

\*\*\*\*\* reading edge list \*\*\*\*\*

```
( 16, 1) ( 16, 2) ( 16, 3) ( 16, 4) ( 16, 5) ( 16, 6) ( 16, 7)
( 16, 8) ( 16, 9) ( 16, 10) ( 16, 11) ( 16, 12) ( 16, 13) ( 16, 14)
( 16, 15) ( 15, 1) ( 15, 2) ( 15, 3) ( 15, 4) ( 15, 5) ( 15, 6)
( 15, 7) ( 15, 8) ( 15, 9) ( 15, 10) ( 15, 11) ( 15, 12) ( 15, 13)
( 15, 14) ( 14, 1) ( 14, 2) ( 14, 3) ( 14, 4) ( 14, 5) ( 14, 6)
( 14, 7) ( 14, 8) ( 14, 9) ( 14, 10) ( 14, 11) ( 14, 12) ( 14, 13)
( 13, 1) ( 13, 2) ( 13, 3) ( 13, 4) ( 13, 5) ( 13, 6) ( 13, 7)
( 13, 8) ( 13, 9) ( 13, 10) ( 13, 11) ( 13, 12) ( 12, 1) ( 12, 2)
( 12, 3) ( 12, 4) ( 12, 5) ( 12, 6) ( 12, 7) ( 12, 8) ( 12, 9)
( 12, 10) ( 12, 11) ( 11, 1) ( 11, 2) ( 11, 3) ( 11, 4) ( 11, 5)
( 11, 6) ( 11, 7) ( 11, 8) ( 11, 9) ( 11, 10) ( 1, 2) ( 1, 3)
( 1, 4) ( 1, 5) ( 1, 6) ( 1, 7) ( 1, 8) ( 1, 9) ( 1, 10)
( 2, 3) ( 2, 4) ( 2, 5) ( 2, 6) ( 2, 7) ( 2, 8) ( 2, 9)
( 2, 10) ( 3, 4) ( 3, 5) ( 3, 6) ( 3, 7) ( 3, 8) ( 3, 9)
( 3, 10) ( 4, 5) ( 4, 6) ( 4, 7) ( 4, 8) ( 4, 9) ( 4, 10)
( 5, 6) ( 5, 7) ( 5, 8) ( 5, 9) ( 5, 10) ( 6, 7) ( 6, 8)
( 6, 9) ( 6, 10) ( 7, 8) ( 7, 9) ( 7, 10) ( 8, 9) ( 8, 10)
( 9, 10)
```

VERTICES = 16 EDGES = 120

ORIGINAL

currentblock=0 no of block used for hashing

|                         |                         |
|-------------------------|-------------------------|
|                         | 87178291200 $x^1 y^0$   |
| 283465647360 $x^2 y^0$  | 392156797824 $x^3 y^0$  |
| 310989260400 $x^4 y^0$  | 159721605680 $x^5 y^0$  |
| 56663366760 $x^6 y^0$   | 14409322928 $x^7 y^0$   |
| 2681453775 $x^8 y^0$    | 368411615 $x^9 y^0$     |
| 37312275 $x^{10} y^0$   | 2749747 $x^{11} y^0$    |
| 143325 $x^{12} y^0$     | 5005 $x^{13} y^0$       |
| 105 $x^{14} y^0$        | 1 $x^{15} y^0$          |
| 87178291200 $x^0 y^1$   | 1040184875520 $x^1 y^1$ |
| 2485192724352 $x^2 y^1$ | 2758232568768 $x^3 y^1$ |
| 1781839521280 $x^4 y^1$ | 742271806640 $x^5 y^1$  |
| 210501307016 $x^6 y^1$  | 41813035264 $x^7 y^1$   |
| 5881504200 $x^8 y^1$    | 583234080 $x^9 y^1$     |
| 39871832 $x^{10} y^1$   | 1787968 $x^{11} y^1$    |
| 47320 $x^{12} y^1$      | 560 $x^{13} y^1$        |

