

For input :

12

12 12

9 3

Output:

```
c Lingeling SAT Solver
c
c Version 1.0.0
c
c Copyright (C) 2010-2016 Armin Biere JKU Linz Austria.
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c
c released Thu Oct 3 10:02:02 IST 2024
c compiled Thu Oct 3 10:02:02 IST 2024
c
c Apple clang version 14.0.0 (clang-1400.0.29.202)
c -W -Wall -O3 -DNLGLOG -DNDEBUG -DNCHKSOL -DNLGLDRUPLIG -DNLGLYALSAT
c -DNLGLFILES -DNLGLDEMA
c Darwin Kovids-MacBook-Air.local 22.5.0 arm64
c
c
c
c seconds      irredundant      redundant clauses  glue  iterations"  MB  stability
c      variables clauses conflicts  large ternary binary  jlevel  jlevel'  agility  tlevel
c
c S    0.0      516      1510      0      0      0      0      0      0      0      0      0      1      0      0
c
c seconds      irredundant      redundant clauses  glue  iterations"  MB  stability
c      variables clauses conflicts  large ternary binary  jlevel  jlevel'  agility  tlevel
c
s UNSATISFIABLE
c
c 0.041 5% simplifying
c 0.785 95% search
c =====
c 0.826 100% all
c
c      40083 conflicts,      48505.9 confs/sec
c      187 ternaries,      214.3 confs/ternary
c      58 binaries,      691.1 confs/binary
c      11 iterations,      3643.9 confs/iteration
c
c      13 reductions,      15.7 redus/sec,      3083.3 confs/reduction
c      1008 restarts,      1219.8 rests/sec,      39.8 confs/restart
c      63478 decisions,      76817.1 decs/sec,      1.6 decs/conflict
c      807057 propagations,      976649.2 props/sec,      12.7 props/decision
c
c 0.8 seconds, 2.7 MB
```

For input:

12

12

9 9

Output:

```

c Darwin Kovid-MacBook-Air.local 22.5.0 arm64
c
c
c seconds      irredundant      redundant clauses  glue  iterations"  MB  stability
c      variables clauses conflicts large ternary binary  jlevel  jlevel'  agility  tlevel
c
c S    0.0      508      1508      0      0      0      0      0      0      0      0      0      1      0      0
c
c seconds      irredundant      redundant clauses  glue  iterations"  MB  stability
c      variables clauses conflicts large ternary binary  jlevel  jlevel'  agility  tlevel
c
s SATISFIABLE
v -1 -2 3 -4 -5 -6 7 -8 -9 -10 11 -12 -13 -14 15 -16 17 -18 -19 -20 -21 22 -23
v -24 25 -26 -27 -28 -29 30 -31 -32 33 -34 -35 -36 -37 38 -39 -40 -41 -42 43 -44
v -45 -46 -47 48 -49 -50 51 -52 -53 -54 -55 56 -57 -58 -59 60 -61 -62 -63 64 65
v -66 -67 -68 -69 70 -71 -72 73 -74 -75 -76 -77 78 -79 -80 -81 -82 83 -84 -85
v -86 87 -88 -89 -90 -91 92 -93 -94 95 -96 -97 -98 -99 100 101 -102 -103 -104
v -105 106 -107 -108 109 -110 -111 -112 -113 114 -115 -116 117 -118 -119 -120
v -121 122 -123 -124 -125 -126 127 -128 -129 -130 -131 132 -133 -134 -135 136
v -137 -138 139 -140 -141 -142 -143 144 145 -146 -147 -148 -149 150 -151 -152
v 153 -154 -155 -156 -157 158 -159 -160 161 -162 -163 -164 -165 166 -167 -168
v -169 -170 171 -172 -173 -174 -175 176 177 -178 -179 -180 -181 182 -183 -184
v -185 -186 -187 188 -189 -190 191 -192 193 -194 -195 -196 -197 198 -199 -200
v -201 -202 203 -204 205 -206 -207 -208 -209 210 -211 -212 -213 -214 215 -216
v -217 -218 -219 220 221 -222 -223 -224 -225 226 -227 -228 229 -230 -231 -232
v -233 234 -235 -236 -237 -238 -239 240 -241 -242 243 -244 -245 -246 247 -248
v -249 -250 -251 252 253 -254 -255 -256 -257 258 -259 -260 -261 -262 -263 264
v -265 -266 267 -268 -269 -270 271 -272 -273 -274 275 -276 -277 -278 279 -280
v -281 -282 283 -284 -285 -286 287 -288 -289 -290 -291 292 -293 -294 -295 296
v -297 -298 299 -300 301 -302 -303 -304 -305 306 -307 -308 -309 -310 311 -312
v -313 -314 -315 316 -317 -318 -319 320 -321 -322 -323 324 -325 -326 -327 328
v -329 -330 -331 332 -333 -334 -335 336 337 -338 -339 -340 -341 342 -343 -344
v -345 -346 -347 348 -349 -350 351 -352 -353 -354 355 -356 -357 -358 -359 360
v 361 -362 -363 -364 -365 366 -367 -368 -369 -370 371 -372 373 -374 -375 -376
v -377 378 -379 -380 -381 -382 383 -384 -385 -386 387 -388 389 -390 -391 -392
v -393 394 -395 -396 -397 -398 -399 400 -401 -402 -403 404 -405 -406 407 -408
v -409 -410 411 -412 -413 -414 -415 416 -417 -418 419 -420 -421 -422 423 -424
v -425 -426 -427 428 -429 -430 -431 432 -433 -434 435 -436 437 -438 -439 -440
v -441 442 -443 -444 -445 -446 447 -448 -449 -450 -451 452 -453 -454 -455 456
v 457 -458 -459 -460 -461 462 -463 -464 -465 -466 -467 468 -469 -470 -471 472
v -473 -474 475 -476 -477 -478 479 -480 -481 -482 -483 484 485 -486 -487 -488
v -489 490 -491 -492 -493 -494 -495 496 497 -498 -499 -500 -501 502 -503 -504
v -505 -506 507 -508 -509 -510 511 -512 513 -514 -515 -516 -517 518 -519 -520
v -521 -522 -523 524 -525 -526 -527 528 529 -530 -531 -532 -533 534 -535 -536
v 537 -538 -539 -540 -541 542 -543 -544 545 -546 -547 -548 -549 550 -551 -552
v -553 -554 -555 556 -557 -558 -559 560 561 -562 -563 -564 -565 566 -567 -568 0
c
c 0.023 99% simplifying
c 0.000 0% search
c =====
c 0.023 100% all
c
c      0 conflicts,      0.0 confs/sec
c      0 ternaries,      0.0 confs/ternary
c      0 binaries,      0.0 confs/binary
c      0 iterations,      0.0 confs/iteration
c
c      0 reductions,      0.0 redus/sec,      0.0 confs/reduction
c      0 restarts,      0.0 rests/sec,      0.0 confs/restart
c      47 decisions,      2056.1 decs/sec,      0.0 decs/conflict
c      2603 propagations, 113872.0 props/sec, 55.4 props/decision
c
c 0.0 seconds, 0.2 MB
(hope) kovid@Kovid-MacBook-Air:lingeling-master %

```