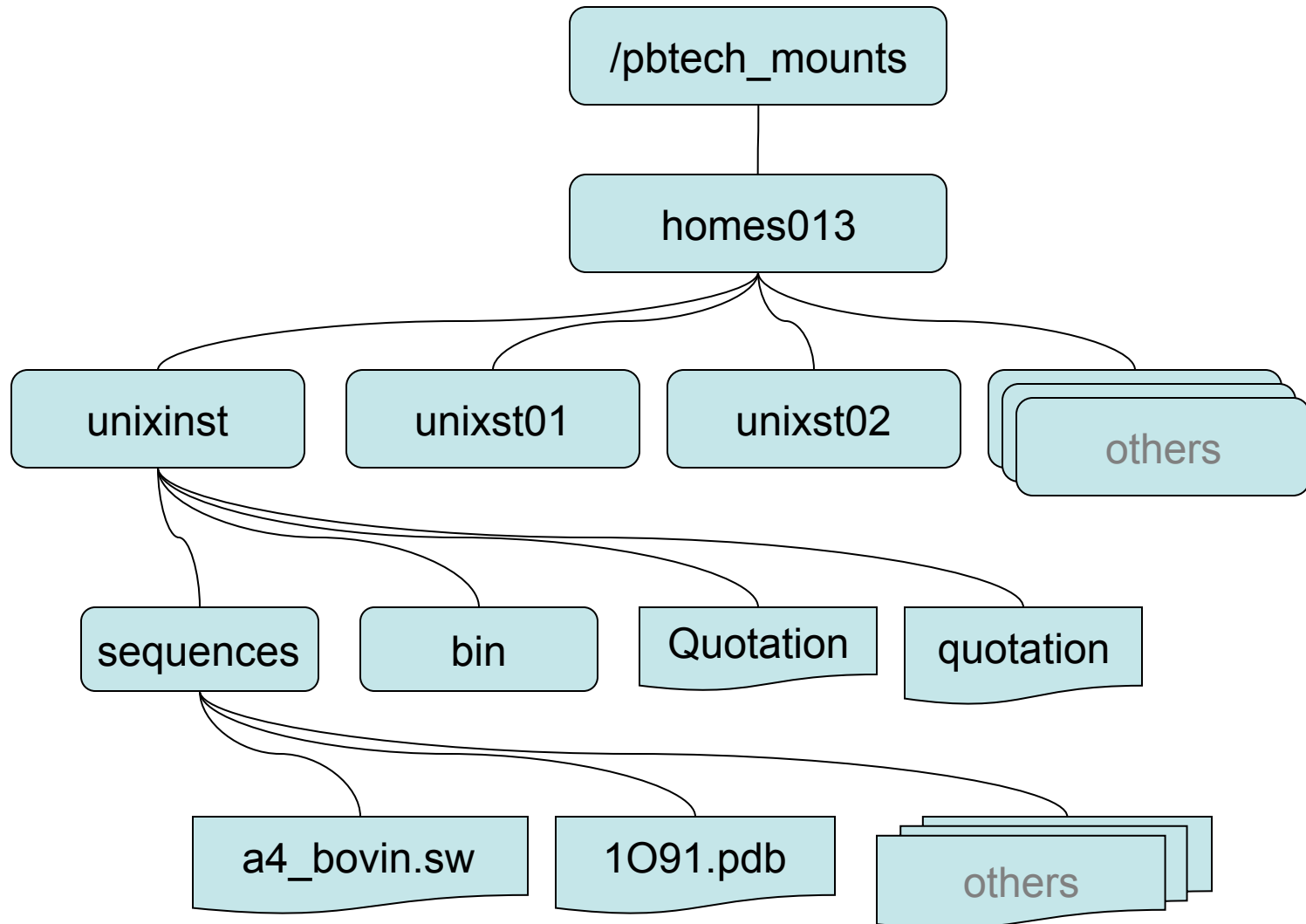
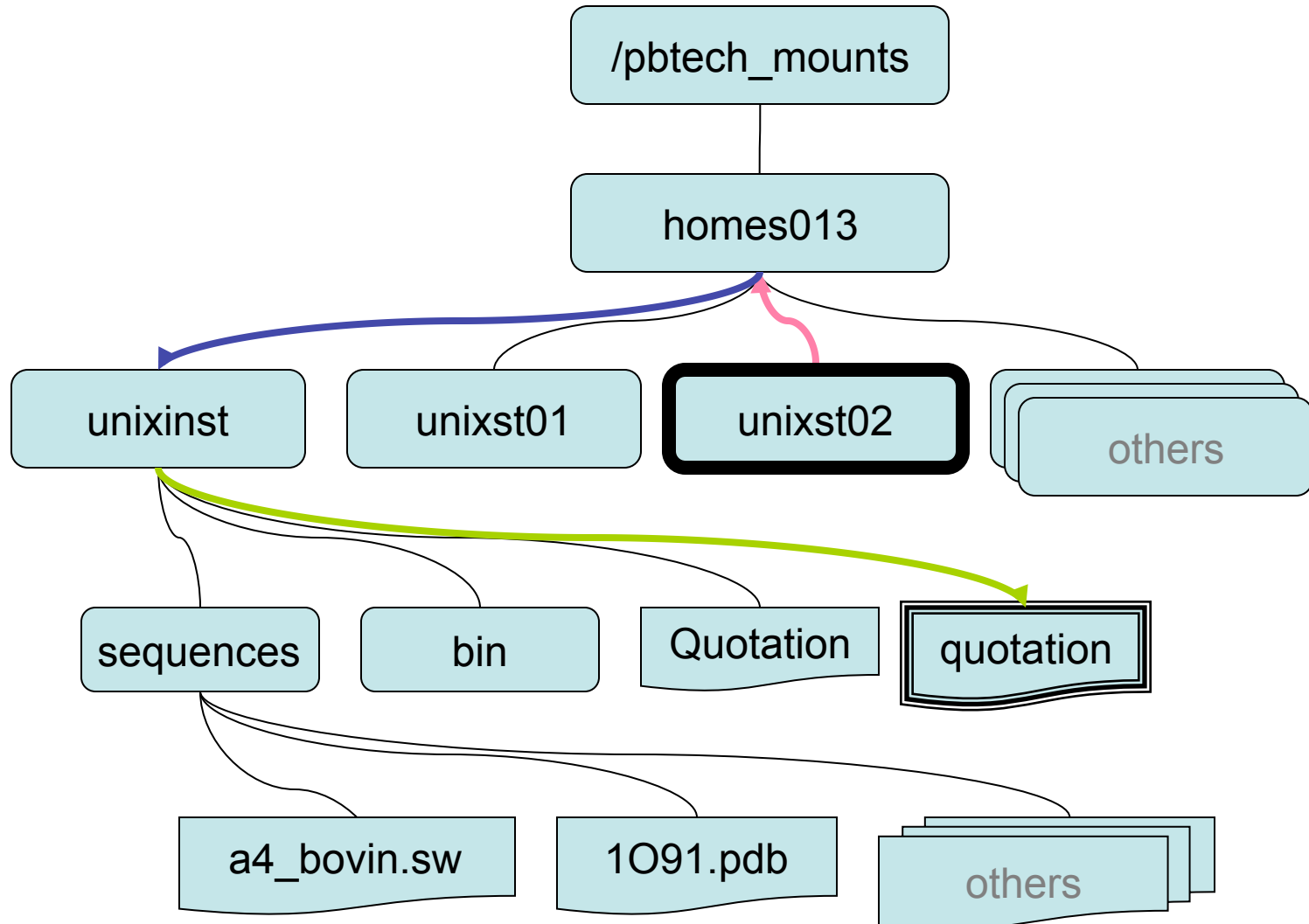


