

CS401 Lab 3: Runtime Complexity and Selection Sort

Output

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1. In Eclipse

```
Before sorting, part of the array:
90377 55278 52402 31297 47625 99032 64212 45968 11766 42597
96696 41406 43109 19141 37906 20119 19160 36226 94736 12747
70654 34234 52522 27026 25365 51064 54024 25888 65248 67358
49437 38919 34979 65985 74657 69107 23659 65841 98141 18086
36139 91284 58880 60129 41073 82094 31518 90235 36839 74750
14695 78273 49269 42584 89974 95962 14483 57386 54816 92118
83068 39854 63852 36163 81951 59339 74882 44763 75279 62216
14652 38589 94266 54735 87209 29158 67527 12169 95328 11356
16040 44891 20786 46471 33071 80413 91992 91852 80077 64931
38107 16343 82150 46010 53459 26933 74928 93472 40183 70748

Execution time: 23.0 ms

After sorting, part of the array:
10002 10012 10018 10032 10036 10048 10052 10052 10053 10065
10067 10072 10081 10097 10097 10117 10121 10124 10132 10135
10139 10141 10152 10153 10158 10160 10177 10182 10190 10196
10221 10236 10242 10262 10265 10266 10298 10317 10322 10335
10337 10344 10354 10358 10402 10407 10417 10441 10453 10456
10459 10492 10507 10523 10524 10538 10542 10550 10559 10559
10566 10571 10576 10577 10579 10600 10614 10619 10621 10646
10651 10658 10659 10680 10687 10691 10696 10702 10704 10712
10713 10716 10736 10753 10753 10754 10755 10763 10766 10771
10780 10784 10785 10789 10800 10806 10809 10810 10815 10823
```

2. JAR File Execution

```
Anaconda Powershell Prompt
Illinois Institute of Technology\Documents\Fall 24\CS_401\0918\CS401-lab03_Seonghwan-Lim"
(base) PS C:\Users\qube2\OneDrive - Illinois Institute of Technology\Documents\Fall 24\CS_401\0918\CS401-lab03_Seonghwan-Lim> java -jar SelectionSort.jar
Before sorting, part of the array:
58626 39606 48949 57624 62409 98895 29989 72469 74768 72612
71781 80251 99677 65208 27254 29231 21454 99600 13139 84658
85738 81206 28347 87792 37510 76185 94326 98836 68628 46463
57800 61803 44902 36584 41892 37716 12608 36560 97992 85232
52556 58416 34422 65995 98486 24129 11170 20551 69735 54687
48903 61842 91200 85254 97477 24132 64204 26556 60213 23767
88392 90555 98749 81410 86143 99544 93550 25460 61341 12293
14074 43290 50997 25855 94964 28061 91470 78293 71680 45067
47576 24934 74681 84592 69084 36821 46129 20976 33106 39964
58291 73060 22140 92666 92276 52463 25456 27547 61768 75980

Execution time: 22.0 ms

After sorting, part of the array:
10011 10035 10035 10044 10054 10061 10076 10090 10091 10133
10135 10154 10166 10167 10170 10171 10215 10217 10220 10237
10244 10257 10258 10281 10293 10295 10313 10334 10340 10342
10357 10381 10382 10382 10391 10405 10408 10431 10434 10444
10452 10455 10456 10457 10465 10476 10482 10488 10493 10502
10525 10528 10530 10542 10562 10575 10578 10587 10613 10626
10632 10643 10652 10668 10674 10680 10691 10705 10711 10733
10736 10747 10753 10754 10764 10785 10785 10802 10803 10815
10819 10824 10841 10852 10873 10911 10917 10924 10937 10979
10982 10986 11029 11030 11052 11056 11062 11085 11091 11091
(base) PS C:\Users\qube2\OneDrive - Illinois Institute of Technology\Documents\Fall 24\CS_401\0918\CS401-lab03_Seonghwan-Lim>
```