**#6. Operations with Excel file using Python**

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**Aim:**

To perform following operations on an excel file (“inventory.xlsx”) using Python:

1. List each company with respective product count
2. List products with inventory less than 10
3. List each company with respective total inventory value
4. Write to Spreadsheet: Calculate and write inventory value for each product into spreadsheet

**Tools Required:**

Text editor with Python interpreter.

**Experiment:**

import openpyxl  
  
wb = openpyxl.load\_workbook('inventory.xlsx')  
a = {}  
sheet1 = wb["Sheet1"]  
  
totalRows=sheet1.max\_row  
supplier = []  
for i in range(2,totalRows+1):  
 supplier.append(sheet1.cell(row=i,column=4).value)  
supplier=[\*set(supplier)]  
InventoryValue={}  
productCount={}  
productList=[]  
for supp in supplier:  
 InventoryValue[supp] = 0  
 productCount[supp]=0  
 for i in range(2, totalRows+1):  
 if supp == sheet1.cell(row=i,column=4).value:  
 InventoryValue[supp] = InventoryValue[supp]+sheet1.cell(row=i,column=2).value  
 productCount[supp] = productCount[supp]+1  
 if(sheet1.cell(row=i,column=2).value<10):  
 productList.append(sheet1.cell(row=i,column=1).value)  
  
print("i. Listing each company with respective product count ")  
print(productCount)  
print("ii. Listing products with inventory less than 10 ")  
print(productList)  
print("iii. Listing each company with respective total inventory value ")  
print(InventoryValue)  
sheet2 = wb.create\_sheet(index=1,title="sheet2")  
i=0  
j=0  
for supp in supplier:  
 i=i+1  
 cellValue = sheet2.cell(row=i,column=1)  
 cellValue.value = supp  
 cellValue = sheet2.cell(row=i, column=2)  
 cellValue.value = InventoryValue[supp]  
wb.save('inventory1.xlsx')

**Output:**

i. Listing each company with respective product count

{'AAA Company': 43, 'CCC Company': 14, 'BBB Company': 17}

ii. Listing products with inventory less than 10

[25.0, 30.0, 74.0]

iii. Listing each company with respective total inventory value

{'AAA Company': 80567.0, 'CCC Company': 35365.0, 'BBB Company': 5453.0}

**Inference and Result:**

The Excel has been imported to the PyCharm IDE and the operation on the file has been done through Python program and the Excel has been updated.