System Directory Hierarchy

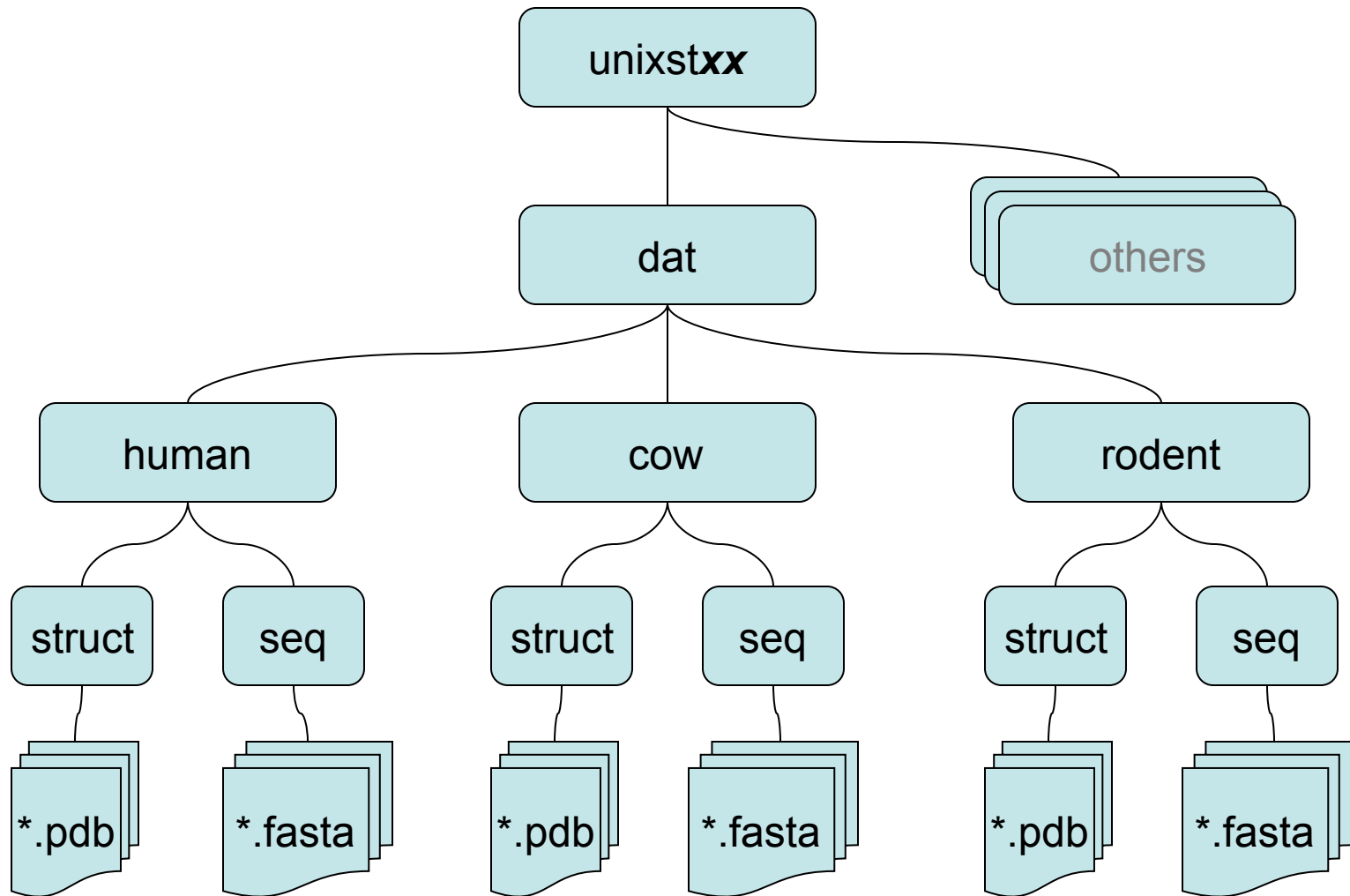


Relative Pathnames

cat `../unixinst/quotation`