|                           |                           |
|---------------------------|---------------------------|
| 843897519360 $x^0 y^2$    | 5668520717952 $x^1 y^2$   |
| 10604280469536 $x^2 y^2$  | 9609371893472 $x^3 y^2$   |
| 5091674948360 $x^4 y^2$   | 1724185390928 $x^5 y^2$   |
| 390462035964 $x^6 y^2$    | 60317705448 $x^7 y^2$     |
| 6355248900 $x^8 y^2$      | 447166720 $x^9 y^2$       |
| 19959940 $x^{10} y^2$     | 505960 $x^{11} y^2$       |
| 5460 $x^{12} y^2$         |                           |
| 4135916663424 $x^0 y^3$   | 19809894406848 $x^1 y^3$  |
| 30044729990912 $x^2 y^3$  | 22563122758176 $x^3 y^3$  |
| 9909786086200 $x^4 y^3$   | 2757086812480 $x^5 y^3$   |
| 505639073940 $x^6 y^3$    | 62089747720 $x^7 y^3$     |
| 5091466380 $x^8 y^3$      | 273473200 $x^9 y^3$       |
| 9269260 $x^{10} y^3$      | 185640 $x^{11} y^3$       |
| 1820 $x^{12} y^3$         |                           |
| 13804429133040 $x^0 y^4$  | 51417490524400 $x^1 y^4$  |
| 64716504234200 $x^2 y^4$  | 40849053525280 $x^3 y^4$  |
| 15067124442370 $x^4 y^4$  | 3497860696330 $x^5 y^4$   |
| 530311802020 $x^6 y^4$    | 53249175980 $x^7 y^4$     |
| 3525011490 $x^8 y^4$      | 149599450 $x^9 y^4$       |
| 3763760 $x^{10} y^4$      | 43680 $x^{11} y^4$        |
| 35551472552960 $x^0 y^5$  | 107707671409520 $x^1 y^5$ |
| 114553675083848 $x^2 y^5$ | 61619905258912 $x^3 y^5$  |
| 19368932542960 $x^4 y^5$  | 3819960043900 $x^5 y^5$   |
| 490057191624 $x^6 y^5$    | 41483658216 $x^7 y^5$     |
| 2307264960 $x^8 y^5$      | 81981900 $x^9 y^5$        |
| 1729728 $x^{10} y^5$      | 17472 $x^{11} y^5$        |
| 75771528126840 $x^0 y^6$  | 192089694401696 $x^1 y^6$ |
| 175289876902140 $x^2 y^6$ | 81460176581784 $x^3 y^6$  |
| 22156965020190 $x^4 y^6$  | 3782313569034 $x^5 y^6$   |
| 420207715928 $x^6 y^6$    | 30832269468 $x^7 y^6$     |
| 1484352870 $x^8 y^6$      | 44974930 $x^9 y^6$        |
| 752752 $x^{10} y^6$       | 4368 $x^{11} y^6$         |
| 139795842558008 $x^0 y^7$ | 302656193956480 $x^1 y^7$ |
| 240204191611956 $x^2 y^7$ | 97720517802336 $x^3 y^7$  |
| 23344840559040 $x^4 y^7$  | 3509089079496 $x^5 y^7$   |
| 344008172508 $x^6 y^7$    | 22254007776 $x^7 y^7$     |
| 933504000 $x^8 y^7$       | 23572120 $x^9 y^7$        |
| 280280 $x^{10} y^7$       |                           |

230337163743687  $x^0 y^8$   
 302375927709141  $x^2 y^8$   
 23193510139800  $x^4 y^8$   
 273749215740  $x^6 y^8$   
 588896880  $x^8 y^8$   
 120120  $x^{10} y^8$

432722797534599  $x^1 y^8$   
 109036253656473  $x^3 y^8$   
 3116181868800  $x^5 y^8$   
 15848392560  $x^7 y^8$   
 12784200  $x^9 y^8$

346709472549440  $x^0 y^9$   
 356315311469260  $x^2 y^9$   
 22087635810240  $x^4 y^9$   
 214039565740  $x^6 y^9$   
 367807440  $x^8 y^9$   
 40040  $x^{10} y^9$

