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#!/usr/bin/python
```

```
import xlrd
import xlwt
import xlutils.copy
```

```
# Variable definitions
```

```
path_to_file           = "Daten.xlsx"
ind_transactions       = 0
ind_store              = 1
col_store              = 3
col_salesperson        = 8
dict_stores_salespersons = {}
dict_stores_num_salesperson = {}
row_start              = 1
row_current            = row_start
```

```
##### Main #####
```

```
sheets                = xlrd.open_workbook(path_to_file)
sheet_transactions    = sheets.sheet_by_index(ind_transactions)
sheet_stores          = sheets.sheet_by_index(ind_store)
```

```
# Initialize dictionary with empty lists
```

```
for store in sheet_stores.col_values(0, 1):
    dict_stores_salespersons[store] = []
```

```
# Fill dictionary with salesperson for each store
```

```
for store in sheet_transactions.col_values(col_store, row_start):
    salesperson = sheet_transactions.cell_value(row_current, col_salesperson)
    dict_stores_salespersons[store].append(salesperson)
    row_current += 1
```

```
# Create dict with number of unique salespersons for each store
```

```
for store in dict_stores_salespersons:
    num_salesperson = len(set(dict_stores_salespersons[store]))
    dict_stores_num_salesperson[store] = num_salesperson
    print "number of unique salespersons in store %.0f: %d" % (store, dict_stores_num_salesperson[store])
```

```
##### Output #####
```

```
sheets_copied = xlutils.copy.copy(sheets)
write_sheet_stores = sheets_copied.get_sheet(ind_store)
```

```
# Create new entries in Store_File
```

```
write_sheet_stores.write(0, sheet_stores.ncols, 'num_salesperson')
```

```
for row in range(1, sheet_stores.nrows):
    store = sheet_stores.cell_value(row, 0)
    write_sheet_stores.write(row, sheet_stores.ncols, dict_stores_num_salesperson[store])
```

```
# Save to path_to_file
```

```
sheets_copied.save(path_to_file)
```