import openpyxl

# Load the workbook

file\_path = r'C:\Users\hp\OneDrive\Documents\INTERNSHIP\RESEARCH WORK FINAL\aa everything new\MAX IN BM\italymaxinbm.xlsx'

wb = openpyxl.load\_workbook(file\_path)

# Create new sheets from "Feb 2005" to "Dec 2023"

months = ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"]

years = list(range(2005, 2024))

for year in years:

for month in months:

if year == 2005 and month == "Jan":

continue

sheet\_name = f"{month} {year}"

if sheet\_name not in wb.sheetnames:

wb.create\_sheet(sheet\_name)

# Define the sheets to copy from

source\_sheet = wb["2005 Jan"]

adjusted\_return\_sheet = wb["Adjusted Return"]

bm\_sheet = wb["bm"]

mcap\_sheet = wb["mcap"]

max\_sheet = wb["max"]

# Copy data to new sheets

for idx, year in enumerate(years):

for jdx, month in enumerate(months):

if idx == 0 and jdx == 0:

continue

sheet\_name = f"{month} {year}"

target\_sheet = wb[sheet\_name]

# Copy column A from "2005 Jan" to column A of the new sheet

for row in source\_sheet.iter\_rows(min\_col=1, max\_col=1):

for cell in row:

target\_sheet[cell.coordinate] = cell.value

# Copy columns E to X from "2005 Jan" to columns E to X of the new sheet

for row in source\_sheet.iter\_rows(min\_col=5, max\_col=50):

for cell in row:

target\_sheet[cell.coordinate] = cell.value

# Copy data from "Adjusted Return" to column B of the new sheets with cell referencing

col\_index = 50 + (idx \* 12 + jdx) # Starting from AY

if col\_index <= adjusted\_return\_sheet.max\_column:

for row in adjusted\_return\_sheet.iter\_rows(min\_row=1, max\_row=442, min\_col=col\_index, max\_col=col\_index):

for cell in row:

target\_sheet[f"B{cell.row + 1}"] = f"='Adjusted Return'!{cell.coordinate}"

# Copy data from "mcap" to column C of the new sheets

col\_index = 38 + (idx \* 12 + jdx) # Starting from AM

if col\_index <= bm\_sheet.max\_column:

for row in bm\_sheet.iter\_rows(min\_row=1, max\_row=442, min\_col=col\_index, max\_col=col\_index):

for cell in row:

target\_sheet[f"C{cell.row + 1}"] = f"='bm'!{cell.coordinate}"

# Copy data from "mcap" to column D of the new sheets

col\_index = 39 + (idx \* 12 + jdx) # Starting from AM

if col\_index <= mcap\_sheet.max\_column:

for row in mcap\_sheet.iter\_rows(min\_row=1, max\_row=442, min\_col=col\_index, max\_col=col\_index):

for cell in row:

target\_sheet[f"D{cell.row + 1}"] = f"='mcap'!{cell.coordinate}"

# Copy data from "max" to column D of the new sheets

col\_index = 2 + (idx \* 12 + jdx) # Starting from C

if col\_index <= max\_sheet.max\_column:

for row in max\_sheet.iter\_rows(min\_row=1, max\_row=442, min\_col=col\_index, max\_col=col\_index):

for cell in row:

target\_sheet[f"E{cell.row + 1}"] = f"='max'!{cell.coordinate}"

# Adding formulas to "SORTING AVERAGE RETURN & COUNT" sheet

sorting\_avg\_return\_sheet = wb["SORTING AVERAGE RETURN"]

formulas\_C3\_HO3 = [

f"='{month} {year}'!$M7"

for year in years

for month in months

if not (year == 2005 and month == "Jan")

]

for idx, formula in enumerate(formulas\_C3\_HO3, start=3): # Start from column B (index 2)

sorting\_avg\_return\_sheet.cell(row=3, column=idx).value = formula

formulas\_C22\_HO22 = [

f"='{month} {year}'!$R7"

for year in years

for month in months

if not (year == 2005 and month == "Jan")

]

for idx, formula in enumerate(formulas\_C22\_HO22, start=3): # Start from column B (index 2)

sorting\_avg\_return\_sheet.cell(row=22, column=idx).value = formula

# Adding formulas to "SORTING WEIGHTED VALUE" sheet

sorting\_weighted\_value\_sheet = wb["SORTING WEIGHTED VALUE"]

formulas\_C4\_HO4 = [

f"='{month} {year}'!$N7"

for year in years

for month in months

if not (year == 2005 and month == "Jan")

]

for idx, formula in enumerate(formulas\_C4\_HO4, start=3): # Start from column B (index 2)

sorting\_weighted\_value\_sheet.cell(row=4, column=idx).value = formula

# Save the modified workbook

wb.save(r'C:\Users\hp\OneDrive\Documents\INTERNSHIP\RESEARCH WORK FINAL\aa everything new\MAX IN BM\italymaxinbm\_modified2.xlsx')