572723689409300  $x^1 y^9$   
 115198751339100  $x^3 y^9$   
 2686389665960  $x^5 y^9$   
 11190058880  $x^7 y^9$   
 6606600  $x^9 y^9$

484953383644730  $x^0 y^{10}$   
 398640076869034  $x^2 y^{10}$   
 20392594222000  $x^4 y^{10}$   
 165178781768  $x^6 y^{10}$   
 224384160  $x^8 y^{10}$   
 8008  $x^{10} y^{10}$

712426123350942  $x^1 y^{10}$   
 116753196141582  $x^3 y^{10}$   
 2267974036328  $x^5 y^{10}$   
 7812492688  $x^7 y^{10}$   
 3163160  $x^9 y^{10}$

638642846914072  $x^0 y^{11}$   
 427997842782328  $x^2 y^{11}$   
 18396452492600  $x^4 y^{11}$   
 126140222208  $x^6 y^{11}$   
 134294160  $x^8 y^{11}$

842704240632436  $x^1 y^{11}$   
 114596737757684  $x^3 y^{11}$   
 1885351159328  $x^5 y^{11}$   
 5397135744  $x^7 y^{11}$   
 1441440  $x^9 y^{11}$

800007217106279  $x^0 y^{12}$   
 444602836209077  $x^2 y^{12}$   
 16304143387350  $x^4 y^{12}$   
 95463171804  $x^6 y^{12}$   
 78828750  $x^8 y^{12}$

956571016214723  $x^1 y^{12}$   
 109698916506361  $x^3 y^{12}$   
 1548674731968  $x^5 y^{12}$   
 3688332648  $x^7 y^{12}$   
 640640  $x^9 y^{12}$

961040671830512  $x^0 y^{13}$   
 449683559679536  $x^2 y^{13}$   
 14249329984890  $x^4 y^{13}$   
 71555904420  $x^6 y^{13}$   
 44414370  $x^8 y^{13}$

1049517922004384  $x^1 y^{13}$   
 102945750322128  $x^3 y^{13}$   
 1259469130920  $x^5 y^{13}$   
 2479877400  $x^7 y^{13}$   
 240240  $x^9 y^{13}$

1114391941059320  $x^0 y^{14}$   
 444997876724180  $x^2 y^{14}$   
 12311031592860  $x^4 y^{14}$   
 53034901920  $x^6 y^{14}$   
 23835240  $x^8 y^{14}$

1119367222862120  $x^1 y^{14}$   
 95070567505980  $x^3 y^{14}$   
 1014792799020  $x^5 y^{14}$   
 1633151520  $x^7 y^{14}$   
 68640  $x^9 y^{14}$

1253950859878976  $x^0 y^{15}$   
 432473074896824  $x^2 y^{15}$   
 10530879318960  $x^4 y^{15}$   
 38818603824  $x^6 y^{15}$   
 12200760  $x^8 y^{15}$

1165857181198776  $x^1 y^{15}$   
 86640418053904  $x^3 y^{15}$   
 810132258936  $x^5 y^{15}$   
 1052251200  $x^7 y^{15}$   
 11440  $x^9 y^{15}$

1375138060083606  $x^0 y^{16}$   
 413974843622054  $x^2 y^{16}$   
 8926789631760  $x^4 y^{16}$   
 28028296296  $x^6 y^{16}$   
 5945940  $x^8 y^{16}$

1190135287488472  $x^1 y^{16}$   
 78072509800428  $x^3 y^{16}$   
 640634158164  $x^5 y^{16}$   
 662341680  $x^7 y^{16}$

1474954278842954  $x^0 y^{17}$   
 391180359940370  $x^2 y^{17}$   
 7501929134700  $x^4 y^{17}$   
 19933313400  $x^6 y^{17}$   
 2702700  $x^8 y^{17}$

1194272704457924  $x^1 y^{17}$   
 69660750711552  $x^3 y^{17}$   
 501527666640  $x^5 y^{17}$   
 405765360  $x^7 y^{17}$