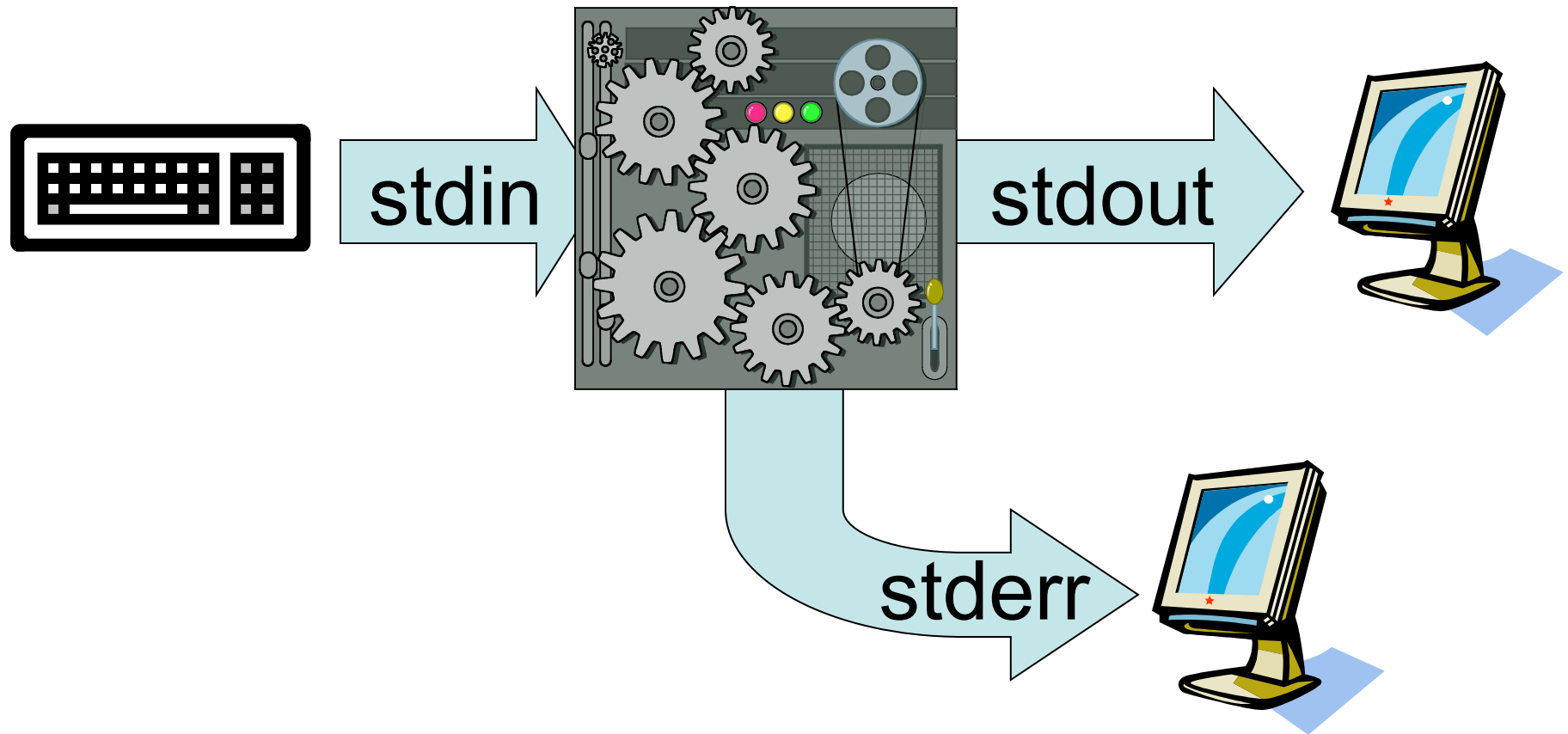


Your Directory Hierarchy



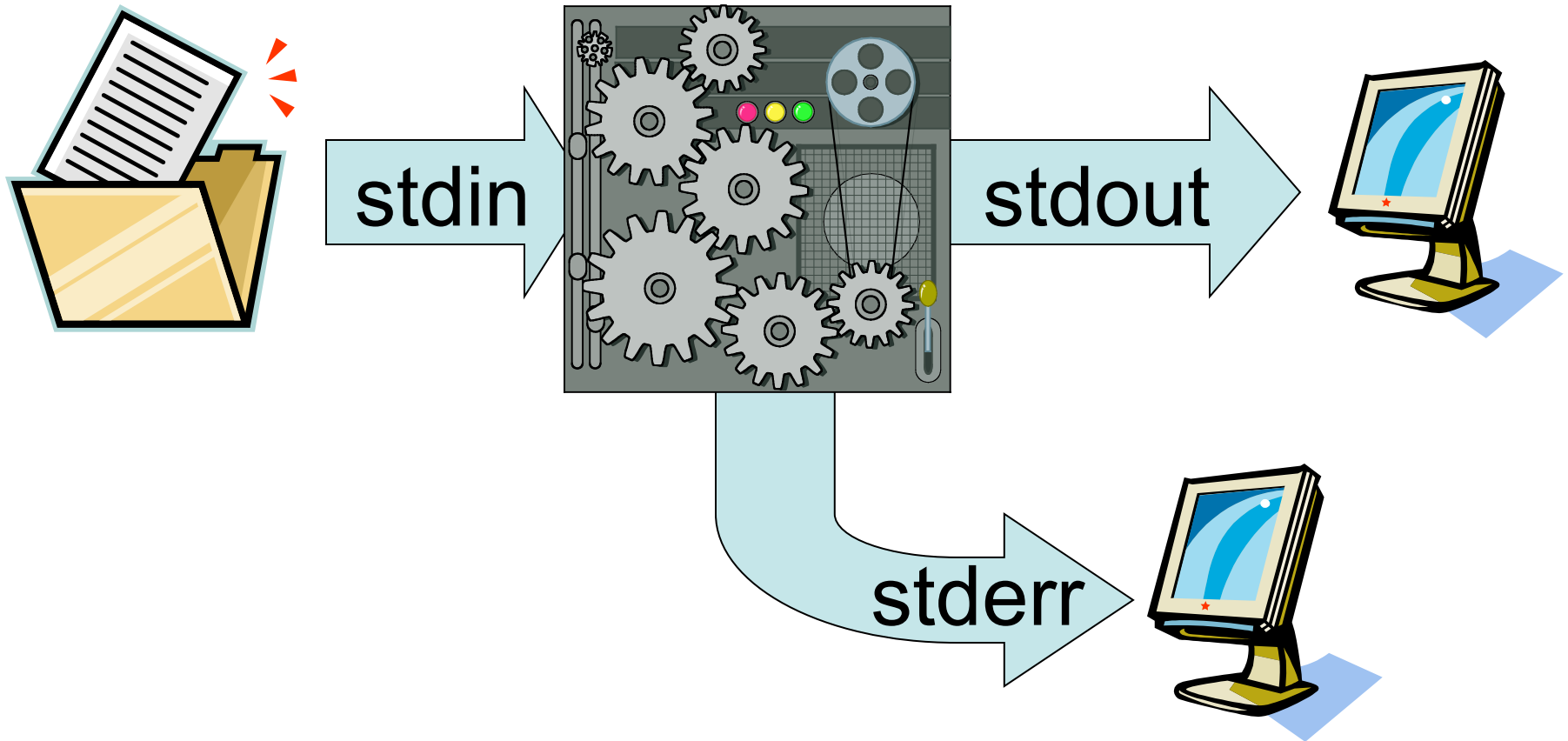
