```
Convex hull algorithms comparison for 1000
  0.35
  0.30 -
  0.25
0.20 -
  0.15 -
  0.10 -
  0.05
```



Quick hull

Gift wrap

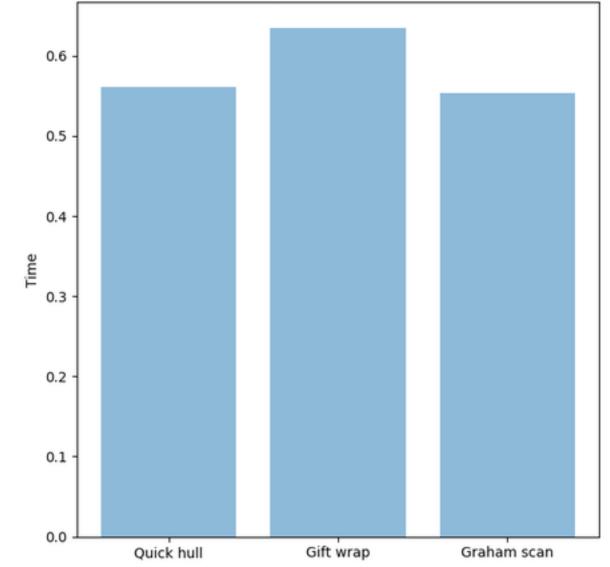
Graham scan

0.00 -

```
-/Sem_2-2/algo/CS-212-Assignments/Assignment-4(master*) » python2 convex_hull.py
('Quick hull': 0.3693571090698242, 'Gift wrap': 0.3613739013671875, 'Graham scan': 0.363869905
                                                                                                                                                            Convex hull algorithms comparison for 2000
                                                                                                                                       0.5
                                                                                                                                       0.4
                                                                                                                                       0.3
                                                                                                                                    Time
                                                                                                                                       0.2
                                                                                                                                       0.1
                                                                                                                                       0.0
                                                                                                                                                        Quick hull
                                                                                                                                                                                        Gift wrap
                                                                                                                                                                                                                     Graham scan
```

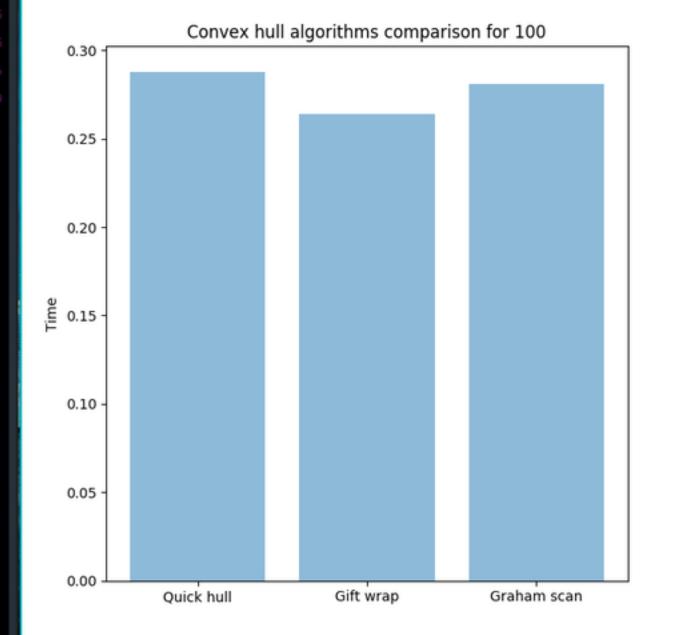
~/Sem_2-2/algo/CS-212-Assignments/Assignment-4(master*) » python2 convex_hull.py {'Quick hull': 0.3693571090698242, 'Gift wrap': 0.3613739013671875, 'Graham scan': 0.363869905 47180176} {'Quick hull': 0.41518497467041016, 'Gift wrap': 0.5090310573577881, 'Graham scan': 0.48417115 211486816} {'Quick hull': 0.5615208148956299, 'Gift wrap': 0.6348710060119629, 'Graham scan': 0.553371906 2805176}







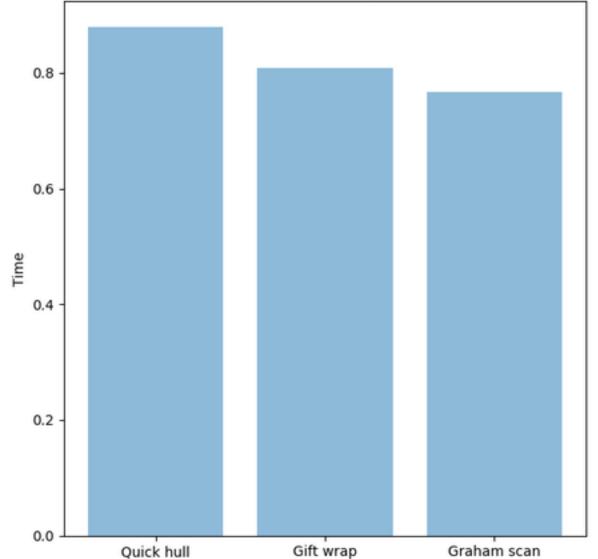
```
('Quick hull': 0.3693571090698242, 'Gift wrap': 0.3613739013671875, 'Graham scan': 0.3638699 (7180176) ('Quick hull': 0.41518497467041016, 'Gift wrap': 0.5090310573577881, 'Graham scan': 0.484171 (11486816) ('Quick hull': 0.5615208148956299, 'Gift wrap': 0.6348710060119629, 'Graham scan': 0.5533719 (805176) ('Quick hull': 0.28789782524108887, 'Gift wrap': 0.26407599449157715, 'Graham scan': 0.28094 (99859619)
```





