

```

-----
DUPLICATES: {1}
0(n^2)Time 0(1)Space n = 3 CPU 3.7e-05 secs
0  1  2
1  1  1
DUPLICATES: {1}
0(n)Time 0(n)Space  n = 3 CPU 4e-06 secs
0  1  2
1  1  1
DUPLICATES: {1}
0(n)Time 0(1)Space n = 3 CPU 1.7e-05 secs
0  1  2
1  1  1
-----

```

```

-----
DUPLICATES: {0}
0(n^2)Time 0(1)Space n = 4 CPU 3e-06 secs
0  1  2  3
1  0  0  0
DUPLICATES: {0}
0(n)Time 0(n)Space  n = 4 CPU 4e-06 secs
0  1  2  3
1  0  0  0
DUPLICATES: {0}
0(n)Time 0(1)Space n = 4 CPU 4e-06 secs
0  1  2  3
1  0  0  0
-----

```

```

-----
DUPLICATES: {1, 3, 6}
0(n^2)Time 0(1)Space n = 7 CPU 4e-06 secs
0  1  2  3  4  5  6
1  2  3  1  3  6  6
DUPLICATES: {1, 3, 6}
0(n)Time 0(n)Space  n = 7 CPU 4e-06 secs
0  1  2  3  4  5  6
1  2  3  1  3  6  6
DUPLICATES: {1, 3, 6}
0(n)Time 0(1)Space n = 7 CPU 1.8e-05 secs
0  1  2  3  4  5  6
1  2  3  1  3  6  6
-----

```

```

-----
DUPLICATES: {1, 3, 0}
0(n^2)Time 0(1)Space n = 7 CPU 4e-06 secs
0  1  2  3  4  5  6
1  2  3  1  3  0  0
DUPLICATES: {1, 3, 0}
0(n)Time 0(n)Space  n = 7 CPU 4e-06 secs
0  1  2  3  4  5  6

