

# quickselect Q & A

Bruce Lilly  
bruce.lilly@gmail.com

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## 1 Q & A

1. Q: Other *qsort* functions are much simpler than *quickselect*. Why is *quickselect* so complex?  
A: *Quickselect* performs multiple order statistic selection in addition to sorting, can retain partial order stability, can internally handle details of indirect sorting and selection, and provides protection against adverse inputs. Each of those capabilities requires some additional complexity. Eliminating those additional capabilities can result in a version of *qsort* with some improvements over existing implementations (e.g. better performance with large arrays, and with some common structured input sequences) with little increase in complexity.
2. Q: The implementation of *quickselect* is in C. Is there a version in <some other language>?  
A: *Quickselect* is written in C for performance, portability, and for compatibility with *qsort*. The concepts can be used for implementations in other languages, subject to the limitations of those languages.
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