1551862875600674  $x^0 y^{18}$   
 365522824288622  $x^2 y^{18}$   
 6250652207800  $x^4 y^{18}$   
 13936402480  $x^6 y^{18}$   
 1081080  $x^8 y^{18}$

1180856227595408  $x^1 y^{18}$   
 61602593628576  $x^3 y^{18}$   
 388378390400  $x^5 y^{18}$   
 240400160  $x^7 y^{18}$

1605574802661830  $x^0 y^{19}$   
 338181297684230  $x^2 y^{19}$   
 5162694537000  $x^4 y^{19}$   
 9564835280  $x^6 y^{19}$   
 360360  $x^8 y^{19}$

1152675110366780  $x^1 y^{19}$   
 54023503894360  $x^3 y^{19}$   
 297256799840  $x^5 y^{19}$   
 137257120  $x^7 y^{19}$

1636791362754548  $x^0 y^{20}$   
 310097847359300  $x^2 y^{20}$   
 4225736324810  $x^4 y^{20}$   
 6437218788  $x^6 y^{20}$   
 90090  $x^8 y^{20}$

1112499749497136  $x^1 y^{20}$   
 46997676766040  $x^3 y^{20}$   
 224710854368  $x^5 y^{20}$   
 75315240  $x^7 y^{20}$

1646944378515436  $x^0 y^{21}$   
 282008357765420  $x^2 y^{21}$   
 3426581908750  $x^4 y^{21}$   
 4242650412  $x^6 y^{21}$   
 12870  $x^8 y^{21}$

1062939717955544  $x^1 y^{21}$   
 40563666034320  $x^3 y^{21}$   
 167668468968  $x^5 y^{21}$   
 39519480  $x^7 y^{21}$

|                               |                               |
|-------------------------------|-------------------------------|
| 1637959044421700 $x^0 y^{22}$ | 1006364207689880 $x^1 y^{22}$ |
| 254476883671400 $x^2 y^{22}$  | 34735133328220 $x^3 y^{22}$   |
| 2751699909140 $x^4 y^{22}$    | 123399379740 $x^5 y^{22}$     |
| 2733210480 $x^6 y^{22}$       | 19631040 $x^7 y^{22}$         |
| 1612052859684020 $x^0 y^{23}$ | 944867367186080 $x^1 y^{23}$  |
| 227927726358020 $x^2 y^{23}$  | 29508060251280 $x^3 y^{23}$   |
| 2187581738160 $x^4 y^{23}$    | 89509896840 $x^5 y^{23}$      |
| 1716755040 $x^6 y^{23}$       | 9060480 $x^7 y^{23}$          |
| 1571575246682285 $x^0 y^{24}$ | 880263296318315 $x^1 y^{24}$  |
| 202672825903730 $x^2 y^{24}$  | 24865670012820 $x^3 y^{24}$   |
| 1721040381060 $x^4 y^{24}$    | 63939335460 $x^5 y^{24}$      |
| 1048407360 $x^6 y^{24}$       | 3775200 $x^7 y^{24}$          |
| 1518886692830078 $x^0 y^{25}$ | 814098782082950 $x^1 y^{25}$  |
| 178933915449926 $x^2 y^{25}$  | 20781869668560 $x^3 y^{25}$   |
| 1339445627520 $x^4 y^{25}$    | 44941696800 $x^5 y^{25}$      |
| 620876256 $x^6 y^{25}$        | 1372800 $x^7 y^{25}$          |
| 1456272911094755 $x^0 y^{26}$ | 747675030085907 $x^1 y^{26}$  |
| 156859739676458 $x^2 y^{26}$  | 17223709826400 $x^3 y^{26}$   |
| 1030887377520 $x^4 y^{26}$    | 31055440416 $x^5 y^{26}$      |
| 355459104 $x^6 y^{26}$        | 411840 $x^7 y^{26}$           |
| 1385887893583506 $x^0 y^{27}$ | 682072372874228 $x^1 y^{27}$  |
| 136539129272546 $x^2 y^{27}$  | 14153264722520 $x^3 y^{27}$   |
| 784306803280 $x^4 y^{27}$     | 21075934880 $x^5 y^{27}$      |
| 195875680 $x^6 y^{27}$        | 91520 $x^7 y^{27}$            |
| 1309719322013660 $x^0 y^{28}$ | 618174318716540 $x^1 y^{28}$  |
| 118011056649200 $x^2 y^{28}$  | 11529256984960 $x^3 y^{28}$   |
| 589615506480 $x^4 y^{28}$     | 14029935920 $x^5 y^{28}$      |
| 103223120 $x^6 y^{28}$        | 11440 $x^7 y^{28}$            |
| 1229570258440160 $x^0 y^{29}$ | 556689289037960 $x^1 y^{29}$  |
| 101272806961040 $x^2 y^{29}$  | 9308566896200 $x^3 y^{29}$    |
| 437782425080 $x^4 y^{29}$     | 9147418280 $x^5 y^{29}$       |
| 51531480 $x^6 y^{29}$         |                               |
| 1147052042972836 $x^0 y^{30}$ | 498169756333964 $x^1 y^{30}$  |
| 86287088356040 $x^2 y^{30}$   | 7447614019560 $x^3 y^{30}$    |
| 320871591040 $x^4 y^{30}$     | 5831417592 $x^5 y^{30}$       |
| 24048024 $x^6 y^{30}$         |                               |

