Python Class Exercise Set 6

Sorting

Exercise

```
var = [45, 30, 21, 50]

sortvar = sorted(var)
print (sortvar)

sortvar = sorted(var, reverse=True)
print (sortvar)
```

Exercise

```
from operator import itemgetter

var = [('Carl', 45), ('Amy', 30), ('Zach', 21), ('Jane', 50)]

sortvar = sorted(var)
print (sortvar)

sortvar = sorted(var, key=itemgetter(1))
print (sortvar)

sortvar = sorted(var, key=itemgetter(1), reverse=True)
print (sortvar)
```

Exercise

```
from operator import itemgetter

var = {'Carl':45, 'Amy':30, 'Zach':21, 'Jane':50}

sortvar = sorted(var.items())
print (sortvar)

sortvar = sorted(var.items(), key=itemgetter(1))
print (sortvar)

sortvar = sorted(var.items(), key=itemgetter(1), reverse=True)
print (sortvar)
```

Nested For Loops

Exercise

```
nl = [
     [10, 20, 30],
     [100, 200, 300, 400],
     [1000, 2000, 3000, 4000, 5000]]

for i in range(len(nl)):
     for j in range(len(nl[i])):
          print ("element", i,j, "is:", nl[i][j])
```

Exercise

```
IMDB = {
    'Alfred Hitchcock': {'Family Plot': '6.8', 'Rebecca': '8.2', 'Spellbound': '7.6'},
    'Mel Gibson': {'Apocalypto': '7.8', 'Braveheart': '8.4'},
    'Mel Brooks': {'Spaceballs': '7.1', 'History of the World: Part I': '6.9'},
    'Ang Lee': {'Life of Pi': '8', 'The Ice Storm': '7.5'},
    'J.J. Abrams': {'Star Trek': '8', 'Star Trek Into Darkness': '7.8'},
    'Clint Eastwood': {'J. Edgar': '6.6', 'The Bridges of Madison County': '7.5'}}

for director, movieRatings in IMDB.items():
    print (director)
    for movie, rating in movieRatings.items():
        print (movie, rating)
    print ("-"*11)
```