

Exercise 2.2-2:

My python version implementation of selection sort is as follows:

```
import re

def selection_sort(a):
    n = len(a)
    for i in xrange(n - 1):
        mi = i
        for j in xrange(i + 1, n):
            if a[j] < a[mi]:
                mi = j
        a[i], a[mi] = a[mi], a[i]

def main():
    a = [31, 64, 12, 8, 4532, 22, 13, 31]
    print(' '.join(map(str, a)))
    selection_sort(a)
    print(' '.join(map(str, a)))

if __name__ == '__main__':
    main()
```

Number of comparisons is always $\Theta(n^2)$.

Number of swaps is 0 in best case, $\Theta(n)$ in worst case.