UNIX Commands: No Redirection

`sort`



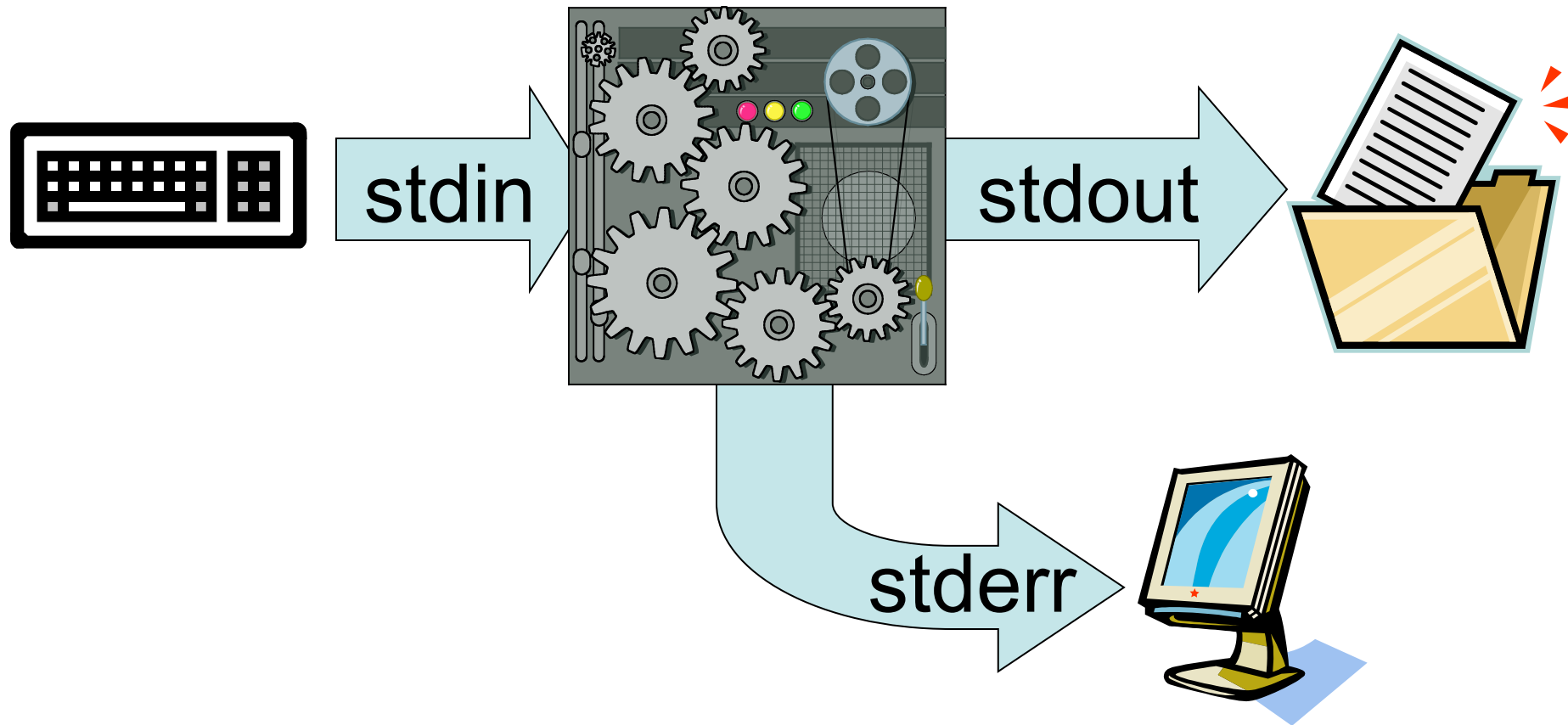
UNIX Commands: Redirect input