```

1 2 3 1 3 0 0

DUPLICATES: {1, 3, 0}

0(n)Time 0(1)Space n = 7 CPU 2.3e-05 secs

0 1 2 3 4 5 6

1 2 3 1 3 0 0

DUPLICATES: {0}

0(n^2)Time 0(1)Space n = 3 CPU 3e-06 secs

0 1 2

0 0 1

DUPLICATES: {0}

0(n)Time 0(n)Space n = 3 CPU 1.7e-05 secs

0 1 2

0 0 1

DUPLICATES: {0}

0(n)Time 0(1)Space n = 3 CPU 2.3e-05 secs

0 1 2

0 0 1

0(n^2)Time 0(1)Space n = 4 CPU 2e-06 secs

0 1 2 3

3 2 0 1

0(n)Time 0(n)Space n = 4 CPU 2e-06 secs

0 1 2 3

3 2 0 1

0(n)Time 0(1)Space n = 4 CPU 2e-06 secs

0 1 2 3

3 2 0 1

0(n^2)Time 0(1)Space n = 10000 CPU 0.113288 secs

0(n)Time 0(n)Space n = 10000 CPU 0.000115 secs

0(n)Time 0(1)Space n = 10000 CPU 0.000114 secs

0(n^2)Time 0(1)Space n = 20000 CPU 0.430768 secs

0(n)Time 0(n)Space n = 20000 CPU 0.000236 secs

0(n)Time 0(1)Space n = 20000 CPU 0.000206 secs

0(n^2)Time 0(1)Space n = 30000 CPU 0.992107 secs

0(n)Time 0(n)Space n = 30000 CPU 0.000337 secs

0(n)Time 0(1)Space n = 30000 CPU 0.000297 secs

0(n^2)Time 0(1)Space n = 40000 CPU 1.75697 secs

0(n)Time 0(n)Space n = 40000 CPU 0.000456 secs

0(n)Time 0(1)Space n = 40000 CPU 0.000658 secs

0(n^2)Time 0(1)Space n = 50000 CPU 2.75415 secs

0(n)Time 0(n)Space n = 50000 CPU 0.00083 secs

0(n)Time 0(1)Space n = 50000 CPU 0.000474 secs

0(n^2)Time 0(1)Space n = 60000 CPU 3.96267 secs

0(n)Time 0(n)Space n = 60000 CPU 0.000683 secs

0(n)Time 0(1)Space n = 60000 CPU 0.000654 secs

0(n^2)Time 0(1)Space n = 70000 CPU 5.40944 secs

0(n)Time 0(n)Space n = 70000 CPU 0.000797 secs
0(n)Time 0(1)Space n = 70000 CPU 0.000679 secs
0(n^2)Time 0(1)Space n = 80000 CPU 7.24665 secs
0(n)Time 0(n)Space n = 80000 CPU 0.00096 secs
0(n)Time 0(1)Space n = 80000 CPU 0.000944 secs
0(n^2)Time 0(1)Space n = 90000 CPU 9.04793 secs
0(n)Time 0(n)Space n = 90000 CPU 0.00123 secs
0(n)Time 0(1)Space n = 90000 CPU 0.000962 secs
0(n^2)Time 0(1)Space n = 100000 CPU 11.1291 secs
0(n)Time 0(n)Space n = 100000 CPU 0.0012 secs
0(n)Time 0(1)Space n = 100000 CPU 0.001066 secs
0(n^2)Time 0(1)Space n = 110000 CPU 13.3948 secs
0(n)Time 0(n)Space n = 110000 CPU 0.001358 secs
0(n)Time 0(1)Space n = 110000 CPU 0.001102 secs
0(n^2)Time 0(1)Space n = 120000 CPU 15.8689 secs
0(n)Time 0(n)Space n = 120000 CPU 0.001883 secs
0(n)Time 0(1)Space n = 120000 CPU 0.001368 secs
0(n^2)Time 0(1)Space n = 130000 CPU 18.5449 secs
0(n)Time 0(n)Space n = 130000 CPU 0.001657 secs
0(n)Time 0(1)Space n = 130000 CPU 0.001473 secs
0(n^2)Time 0(1)Space n = 140000 CPU 21.5639 secs
0(n)Time 0(n)Space n = 140000 CPU 0.001811 secs
0(n)Time 0(1)Space n = 140000 CPU 0.00157 secs
0(n^2)Time 0(1)Space n = 150000 CPU 24.7423 secs
0(n)Time 0(n)Space n = 150000 CPU 0.002045 secs
0(n)Time 0(1)Space n = 150000 CPU 0.001853 secs
0(n^2)Time 0(1)Space n = 160000 CPU 28.0541 secs
0(n)Time 0(n)Space n = 160000 CPU 0.002231 secs
0(n)Time 0(1)Space n = 160000 CPU 0.002269 secs
0(n^2)Time 0(1)Space n = 170000 CPU 31.8072 secs
0(n)Time 0(n)Space n = 170000 CPU 0.002136 secs
0(n)Time 0(1)Space n = 170000 CPU 0.002019 secs
0(n^2)Time 0(1)Space n = 180000 CPU 35.6363 secs
0(n)Time 0(n)Space n = 180000 CPU 0.002308 secs
0(n)Time 0(1)Space n = 180000 CPU 0.001957 secs
0(n^2)Time 0(1)Space n = 190000 CPU 39.7454 secs
0(n)Time 0(n)Space n = 190000 CPU 0.002514 secs
0(n)Time 0(1)Space n = 190000 CPU 0.002671 secs
0(n^2)Time 0(1)Space n = 200000 CPU 43.9815 secs
0(n)Time 0(n)Space n = 200000 CPU 0.0025 secs
0(n)Time 0(1)Space n = 200000 CPU 0.002255 secs
0(n^2)Time 0(1)Space n = 210000 CPU 49.3031 secs
0(n)Time 0(n)Space n = 210000 CPU 0.002749 secs
0(n)Time 0(1)Space n = 210000 CPU 0.002337 secs
0(n^2)Time 0(1)Space n = 220000 CPU 53.8132 secs
0(n)Time 0(n)Space n = 220000 CPU 0.002855 secs
0(n)Time 0(1)Space n = 220000 CPU 0.002544 secs
0(n^2)Time 0(1)Space n = 230000 CPU 58.6625 secs
0(n)Time 0(n)Space n = 230000 CPU 0.003549 secs
0(n)Time 0(1)Space n = 230000 CPU 0.002666 secs

