



PLATINUM JUBILEE
Celebrating 75 years of WCE & 20 years of Department



Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Department of Information Technology

Computer Algorithms

Assignment 1

Submitted by

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Profile output using gprof:

```
rutuja@ubuntu:~/Desktop$ gcc -Wall -pg quick_sort.c -o qs
rutuja@ubuntu:~/Desktop$ gprof ./qs
Flat profile:

Each sample counts as 0.01 seconds.
%   cumulative   self           calls   self   total    name
time   seconds  seconds             ms/call  ms/call  name
101.01      0.10      0.10           10000      0.01     0.01  partition
  0.00      0.10      0.00           10000      0.00     0.00  swap
  0.00      0.10      0.00              1      0.00    101.01  QuickSort
```

Call graph (explanation follows)

granularity: each sample hit covers 2 byte(s) for 9.90% of 0.10 seconds

index	% time	self	children	called	name
		0.10	0.00	10000/10000	QuickSort [2]
[1]	100.0	0.10	0.00	10000	partition [1]
		0.00	0.00	10000/10000	swap [4]

				20000	QuickSort [2]
		0.00	0.10	1/1	main [3]
[2]	100.0	0.00	0.10	1+20000	QuickSort [2]
		0.10	0.00	10000/10000	partition [1]
				20000	QuickSort [2]

					<spontaneous>
[3]	100.0	0.00	0.10		main [3]
		0.00	0.10	1/1	QuickSort [2]

		0.00	0.00	10000/10000	partition [1]
[4]	0.0	0.00	0.00	10000	swap [4]

This table describes the call tree of the program, and was sorted by the total amount of time spent in each function and its children.