`sort < in.txt`



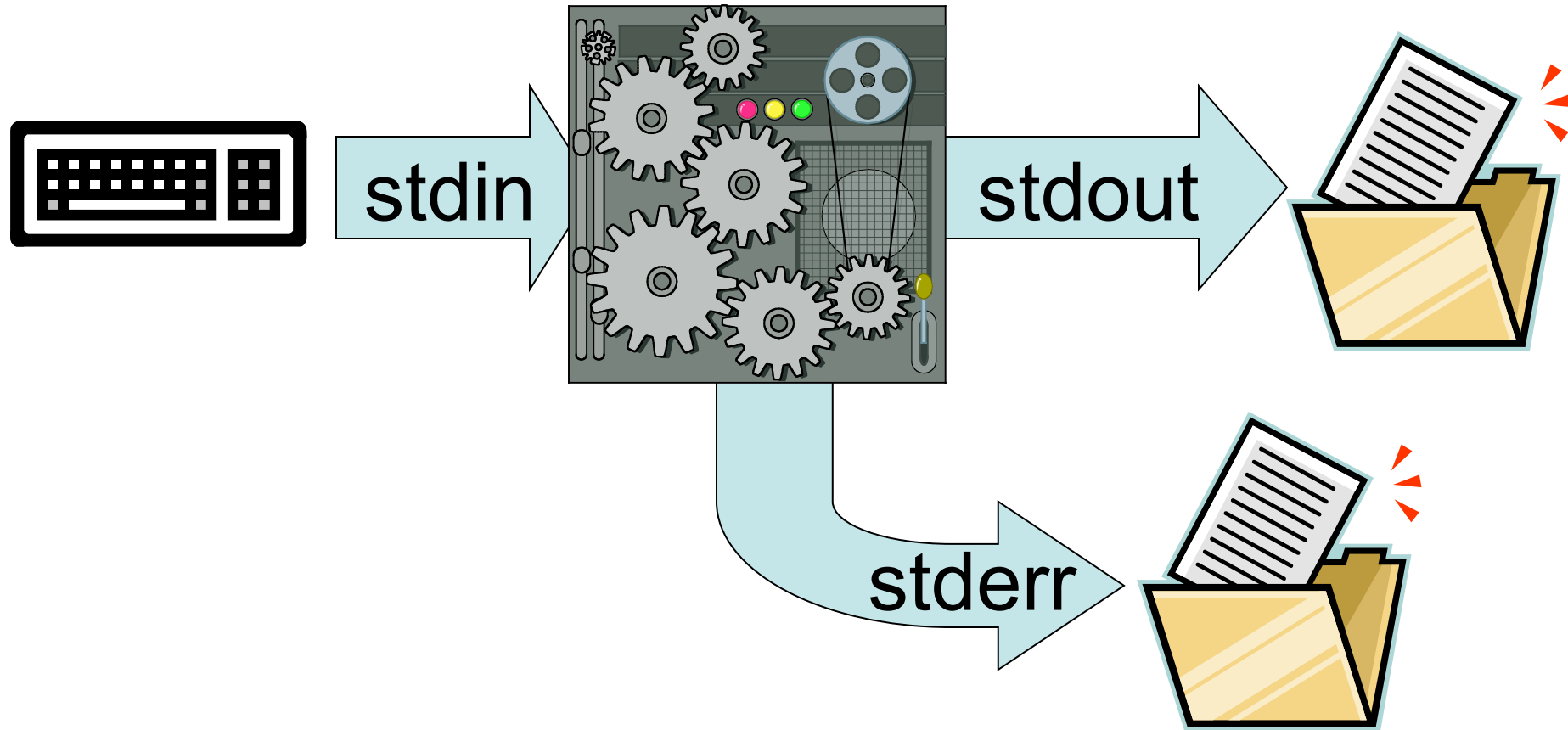
UNIX Commands: Redirect Output

```
sort > sorted.txt
```



