

1、安装库文件

```
pip install xlrd xlwt openpyxl
```

一、2003以前的表格以.xls后缀，用xlwt来写表格，用xlrd来读取表格；2007的表格以.xlsx后缀，用openpyxl来读写表格。

二、xlrd使用介绍

1、导入模块

```
import xlrd
```

2、打开Excel文件读取数据

```
data = xlrd.open_workbook('excelFile.xls')
```

3、使用技巧

获取一个工作表

```
table = data.sheets()[0] #通过索引顺序获取
```

```
table = data.sheet_by_index(0) #通过索引顺序获取
```

```
table = data.sheet_by_name(u'Sheet1') #通过名称获取
```

获取整行和整列的值（数组）

```
table.row_values(i)
```

```
table.col_values(i)
```

获取行数和列数

```
nrows = table.nrows
```

```
ncols = table.ncols
```

循环行列表数据

```
for i in range(nrows):
```

```
    print table.row_values(i)
```

单元格

```
cell_A1 = table.cell(0,0).value
```

```
cell_C4 = table.cell(2,3).value
```

使用行列索引

```
cell_A1 = table.row(0)[0].value
```

```
cell_A2 = table.col(1)[0].value
```

简单的写入

```
row = 0
```

```
col = 0
```

```
# 类型 0 empty, 1 string, 2 number, 3 date, 4 boolean, 5 error
```

```
ctype = 1 value = '单元格的值'
```

```
xf = 0 # 扩展的格式化
```

```
table.put_cell(row, col, ctype, value, xf)
```

```
table.cell(0,0) #单元格的值'
```

```
table.cell(0,0).value #单元格的值'
```

三、代码试例

```
1  #!/usr/bin/python
2  # coding:utf-8
3  # @author : csl
4  # @date : 2018/03/26 22:02
5  '''Excel表格操作'''
6
7  # 读写.xls表格03-07版
8  import xlrd
9  import xlwt
10 # 读写.xlsx表格07版
11 import openpyxl
12
13 def write_03_Excel(file_path):
14     wb = xlwt.Workbook() #打开excel文件
15     sheet = wb.add_sheet("测试表格2003") #添加表格名称
16     value = [["姓名", "年龄", "电话", "婚姻状况"],
17             ["范彬彬", "22", "18888888888", "已婚"],
18             ["袁姗姗", "25", "18999999999", "未婚"],
19             ["刘德华", "50", "17777777777", "已婚"],
20             ["张学友", "55", "15555555555", "已婚"],
21             ["郭富城", "55", "13333333333", "已婚"]]
```

```

22     for i in range(0, len(value)):
23         for e in range(0, len(value[i])):
24             sheet.write(i, e, value[i][e]) #i、e分别表示行和列
25         wb.save(file_path)
26         print("写入表格成功！")
27
28
29 def read_03_Excel(file_path):
30     wb = xlrd.open_workbook(file_path) #打开excel文件
31     r_sheet = wb.sheet_names() #查找所有的表名
32     work_sheet = wb.sheet_by_name(r_sheet[0]) #通过表名找到第一张表
33     for i in range(0, work_sheet.nrows): #循环所有行
34         row = work_sheet.row(i) #获取第i行
35         for j in range(0, work_sheet.ncols): #循环所有的列
36             print(work_sheet.cell_value(i, j), "\t", end="") #获取行和列的cell
37         print()
38
39
40 def wirte_07_Excel(file_path):
41     wb = openpyxl.Workbook() #打开文件
42     sheet = wb.active #激活sheet表格
43     sheet.title = "测试表格2007" #添加sheet表格名称
44     value = [["姓名", "年龄", "电话", "婚姻状况"],
45             ["范彬彬", "22", "18888888888", "已婚"],
46             ["袁姗姗", "25", "18999999999", "未婚"],
47             ["刘德华", "50", "17777777777", "已婚"],
48             ["张学友", "55", "15555555555", "已婚"],
49             ["郭富城", "55", "13333333333", "已婚"]]
50     for i in range(0, len(value)):
51         for j in range(0, len(value[i])):
52             sheet.cell(row=i+1, column=j+1, value=str(value[i][j])) #写入单元格
53         wb.save(file_path)
54         print("写入07表格成功")
55
56
57 def read_07_Excel(file_path):
58     wb = openpyxl.load_workbook(file_path) #打开文件
59     # sheet = wb.get_sheet_by_name("测试表格2007")
60     sheet = wb["测试表格2007"] #通过sheet名称锁定表格
61     for row in sheet.rows: #循环所有的行
62         for cell in row: #循环行中所有的单元格

