workbook methods:

1. add\_worksheet(string): adds a sheet to the workbook.

2.format1=workbook. add\_format()

format1.bold=True

(or)

format1.set\_bold()

3. Format1.set\_italic()

4. Format1.set\_underline()

5. Format1.set\_font\_strikeout()

6. format1.font\_name="Arial"

7. Format.set\_font\_script(1/2): for superscript and subscript

8. Format.set\_locked(): to lock cells

9. Format.set\_text\_wrap(): for text wrapping

10. Format.set\_shrink(): shrink to fit

11. Format.set\_bg\_color(string):

12. Format.set\_fg\_color(string):

13. Format.set\_border\_color(string):

14. Format.set\_font\_name(string): sets the font name

15. Format.set\_font\_size(num)

16. Format.set\_font\_color(string)

17. Format.set\_num\_format(string):

Number format strings can be:

* 0.0000 like 3.1245
* #,##0 like 2,345
* #,##0.00 like 1,234.56
* 0.00 like 9.99
* mm/dd/yy like 01/01/01
* mmm d yyyy like jan 1 2014
* dd/mm/yyyy hh:mm AM/PM

18. Format.set\_alignment(string):

Center/left/right/justify

Another way of formatting

* We can use the formatting methods as values for the add\_format() constructor as:

format1=book.add\_format({'bold':True,'font\_color':'red','font\_size':16})

Modifying formats

Once a format is designed, its possible to edit it later as:

format1=book.add\_format({'bold':True,'font\_color':'red','font\_size':16})

Later, we can edit it as:

format1.set\_font\_color(‘green’)

worksheet methods:

1. write(row,col,data): writes data in the specified row,col

2. write\_row(row,col,list): writes a list of values in the specified rows,cols.

3. write\_colum(row,col,list):

4. write\_comment(row,col,comment):

5. write\_formula(row,col,formula)

Ex: ws1.write\_formula(0,2,"SUM(A1,B1)")

ws1.write(0,3,"=sum(A1,B1)")

6. write\_number(row,col,int/float number)

7. write\_blank(row,col,data): any data will be ignored

8. write\_string(row,col,string)

9. write('cell address',data)

10. To add format,

write(row,col,data,format\_object)

11. activate(): specifies which worksheet is initially visible in a multi sheet workbook.

Sh3.activate()

12. select(): used to select more than one worksheets, but only one is activated.

Sh1.select()

Sh2.select()

13. hide(): hides the current worksheet.

Sh2.hide()

14. set\_first\_sheet(): sets current worksheet as the first sheet.

15. merge\_range(first row, first col, last row, last col, [cell\_format]):

Ex: sh3.merge\_range(‘D3:G10’, ‘data’)

Sh3.merge\_range(0,0,10,10,’data’)

16. autofilter(firstrow,firstcol,lastrow,lastcol): sets autofilter area.

Ex: sh2.autofilter(‘A1:D11’)

or

sh2.autofilter(0,0,10,30)

To add filters:

* To filter the data, criteria is applied to the columns using either filter\_column() or filter\_column\_list() methods.
* filter\_column(): adds a filter based on simple criteria

sheet.filter\_colum(‘A’, ‘x>2000 and x<5000’)

Operators used are:

==

!=

>

>=

<=

and

or

* To filter blank and non-blank lines,

‘x==Blanks’

‘x==NonBlanks’

* B\* : begins with B
* \*B: ends with B
* \*B\*: contains B

Creating a simple excel workbook

import xlsxwriter

#create a workbook

wb=xlsxwriter.Workbook("list.xls")

#add worksheets to the workbook

ws1=wb.add\_worksheet("students")

ws2=wb.add\_worksheet("employees")

#add data to worsheet1

ws1.write(0,0,"Sno")

wb.close()

Ex: Write elements of a list into a sheet

#adding a list of values to an excel sheet

import xlsxwriter

list1=range(1,11)

#create a workbook

wb=xlsxwriter.Workbook("list.xlsx")

#add worksheets to the workbook

ws1=wb.add\_worksheet("students")

ws2=wb.add\_worksheet("employees")

#add list1 to worsheet1

ws1.write(0,0,"Sno")

row=1

col=0

i=0

length=len(list1)

while i<=length:

ws1.write(row,col,list1[i])

i=i+1

row=row+1

wb.close()

Ex: Write employee info into a sheet

import xlsxwriter

wb=xlsxwriter.Workbook("empinfo.xlsx")

ws1=wb.add\_worksheet("data")

list1=[("empid","name","salary"),(101,"smith",12000),(102,"clark",9000),(103,"alice",8000)]

row=0

col=0

ind=0

for i in list1:

x=i

for j in x:

ws1.write(row,col,j)

col=col+1

row=row+1

col=0

(or): a simple way

import xlsxwriter

wb=xlsxwriter.Workbook("empinfo.xlsx")

ws1=wb.add\_worksheet("data")

list1=[("empid","name","salary"),(101,"smith",12000),(102,"clark",9000),(103,"alice",8000)]

row=0

col=0

for i in range(len(list1)):

ws1.write\_row(row,col,list1[i])

row=row+1

col=0

wb.close()