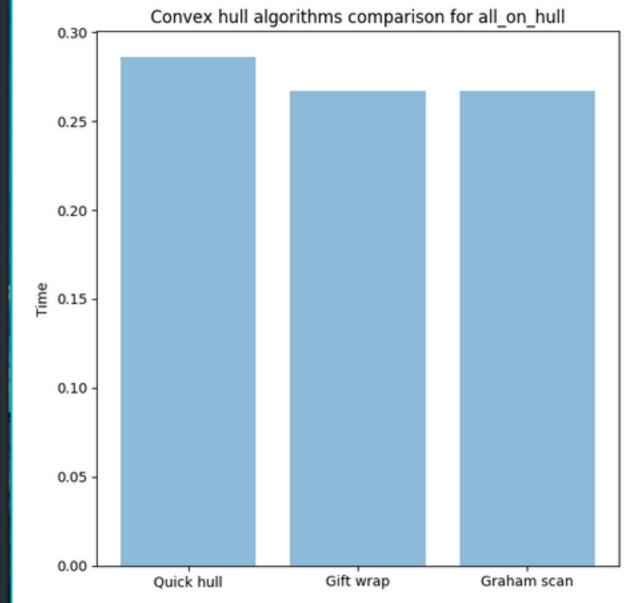
```
'Sem_2-2/algo/CS-212-Assignments/Assignment-4(master*) > python2 convex_hull.py
('Quick hull': 0.3693571090698242, 'Gift wrap': 0.3613739013671875, 'Graham scan': 0.3638699(47180176)
{'Quick hull': 0.41518497467041016, 'Gift wrap': 0.5090310573577881, 'Graham scan': 0.484171(211486816)
{'Quick hull': 0.5615208148956299, 'Gift wrap': 0.6348710060119629, 'Graham scan': 0.5533719(2805176)
{'Quick hull': 0.28789782524108887, 'Gift wrap': 0.26407599449157715, 'Graham scan': 0.28094(599859619)
{'Quick hull': 0.8799910545349121, 'Gift wrap': 0.8087239265441895, 'Graham scan': 0.7663340(384248)
]
```







```
/Sem_2-2/algo/CS-212-Assignments/Assignment-4(master*) » python2 convex_hull.py
'Quick hull': 0.3693571090698242, 'Gift wrap': 0.3613739013671875, 'Graham scan': 0.363869905
7180176}
'Quick hull': 0.41518497467041016, 'Gift wrap': 0.5090310573577881, 'Graham scan': 0.48417115
11486816}
'Quick hull': 0.5615208148956299, 'Gift wrap': 0.6348710060119629, 'Graham scan': 0.553371906
805176}
'Quick hull': 0.28789782524108887, 'Gift wrap': 0.26407599449157715, 'Graham scan': 0.2809469
99859619}
'Quick hull': 0.8799910545349121, 'Gift wrap': 0.8087239265441895, 'Graham scan': 0.766334056
54248}
'Quick hull': 0.28624486923217773, 'Gift wrap': 0.266834020614624, 'Graham scan': 0.266970872
790283}
```





```
~/Sem_2-2/algo/CS-212-Assignments/Assignment-4(master*) » python2 convex_hull.py
{'Quick hull': 0.3693571090698242, 'Gift wrap': 0.3613739013671875, 'Graham scan': 0.36386990
47180176}
{'Quick hull': 0.41518497467041016, 'Gift wrap': 0.5090310573577881, 'Graham scan': 0.4841711
211486816}
{'Quick hull': 0.5615208148956299, 'Gift wrap': 0.6348710060119629, 'Graham scan': 0.55337190
2805176}
{'Quick hull': 0.28789782524108887, 'Gift wrap': 0.26407599449157715, 'Graham scan': 0.280946
699859619}
{'Quick hull': 0.8799910545349121, 'Gift wrap': 0.8087239265441895, 'Graham scan': 0.76633405
854248}
{'Quick hull': 0.28624486923217773, 'Gift wrap': 0.266834020614624, 'Graham scan': 0.26697087
8790283}
{'Quick hull': 0.3930320739746094, 'Gift wrap': 0.36215996742248535, 'Graham scan': 0.4799959
59576416}
```