|                               |                              |
|-------------------------------|------------------------------|
| 1063584529511504 $x^0 y^{31}$ | 443029183412816 $x^1 y^{31}$ |
| 72988522366760 $x^2 y^{31}$   | 5903554416760 $x^3 y^{31}$   |
| 232029958160 $x^4 y^{31}$     | 3627888264 $x^5 y^{31}$      |
| 10306296 $x^6 y^{31}$         |                              |
| 980400926815310 $x^0 y^{32}$  | 391557359263070 $x^1 y^{32}$ |
| 61289679410960 $x^2 y^{32}$   | 4635255544920 $x^3 y^{32}$   |
| 165435870600 $x^4 y^{32}$     | 2197835640 $x^5 y^{32}$      |
| 3963960 $x^6 y^{32}$          |                              |
| 898555441784000 $x^0 y^{33}$  | 343934666593700 $x^1 y^{33}$ |
| 51086683749920 $x^2 y^{33}$   | 3604043821560 $x^3 y^{33}$   |
| 116222204280 $x^4 y^{33}$     | 1293135480 $x^5 y^{33}$      |
| 1321320 $x^6 y^{33}$          |                              |
| 818932613967650 $x^0 y^{34}$  | 300245668003190 $x^1 y^{34}$ |
| 42264359571980 $x^2 y^{34}$   | 2774241768480 $x^3 y^{34}$   |
| 80386067580 $x^4 y^{34}$      | 736412040 $x^5 y^{34}$       |
| 360360 $x^6 y^{34}$           |                              |
| 742257708271352 $x^0 y^{35}$  | 260492236718480 $x^1 y^{35}$ |
| 34700871844964 $x^2 y^{35}$   | 2113514807040 $x^3 y^{35}$   |
| 54690575940 $x^4 y^{35}$      | 404107704 $x^5 y^{35}$       |
| 72072 $x^6 y^{35}$            |                              |
| 669107832993600 $x^0 y^{36}$  | 224606305184768 $x^1 y^{36}$ |
| 28271805620552 $x^2 y^{36}$   | 1593044533080 $x^3 y^{36}$   |
| 36562445920 $x^4 y^{36}$      | 212444232 $x^5 y^{36}$       |
| 8008 $x^6 y^{36}$             |                              |
| 599923608886784 $x^0 y^{37}$  | 192462175217312 $x^1 y^{37}$ |
| 22853633568584 $x^2 y^{37}$   | 1187550364000 $x^3 y^{37}$   |
| 23990406440 $x^4 y^{37}$      | 106186080 $x^5 y^{37}$       |
| 535021271766800 $x^0 y^{38}$  | 163888249343000 $x^1 y^{38}$ |
| 18326548260020 $x^2 y^{38}$   | 875187953640 $x^3 y^{38}$    |
| 15428993580 $x^4 y^{38}$      | 49969920 $x^5 y^{38}$        |
| 474605089289240 $x^0 y^{39}$  | 138678012859400 $x^1 y^{39}$ |
| 14576669287180 $x^2 y^{39}$   | 637355161520 $x^3 y^{39}$    |
| 9711081380 $x^4 y^{39}$       | 21861840 $x^5 y^{39}$        |

