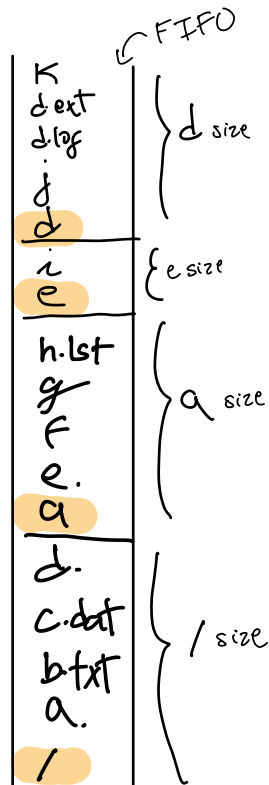


```

$ cd /
$ ls
dir a
14848514 b.txt
8504156 c.dat
dir d
$ cd a
$ ls
dir e
29116 f
2557 g
62596 h.lst
$ cd e
$ ls
584 i
$ cd ..
$ cd ..
$ cd d
$ ls
4060174 j
8033020 d.log
5626152 d.ext
7214296 k

```



while reading commands:

if cwd is leaf-dir:

push dir-content //because we depend on other contents

else:

save cwd size in dirs-size-map //easy to calculate

while stack is not empty:

di = pop(dir-info)

if !dirs-size-map contains di: //do not recalculate if we know it

s = calculate_dir_size(di)

save dirsize in dirs-size-map

dirs-size-map contains info of all dir's

The queue is used to track folders that depend on others subfolders.

i.e: I can't compute size of cwd, so I'll just put that here temporarily

```

- / (dir)
- a (dir)
- e (dir)
- i (file, size=584)
- f (file, size=29116)
- g (file, size=2557)
- h.lst (file, size=62596)
- b.txt (file, size=14848514)
- c.dat (file, size=8504156)
- d (dir)
- j (file, size=4060174)
- d.log (file, size=8033020)
- d.ext (file, size=5626152)
- k (file, size=7214296)

```

cwd:

```

/
/a
/ae
/a
/
/d
/
/a

```

