

```

with open("book.html", "r") as fh:
    old_lines = fh.readlines()
import re
headpat = re.compile(r'<h[1-6] id="oo(?:[^\s]+).*">')
figppat = re.compile(r'<p>Figure ([1-9][0-9]*\.[0-9]+\.[0-9]*</p>\n')
ln = -1
figures = 0
changed_labels = 0
chapstr = ""
while True:
    ln += 1
    if ln == len(old_lines):
        break
    line = old_lines[ln]
    hm = headpat.match(line)
    if hm:
        new_chapstr = hm.group(1)
        if chapstr != new_chapstr:
            chapstr = new_chapstr
            chap_fignum = 0
    m = figppat.match(line)
    if not m:
        continue
    oldlabel = m.group(1)
    if not "." in oldlabel:
        raise ValueError(f"old label {oldlabel} without a '.'!!!")
    figures += 1
    chap_fignum += 1
    newlabel = f"{chapstr}.{str(chap_fignum)}"
    if newlabel == oldlabel:
        print(f"{newlabel} ok!")
    else:
        print(f"will need to change {oldlabel}->{newlabel} on line {ln+1}")
        changed_labels += 1
print(f"in {figures} got {changed_labels} incorrectly numbered!")

```