|                              |                              |
|------------------------------|------------------------------|
| 418779948058031 $x^0 y^{40}$ | 116600108570463 $x^1 y^{40}$ |
| 11497663825648 $x^2 y^{40}$  | 458434813760 $x^3 y^{40}$    |
| 5971005040 $x^4 y^{40}$      | 8744736 $x^5 y^{40}$         |
| 367563943157488 $x^0 y^{41}$ | 97407382607458 $x^1 y^{41}$  |
| 8991838199344 $x^2 y^{41}$   | 325499494320 $x^3 y^{41}$    |
| 3578855280 $x^4 y^{41}$      | 3123120 $x^5 y^{41}$         |
| 320900788961753 $x^0 y^{42}$ | 80844824447959 $x^1 y^{42}$  |
| 6970767537448 $x^2 y^{42}$   | 227998570800 $x^3 y^{42}$    |
| 2085563480 $x^4 y^{42}$      | 960960 $x^5 y^{42}$          |
| 278671869807760 $x^0 y^{43}$ | 66656367074440 $x^1 y^{43}$  |
| 5355533017120 $x^2 y^{43}$   | 157442885600 $x^3 y^{43}$    |
| 1177856680 $x^4 y^{43}$      | 240240 $x^5 y^{43}$          |
| 240707759715280 $x^0 y^{44}$ | 54590550032200 $x^1 y^{44}$  |
| 4076635424680 $x^2 y^{44}$   | 107099210400 $x^3 y^{44}$    |
| 642139680 $x^4 y^{44}$       | 43680 $x^5 y^{44}$           |
| 206799058915488 $x^0 y^{45}$ | 44405079657848 $x^1 y^{45}$  |
| 3073652316280 $x^2 y^{45}$   | 71703930480 $x^3 y^{45}$     |
| 336277760 $x^4 y^{45}$       | 4368 $x^5 y^{45}$            |
| 176706419487728 $x^0 y^{46}$ | 35870347996392 $x^1 y^{46}$  |
| 2294703108880 $x^2 y^{46}$   | 47202559040 $x^3 y^{46}$     |
| 168127960 $x^4 y^{46}$       |                              |
| 150169661184400 $x^0 y^{47}$ | 28771994087200 $x^1 y^{47}$  |
| 1695781130680 $x^2 y^{47}$   | 30518888400 $x^3 y^{47}$     |
| 79639560 $x^4 y^{47}$        |                              |
| 126915909481400 $x^0 y^{48}$ | 22912607277560 $x^1 y^{48}$  |
| 1240004467520 $x^2 y^{48}$   | 19355175840 $x^3 y^{48}$     |
| 35395360 $x^4 y^{48}$        |                              |
| 106666718843360 $x^0 y^{49}$ | 18112681776800 $x^1 y^{49}$  |
| 896829224720 $x^2 y^{49}$    | 12022890880 $x^3 y^{49}$     |
| 14574560 $x^4 y^{49}$        |                              |
| 89144173279928 $x^0 y^{50}$  | 14210935371152 $x^1 y^{50}$  |
| 641260428380 $x^2 y^{50}$    | 7302214920 $x^3 y^{50}$      |
| 5465460 $x^4 y^{50}$         |                              |