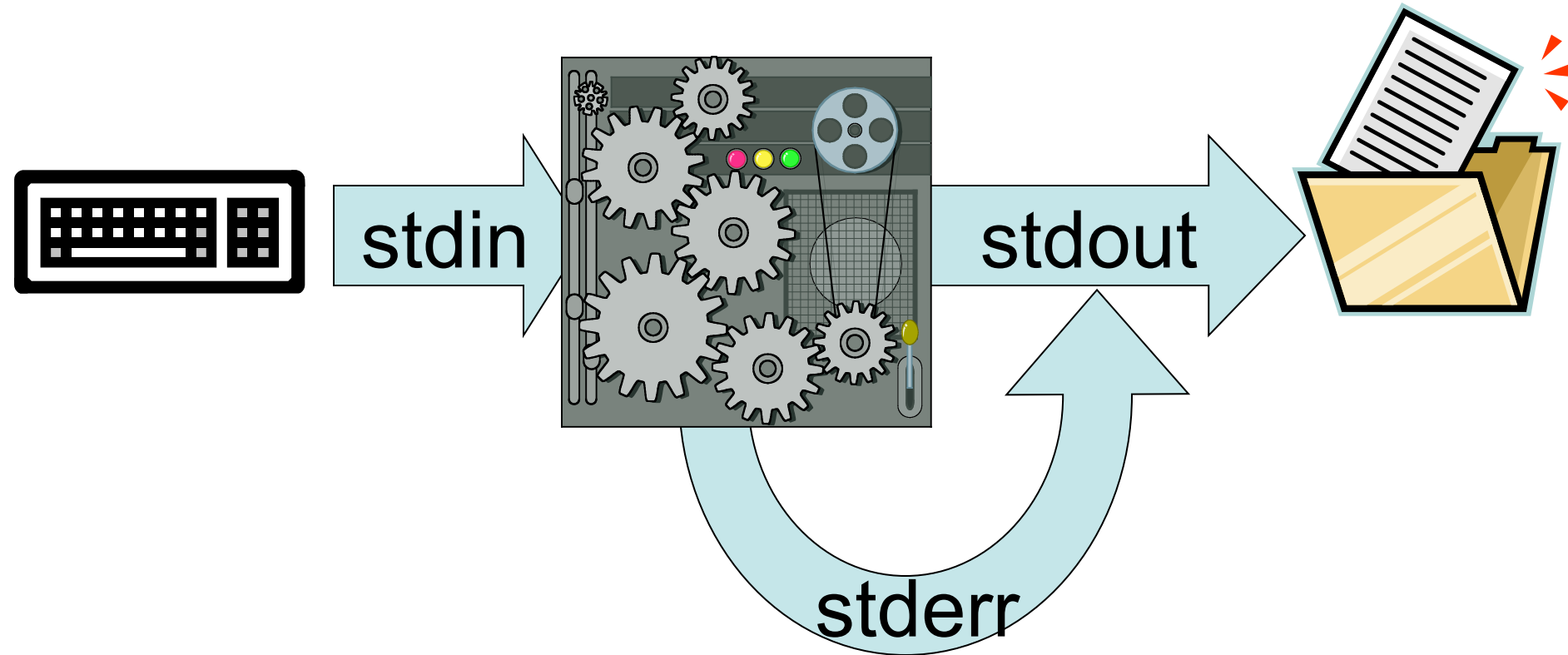
UNIX Commands: Redirect Output

```
sort > sorted.txt 2> err.log
```



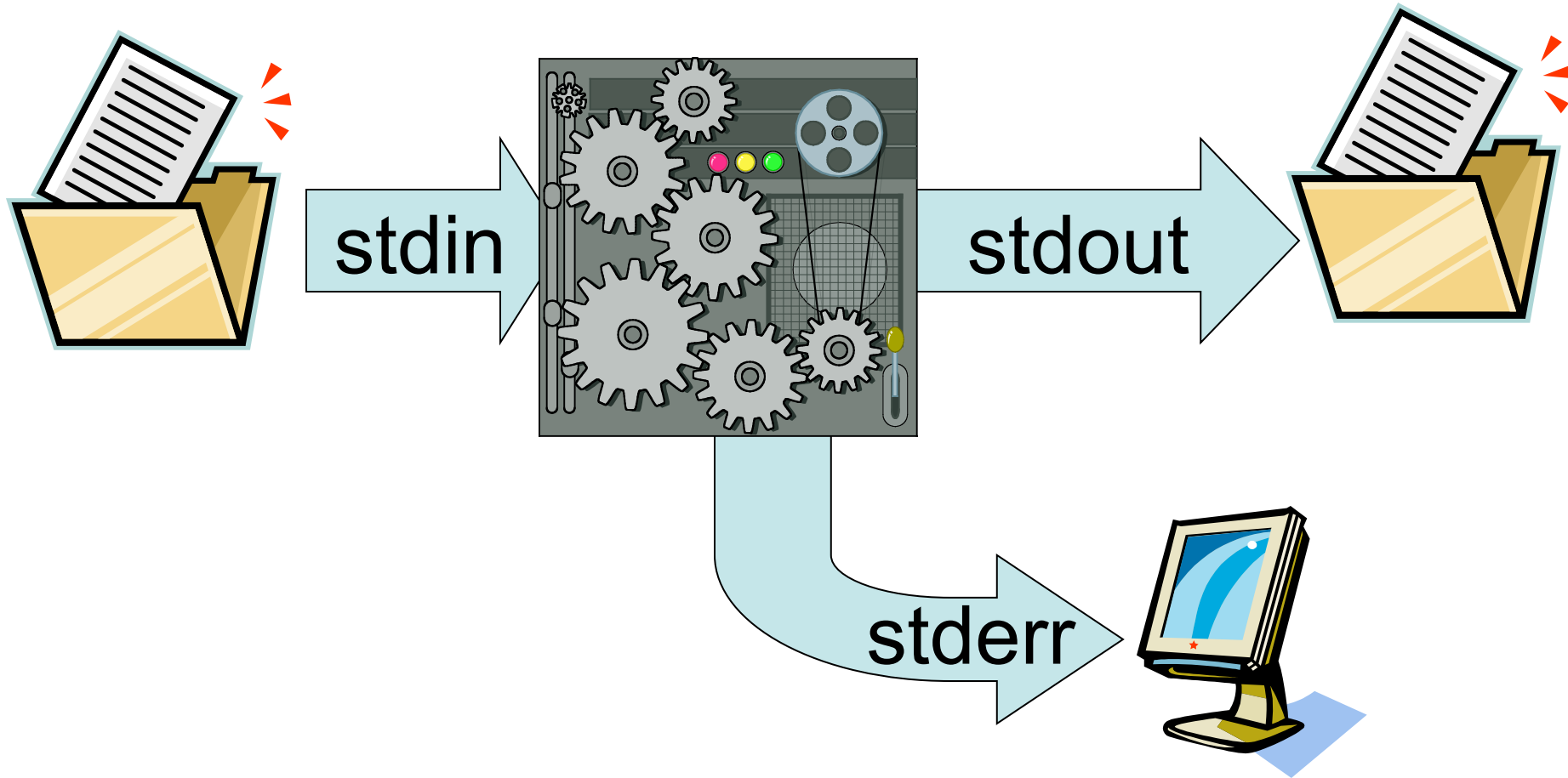
UNIX Commands: Combined Redirection

```
sort > sorted.txt 2>&1
```



