

## Q6. Profiling Quick Sort

Unfortunately I get errors for exceeding the stack space when trying to execute my recursive Quick Sort on arrays larger than  $10^3$  so I couldn't benchmark all the way up to  $10^6$

	user	system	total	real
Random: 1	0.000000	0.000000	0.000000	( 0.000009)
Random: 2	0.000000	0.000000	0.000000	( 0.000009)
Random: 10	0.000000	0.000000	0.000000	( 0.000013)
Random: $10^2$	0.000000	0.000000	0.000000	( 0.000172)
Random: $10^3$	0.000000	0.000000	0.000000	( 0.003330)

  

	user	system	total	real
Reverse: 2..1	0.000000	0.000000	0.000000	( 0.000006)
Reverse: 10..1	0.000000	0.000000	0.000000	( 0.000017)
Reverse: $10^2$ ..1	0.000000	0.000000	0.000000	( 0.001127)
Reverse: $10^3$ ..1	0.100000	0.000000	0.100000	( 0.099556)

  

	user	system	total	real
All 1's: 1	0.000000	0.000000	0.000000	( 0.000006)
All 1's: 2	0.000000	0.000000	0.000000	( 0.000006)
All 1's: 10	0.000000	0.000000	0.000000	( 0.000015)
All 1's: $10^2$	0.000000	0.000000	0.000000	( 0.000589)
All 1's: $10^3$	0.040000	0.000000	0.040000	( 0.048234)