|                             |                             |
|-----------------------------|-----------------------------|
| 74075982198712 $x^0 y^{51}$ | 11064104135448 $x^1 y^{51}$ |
| 453087815180 $x^2 y^{51}$   | 4327643320 $x^3 y^{51}$     |
| 1821820 $x^4 y^{51}$        |                             |
| 61199611636020 $x^0 y^{52}$ | 8546320279420 $x^1 y^{52}$  |
| 316166570720 $x^2 y^{52}$   | 2496617200 $x^3 y^{52}$     |
| 520520 $x^4 y^{52}$         |                             |
| 50265508953440 $x^0 y^{53}$ | 6548172997520 $x^1 y^{53}$  |
| 217756819280 $x^2 y^{53}$   | 1397993520 $x^3 y^{53}$     |
| 120120 $x^4 y^{53}$         |                             |
| 41039493100540 $x^0 y^{54}$ | 4975543109460 $x^1 y^{54}$  |
| 147930282500 $x^2 y^{54}$   | 757196440 $x^3 y^{54}$      |
| 20020 $x^4 y^{54}$          |                             |
| 33304392720456 $x^0 y^{55}$ | 3748291862224 $x^1 y^{55}$  |
| 99047928980 $x^2 y^{55}$    | 395045560 $x^3 y^{55}$      |
| 1820 $x^4 y^{55}$           |                             |
| 26861020869449 $x^0 y^{56}$ | 2798872962236 $x^1 y^{56}$  |
| 65308689680 $x^2 y^{56}$    | 197520960 $x^3 y^{56}$      |
| 21528578143475 $x^0 y^{57}$ | 2070925273560 $x^1 y^{57}$  |
| 42366448800 $x^2 y^{57}$    | 94057600 $x^3 y^{57}$       |
| 17144575887660 $x^0 y^{58}$ | 1517892203100 $x^1 y^{58}$  |
| 27010488960 $x^2 y^{58}$    | 42325920 $x^3 y^{58}$       |
| 13564368356760 $x^0 y^{59}$ | 1101703042440 $x^1 y^{59}$  |
| 16903275480 $x^2 y^{59}$    | 17821440 $x^3 y^{59}$       |
| 10660377709020 $x^0 y^{60}$ | 791541761192 $x^1 y^{60}$   |
| 10368791160 $x^2 y^{60}$    | 6930560 $x^3 y^{60}$        |
| 8321089076612 $x^0 y^{61}$  | 562720144168 $x^1 y^{61}$   |
| 6224454600 $x^2 y^{61}$     | 2446080 $x^3 y^{61}$        |
| 6449885162760 $x^0 y^{62}$  | 395664829560 $x^1 y^{62}$   |
| 3649846200 $x^2 y^{62}$     | 764400 $x^3 y^{62}$         |
| 4963781321720 $x^0 y^{63}$  | 275021750640 $x^1 y^{63}$   |
| 2085910320 $x^2 y^{63}$     | 203840 $x^3 y^{63}$         |



|                                                       |                                                 |
|-------------------------------------------------------|-------------------------------------------------|
| 3792113277810 $x^0 y^{64}$<br>1158902160 $x^2 y^{64}$ | 188876659920 $x^1 y^{64}$<br>43680 $x^3 y^{64}$ |
| 2875220866830 $x^0 y^{65}$<br>624034320 $x^2 y^{65}$  | 128086736064 $x^1 y^{65}$<br>6720 $x^3 y^{65}$  |
| 2163162714584 $x^0 y^{66}$<br>324498720 $x^2 y^{66}$  | 85715637616 $x^1 y^{66}$<br>560 $x^3 y^{66}$    |
| 1614488829160 $x^0 y^{67}$<br>162249360 $x^2 y^{67}$  | 56562652160 $x^1 y^{67}$                        |
| 1195090848900 $x^0 y^{68}$<br>77597520 $x^2 y^{68}$   | 36775655280 $x^1 y^{68}$                        |
| 877143273500 $x^0 y^{69}$<br>35271600 $x^2 y^{69}$    | 23537295600 $x^1 y^{69}$                        |
| 638143475736 $x^0 y^{70}$<br>15116400 $x^2 y^{70}$    | 14814018960 $x^1 y^{70}$                        |
| 460053664200 $x^0 y^{71}$<br>6046560 $x^2 y^{71}$     | 9158104800 $x^1 y^{71}$                         |
| 328544222955 $x^0 y^{72}$<br>2227680 $x^2 y^{72}$     | 5553693600 $x^1 y^{72}$                         |
| 232334941605 $x^0 y^{73}$<br>742560 $x^2 y^{73}$      | 3298735440 $x^1 y^{73}$                         |
| 162628496160 $x^0 y^{74}$<br>218400 $x^2 y^{74}$      | 1915804800 $x^1 y^{74}$                         |
| 112629060128 $x^0 y^{75}$<br>54600 $x^2 y^{75}$       | 1085742840 $x^1 y^{75}$                         |
| 77138022000 $x^0 y^{76}$<br>10920 $x^2 y^{76}$        | 599060280 $x^1 y^{76}$                          |
| 52218363600 $x^0 y^{77}$<br>1560 $x^2 y^{77}$         | 320931000 $x^1 y^{77}$                          |
| 34919219920 $x^0 y^{78}$<br>120 $x^2 y^{78}$          | 166409480 $x^1 y^{78}$                          |