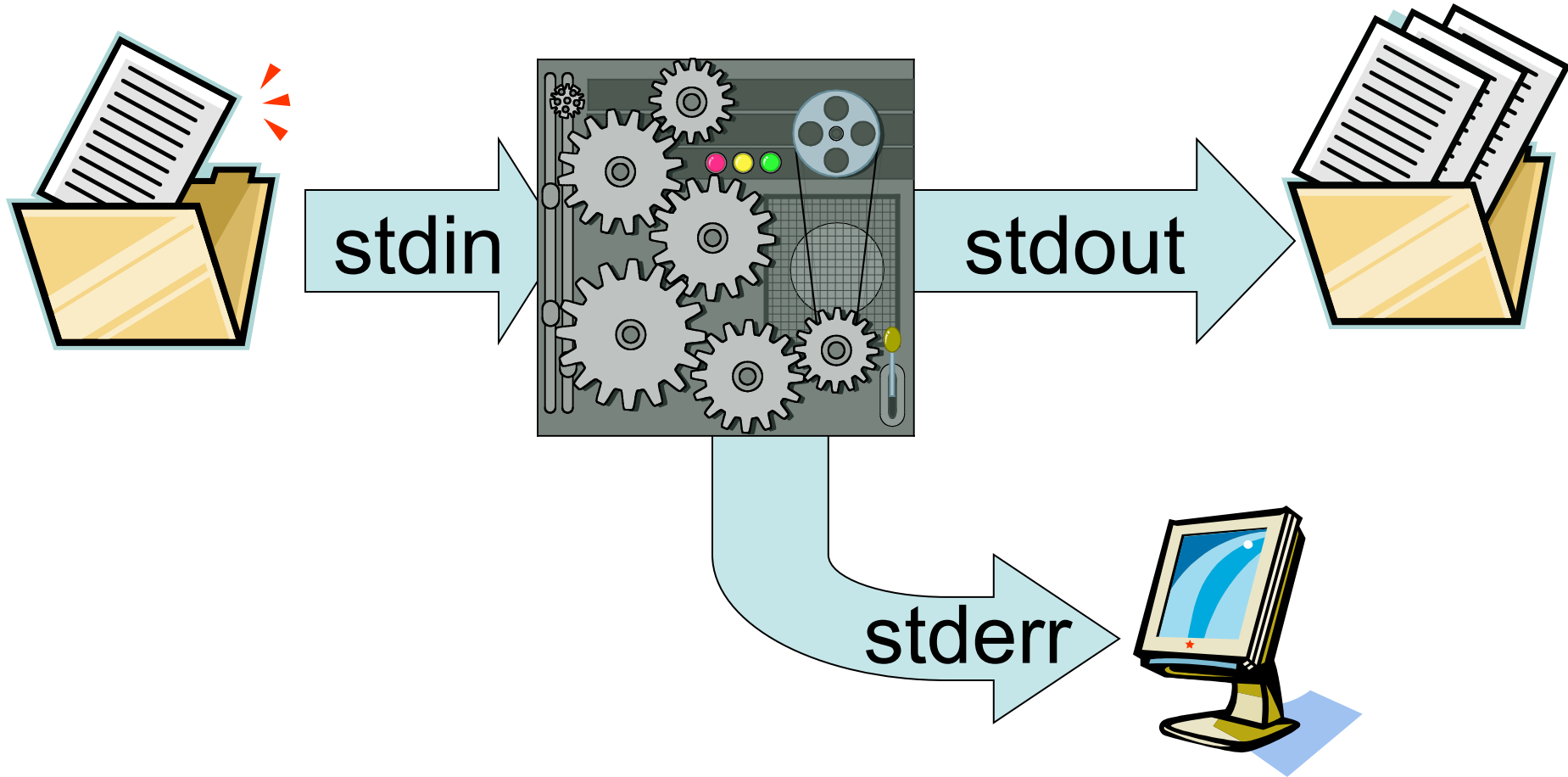
UNIX Commands: More examples

```
sort < in.txt > sorted.txt
```



