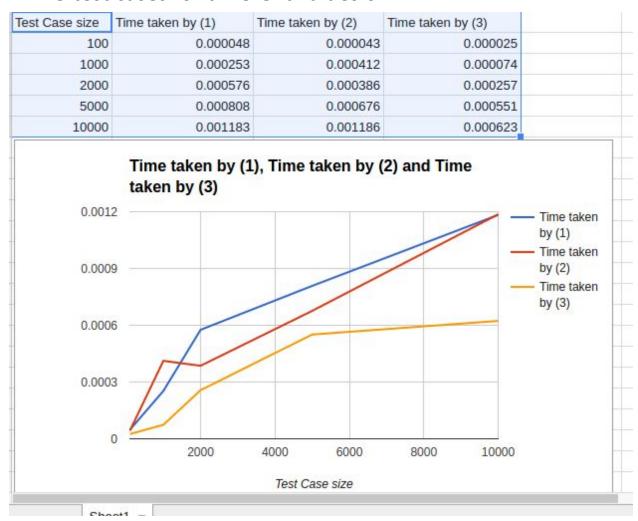
NAME: AKASH GUPTA

ENR. NO.: 15114004

- 1. Gift Wrapping Algorithm
- 2. Graham Scan
- 3. Quickhull

## A. 5 test cases for different values of n.



- B. For fixed size test cases of different shape of convex hull
  - Test 1
     points

(48 41) (49 14) (83 30) (97 34) (86 48) (84 16) (22 30) (21 69) (93 46) (50 31)

## 2. Test 2

10 points (26 67) (35 2) (59 47) (37 12) (38 51) (91 32) (37 35) (53 40) (20 16) (18 13)

## 3. Test 3

10 points
(0 1) (2 0) (4 0) (10 1) (11 3) (11 6) (10 10) (7 11) (3 11) (0 10)

Test case no.	No. of points on hull	Time on 1	Time on 2	Time on 3
1	6	$6 \times 10^{-6}$	$2\times10^{-6}$	$1.5 \times 10^{-6}$
2	4	$2.1 \times 10^{-6}$	$1.4 \times 10^{-6}$	$1.3 \times 10^{-6}$
3	10	$2.4 \times 10^{-6}$	$2.7 \times 10^{-6}$	$1.9 \times 10^{-6}$