0(n^2)Time 0(1)Space n = 240000 CPU 63.8376 secs
0(n)Time 0(n)Space n = 240000 CPU 0.003268 secs
0(n)Time 0(1)Space n = 240000 CPU 0.003165 secs
0(n^2)Time 0(1)Space n = 250000 CPU 69.1244 secs
0(n)Time 0(n)Space n = 250000 CPU 0.003305 secs
0(n)Time 0(1)Space n = 250000 CPU 0.003366 secs
0(n^2)Time 0(1)Space n = 260000 CPU 73.1581 secs
0(n)Time 0(n)Space n = 260000 CPU 0.00383 secs
0(n)Time 0(1)Space n = 260000 CPU 0.003412 secs
0(n^2)Time 0(1)Space n = 270000 CPU 77.9154 secs
0(n)Time 0(n)Space n = 270000 CPU 0.003551 secs
0(n)Time 0(1)Space n = 270000 CPU 0.002898 secs
0(n^2)Time 0(1)Space n = 280000 CPU 84.0601 secs
0(n)Time 0(n)Space n = 280000 CPU 0.003705 secs
0(n)Time 0(1)Space n = 280000 CPU 0.003095 secs
0(n^2)Time 0(1)Space n = 290000 CPU 89.8976 secs
0(n)Time 0(n)Space n = 290000 CPU 0.003901 secs
0(n)Time 0(1)Space n = 290000 CPU 0.003167 secs
0(n^2)Time 0(1)Space n = 300000 CPU 96.2553 secs
0(n)Time 0(n)Space n = 300000 CPU 0.003948 secs
0(n)Time 0(1)Space n = 300000 CPU 0.003276 secs
0(n^2)Time 0(1)Space n = 310000 CPU 102.991 secs
0(n)Time 0(n)Space n = 310000 CPU 0.003987 secs
0(n)Time 0(1)Space n = 310000 CPU 0.003597 secs
0(n^2)Time 0(1)Space n = 320000 CPU 109.775 secs
0(n)Time 0(n)Space n = 320000 CPU 0.004363 secs
0(n)Time 0(1)Space n = 320000 CPU 0.003791 secs
0(n^2)Time 0(1)Space n = 330000 CPU 117.134 secs
0(n)Time 0(n)Space n = 330000 CPU 0.004402 secs
0(n)Time 0(1)Space n = 330000 CPU 0.004134 secs
0(n^2)Time 0(1)Space n = 340000 CPU 123.713 secs
0(n)Time 0(n)Space n = 340000 CPU 0.004488 secs
0(n)Time 0(1)Space n = 340000 CPU 0.003943 secs
0(n^2)Time 0(1)Space n = 350000 CPU 131.221 secs
0(n)Time 0(n)Space n = 350000 CPU 0.005246 secs
0(n)Time 0(1)Space n = 350000 CPU 0.004006 secs
0(n^2)Time 0(1)Space n = 360000 CPU 138.683 secs
0(n)Time 0(n)Space n = 360000 CPU 0.005594 secs
0(n)Time 0(1)Space n = 360000 CPU 0.004091 secs
0(n^2)Time 0(1)Space n = 370000 CPU 147.11 secs
0(n)Time 0(n)Space n = 370000 CPU 0.004898 secs
0(n)Time 0(1)Space n = 370000 CPU 0.004685 secs
0(n^2)Time 0(1)Space n = 380000 CPU 154.425 secs
0(n)Time 0(n)Space n = 380000 CPU 0.005863 secs
0(n)Time 0(1)Space n = 380000 CPU 0.004336 secs
0(n^2)Time 0(1)Space n = 390000 CPU 162.95 secs
0(n)Time 0(n)Space n = 390000 CPU 0.00498 secs
0(n)Time 0(1)Space n = 390000 CPU 0.004911 secs
0(n^2)Time 0(1)Space n = 400000 CPU 171.383 secs
0(n)Time 0(n)Space n = 400000 CPU 0.005289 secs

0(n)Time 0(1)Space n = 400000 CPU 0.004995 secs
0(n^2)Time 0(1)Space n = 410000 CPU 180.5 secs
0(n)Time 0(n)Space n = 410000 CPU 0.00524 secs
0(n)Time 0(1)Space n = 410000 CPU 0.004742 secs
0(n^2)Time 0(1)Space n = 420000 CPU 188.91 secs
0(n)Time 0(n)Space n = 420000 CPU 0.005618 secs
0(n)Time 0(1)Space n = 420000 CPU 0.004677 secs
0(n^2)Time 0(1)Space n = 430000 CPU 198.276 secs
0(n)Time 0(n)Space n = 430000 CPU 0.005568 secs
0(n)Time 0(1)Space n = 430000 CPU 0.005734 secs
0(n^2)Time 0(1)Space n = 440000 CPU 207.443 secs
0(n)Time 0(n)Space n = 440000 CPU 0.005836 secs
0(n)Time 0(1)Space n = 440000 CPU 0.005219 secs
0(n^2)Time 0(1)Space n = 450000 CPU 217.263 secs
0(n)Time 0(n)Space n = 450000 CPU 0.006073 secs
0(n)Time 0(1)Space n = 450000 CPU 0.005017 secs
0(n^2)Time 0(1)Space n = 460000 CPU 226.886 secs
0(n)Time 0(n)Space n = 460000 CPU 0.006508 secs
0(n)Time 0(1)Space n = 460000 CPU 0.005213 secs
0(n^2)Time 0(1)Space n = 470000 CPU 237.08 secs
0(n)Time 0(n)Space n = 470000 CPU 0.006245 secs
0(n)Time 0(1)Space n = 470000 CPU 0.00548 secs
0(n^2)Time 0(1)Space n = 480000 CPU 247.415 secs
0(n)Time 0(n)Space n = 480000 CPU 0.007341 secs
0(n)Time 0(1)Space n = 480000 CPU 0.006206 secs
0(n^2)Time 0(1)Space n = 490000 CPU 257.473 secs
0(n)Time 0(n)Space n = 490000 CPU 0.006286 secs
0(n)Time 0(1)Space n = 490000 CPU 0.006366 secs

500000 Random test cases passed

All test cases passed. You will get full grade now

Include only duplicateN.h duplicateN.cpp and the output of this program for FULL grade

RUN FINISHED; exit value 0; real time: 1h 12m 41s; user: 14s; system: 1h 12m 19s