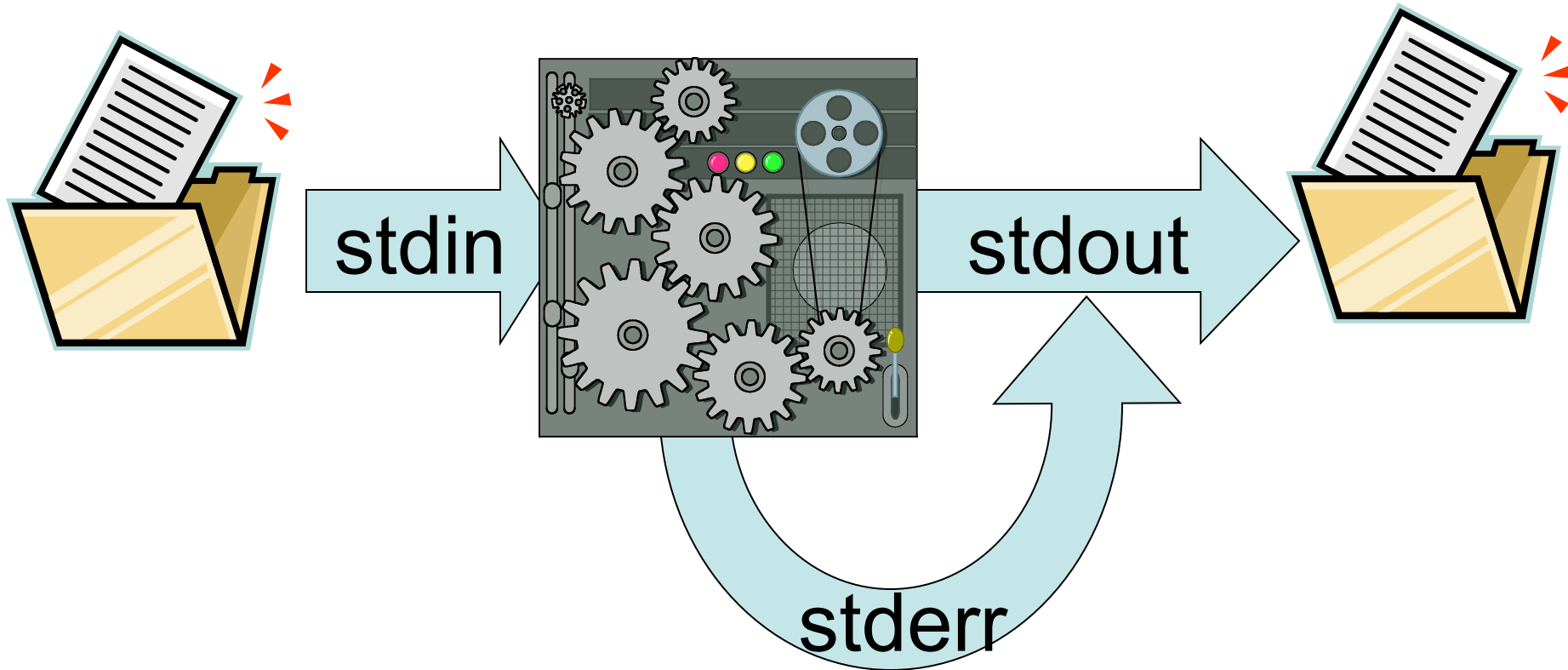
UNIX Commands: More examples

```
sort < in.txt >> sorted.txt
```



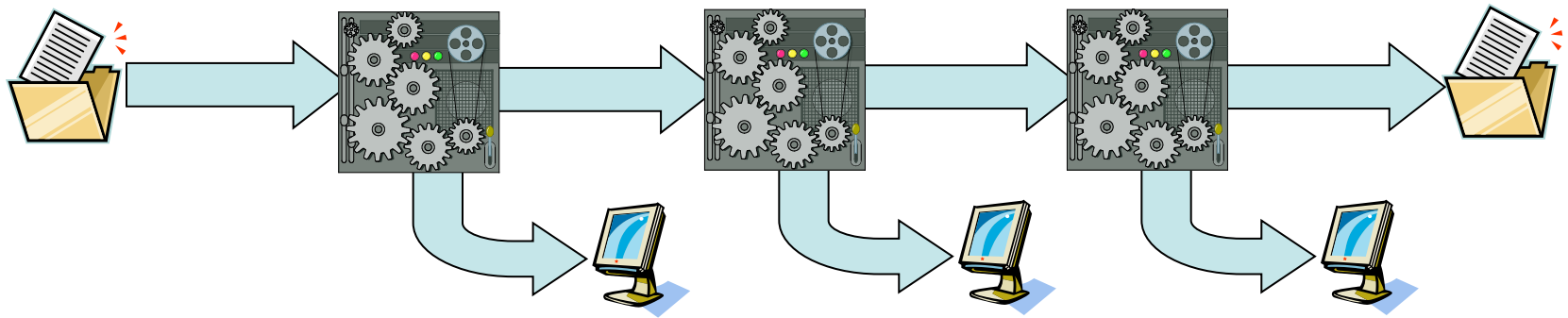
UNIX Commands: More examples

```
sort < in.txt > sorted.txt 2>&1
```



UNIX Commands: Pipes

```
egrep PAT < in.txt | sort | head -1 > first.txt
```



The `csplit` Command

```
csplit seq.fasta '%^>%' '/^>/' '{3}'
```

```
csplit seq.fasta '%^>%' '/^>/' '/^>/' '/^>/' '/^>/'
```

xx00	>seqA MNSGVRMVTRS KVPVWEPQNWQ
xx01	>seqB MEPPVPQSSVP GPPELAPTPAR
xx02	>seqC PLDLKGPTAPP CTNEDDEGSCA
xx03	>seqD SVICKAASGDT MNWNNITLTIV
xx04	>seqE SFRNFLGDIGC LISSNLLSYIK

<code>%pattern%</code>	skip over this group (no file)
<code>/pattern/</code>	create file for this group
<code>{n}</code>	repeat previous pattern <i>n</i> times

5 patterns = 6 groups

- Lines before the first match.
- Lines from the first match up to (but not including) the second match.
- Lines from the second match up to (but not including) the third match.
- Lines from the third match up to (but not including) the fourth match.
- Lines from the fourth match up to (but not including) the fifth match.
- Lines from the fifth match up to the end of the file.