|                          |                       |
|--------------------------|-----------------------|
| 23052406640 $x^0 y^{79}$ | 83204800 $x^1 y^{79}$ |
| 15013185996 $x^0 y^{80}$ | 39938304 $x^1 y^{80}$ |
| 9638174004 $x^0 y^{81}$  | 18305056 $x^1 y^{81}$ |
| 6094011760 $x^0 y^{82}$  | 7958720 $x^1 y^{82}$  |
| 3791180880 $x^0 y^{83}$  | 3255840 $x^1 y^{83}$  |
| 2318098920 $x^0 y^{84}$  | 1240320 $x^1 y^{84}$  |
| 1391355480 $x^0 y^{85}$  | 434112 $x^1 y^{85}$   |
| 818623152 $x^0 y^{86}$   | 137088 $x^1 y^{86}$   |
| 471386640 $x^0 y^{87}$   | 38080 $x^1 y^{87}$    |
| 265171645 $x^0 y^{88}$   | 8960 $x^1 y^{88}$     |
| 145420755 $x^0 y^{89}$   | 1680 $x^1 y^{89}$     |
| 77558520 $x^0 y^{90}$    | 224 $x^1 y^{90}$      |
| 40116584 $x^0 y^{91}$    | 16 $x^1 y^{91}$       |
| 20058300 $x^0 y^{92}$    |                       |
| 9657700 $x^0 y^{93}$     |                       |
| 4457400 $x^0 y^{94}$     |                       |
| 1961256 $x^0 y^{95}$     |                       |
| 817190 $x^0 y^{96}$      |                       |
| 319770 $x^0 y^{97}$      |                       |
| 116280 $x^0 y^{98}$      |                       |
| 38760 $x^0 y^{99}$       |                       |
| 11628 $x^0 y^{100}$      |                       |

3060  $x^0 y^{101}$

680  $x^0 y^{102}$

120  $x^0 y^{103}$

15  $x^0 y^{104}$

1  $x^0 y^{105}$

Number of spanning trees: st = 72057594037927936

TEST: tutteMat[ONE][ZERO]==tutteMat[ZERO][ONE] passed

TEST: tutteMat[TWO][ZERO]-tutteMat[ONE][ONE]+tutteMat[ZERO][TWO]==tutteMat[ONE][ZERO] passed

TEST: tutteMat[THREE][ZERO]-tutteMat[TWO][ONE]+tutteMat[ONE][TWO]-tutteMat[ZERO][THREE]==tutteMat[ONE][ONE] passed

| threshold | graphs | matches | ratio |
|-----------|--------|---------|-------|
| 16        | 1      | 0       | 0.00  |
| 15        | 15     | 0       | 0.00  |
| 14        | 31     | 284     | 9.16  |
| 13        | 45     | 755     | 16.78 |
| 12        | 57     | 1281    | 22.47 |
| 11        | 67     | 1796    | 26.81 |
| 10        | 75     | 2246    | 29.95 |
| 9         | 81     | 2589    | 31.96 |
| 8         | 85     | 2795    | 32.88 |
| total     | 457    | 11746   | 25.70 |
| 27.34u    | 0.22s  | 1:18.69 | 35.0% |