Ex: writing column wise information (write\_column method)

import xlsxwriter

wb=xlsxwriter.Workbook("empinfo.xlsx")

ws1=wb.add\_worksheet("data")

list1=[("empid","name","salary"),(101,"smith",12000),(102,"clark",9000),(103,"alice",8000)]

row=0

col=0

for i in range(len(list1)):

ws1.write\_column(row,col,list1[i])

col=col+1

row=0

wb.close()

# Ex: Writing formulae

import xlsxwriter

elist=[("empname","sal"),('smith',12000),('clark',9000),('james',8000)]

#create a workbook

wb=xlsxwriter.Workbook("emp.xlsx")

#add worksheets to the workbook

ws1=wb.add\_worksheet("employees")

row=0

col=0

for i in elist:

ws1.write(row,col,i[0])

col=col+1

ws1.write(row,col,i[1])

row=row+1

col=0

row=row+1

col=col+1

ws1.write(row,col,"=sum(B2:B4)")

wb.close()

Ex: Read info from a file and write to a sheet.

#read info from a file and write them to a sheet

import xlsxwriter

#adding a list of values to an excel sheet

import xlsxwriter

#create a workbook

wb=xlsxwriter.Workbook("emp.xlsx")

#add worksheets to the workbook

ws1=wb.add\_worksheet("employees")

#read info from file

f1=open("emp.dat")

row=0

col=0

while 1:

str=f1.readline()

if len(str)<=1:

break

list1=str.split()

ws1.write(row,col,list1[0])

col=col+1

ws1.write(row,col,list1[1])

row=row+1

col=0

wb.close()

f1.close()

(or)

import xlsxwriter as xl

wb=xl.Workbook("emp.xlsx")

ws1=wb.add\_worksheet("employees")

f1=open("c:\\users\\hai\\emp.txt","r")

row=col=0

for i in f1:

list1=i.split()

ws1.write\_row(row,col,list1)

row+=1

col=0

f1.close()

wb.close()

(or)

Adding a new field “increment” to the sheet

import xlsxwriter as xl

wb=xl.Workbook("emp.xlsx")

ws1=wb.add\_worksheet("emp")

#ws1.write(row,col,"data")

f1=open("c:\\users\\hai\\emp.txt")

row=col=0

for i in f1:

list1=i.split()

sal=int(list1[2])

incr=sal+sal\*5/100

list1=list1+[incr]

ws1.write\_row(row,col,list1)

row+=1

col=0

f1.close()

wb.close()

Ex: dealing with titles

import xlsxwriter as xl

wb=xl.Workbook("emp.xlsx")

ws1=wb.add\_worksheet("Employee")

f1=open("emp.txt","r")

row=0

col=0

str=f1.readline()

headers=str.split()

headers.append("Increment")

ws1.write\_row(row,col,headers)

row=1

col=0

list1=f1.readlines()

for i in list1:

list2=i.split()

sal=int(list2[2])

incr=sal+sal\*5/100

ws1.write\_row(row,col,list2)

list2.append(incr)

ws1.write\_row(row,col,list2)

row+=1

col=0

wb.close()

f1.close()

Ex: Adding formats to a workbook

import xlsxwriter

wb=xlsxwriter.Workbook("emp.xlsx")

ws1=wb.add\_worksheet("data")

format1=wb.add\_format()

#format1.bold=True

format1.set\_bold()

ws1.write("A4","welcome",format1)

wb.close()

Reading information from the excel sheet

import xlrd

wb=xlrd.open\_workbook("student\_info.xlsx")

#open sheet by index

sh1=wb.sheet\_by\_index(0)

#open sheet by name

sh2=wb.sheet\_by\_name("expenses")

print "no.of rows=",sh1.nrows

print "no.of cols=",sh1.ncols

print "no.of sheets=",wb.nsheets

print "sheets in the book are:",wb.sheet\_names()

#print info in a particular cell

print sh1.cell\_value(0,0)

#print info of a particular row

print sh1.row(0)

#print info in a particular column

print sh1.col(0)

Ex: Read info from a complete sheet

import xlrd

wb=xlrd.open\_workbook("student\_info.xlsx")

sh1=wb.sheet\_by\_index(0)

rows=sh1.nrows

cols=sh1.ncols

list1=[]

for i in range(rows):

list1=list1+sh1.row(i)

print list1