```

```

63     print(cell.value, "\t", end="") #获取单元格的值
64     print()
65
66     file_03_excel = "./data/03excel.xls"
67     file_07_excel = "./data/07excel.xlsx"
68     write_03_Excel(file_03_excel)
69     read_03_Excel(file_03_excel)
70     write_07_Excel(file_07_excel)
71     read_07_Excel(file_07_excel)

```

以下是我自己编写的程序，上面的例子有一些不好用

```

1  #!/usr/bin/python3
2  # coding:utf-8
3  # @author : gswu
4  # @date :2018/11/28 14:04
5
6  # 读写xls表格03-07
7  import xlrd
8  import xlwt
9  #读写xlsx表格07版
10 import openpyxl
11 from tkinter import font
12
13 def write_03_excel(myfilepath):
14     #myfilepath="F:/testpy.xls"
15     #初始化一个excel
16     wb = xlwt.Workbook(encoding='utf-8')
17     #新建一个sheet
18     sheet = wb.add_sheet("test01") #添加表格名称
19     mystyle=xlwt.XFStyle() #初始化样式
20     font=xlwt.Font()#创建字体
21     font.name=u'微软雅黑' #字体类型
22     font.colour_index=6 #字体颜色
23     font.underline = True #下划线
24     font.italic=True#斜体
25     font.height=200#字体大小，200等于excel字体大小中的10
26     mystyle.font=font #设定样式
27     value = [["姓名", "年龄", "电话", "婚姻状况", "备注"],
28             ["范彬彬", "22", "18888888888", "已婚", "学生"],

```

```

29  ["袁姗姗", "25", "18999999999", "未婚", "学生"],
30  ["刘德华", "50", "17777777777", "已婚", "团支书"],
31  ["张学友", "55", "15555555555", "已婚", "学生"],
32  ["郭富城", "55", "13333333333", "已婚", "班长"]]
33  for i in range(0, len(value)):
34  for e in range(0, len(value[i])):
35  sheet.write(i, e, value[i][e], mystyle) #i和e分别表示行和列
36
37  wb.save(myfilepath)
38  print("写入表格成功", "路径为:", myfilepath)
39
40
41  def read_03_excel(myfilepath):
42  #myfilepath="F:/testpy.xls"
43  wb=xlrd.open_workbook(myfilepath)#打开excel文件
44  r_sheet=wb.sheet_names()#查找所有表的名字
45  print("表名字: ", r_sheet)
46  work_sheet=wb.sheet_by_name(r_sheet[0])
47  print("work_sheet: ", work_sheet)
48  for i in range(0, work_sheet.nrows): #循环所有行
49  row=work_sheet.row(i) #获取第i行
50  print("第 %d行:" %(i), row)
51  for j in range(0, work_sheet.ncols):
52  print("第%d行, 第%d列单元格为: "%(i, j), work_sheet.cell_value(i, j))
53
54  #read_03_excel("F:/testdemo.xlsx")
55
56  #myfilepath="F:/test07py.xlsx"
57  def write_07_excel(myfilepath):
58  wb=openpyxl.Workbook() #打开文件
59  mysheet=wb.create_sheet(title="第一个sheet页", index=0)
60  #print(wb.get_sheet_names())
61  #mysheet.title ="test_sheet" #添加sheet页标题
62  myvalue = [["姓名", "年龄", "电话", "婚姻状况"],
63  ["范冰冰", "22", "18888888888", "已婚"],
64  ["袁姗姗", "25", "18999999999", "未婚"],
65  ["刘德华", "50", "17777777777", "已婚"],
66  ["张学友", "55", "15555555555", "已婚"],
67  ["郭富城", "55", "13333333333", "已婚"]]
68  for i in range(0, len(myvalue)):
69  for j in range(0, len(myvalue[i])):

```

```
70  mysheet.cell(row=i+1, column=j+1, value=myvalue[i][j])#写入单元格
71  wb.save(myfilepath)
72  print("07表格写入成功")
73
```