import os

import csv

from openpyxl import Workbook

year = ["1952","1957","1962","1967","1972","1977","1982","1987","1992","1997","2002","2007"]

path = os.path.dirname(\_\_file\_\_)

input\_path = os.path.join(path, "inputs/countries.csv")

with open(input\_path, encoding="utf8") as f:

csv\_reader = csv.reader(f)

gp = Workbook() #excel档

ws = gp["Sheet"]

for i in range(len(year)):

cell = ws["A"+str(i+1)]

cell.value = year[i]+" 年"

lines = []

for line in csv\_reader:

lines.append(line)

for i in range(len(year)):

sumn=0

for line in lines[1::]:

sumn += float(line[i+1])

cell = ws["B"+str(i+1)]

cell.value = sumn

output\_path = os.path.join(path, "outputs/global-population.xlsx")

gp.save(output\_path)

# excel finished

top = Workbook()

top.remove(top['Sheet'])

lines = lines[1::]

for i in range(1,13):

top.create\_sheet(year[i-1])

ws = top[year[i-1]]

def cmp(a):

return float(a[i])

title=ws["A1"]

title.value = "國家"

ppl=ws["B1"]

ppl.value = "人口"

lines.sort(key=cmp)

lines.reverse()

for j in range(2,12):

country=ws["A"+str(j)]

population=ws["B"+str(j)]

country.value=(lines[j-2])[0]

population.value=(lines[j-2])[i]

print(lines)

wss = top.create\_sheet("Summary", 0)

cell=wss["A1"]

cell.value = "這個檔案列出各年全球人口頭十位的國家。"

output\_path2 = os.path.join(path, "outputs/test.xlsx")

top.save(output\_path2)