```
R version 4.4.0 (2024-04-24) -- "Puppy Cup"
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Platform: aarch64-apple-darwin20

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[R.app GUI 1.80 (8376) aarch64-apple-darwin20]

[History restored from /Users/alperkaragol/.Rapp.history]

> rm(list = ls())
> x0 <-
c(0,0,0,0,1.136,9.89,0,2.151,1.064,2.105,1.042,0,9.375,0,0,2.105,0,0,0,0,0,0,6.186,54.639,0,0,0,0,0,0,9.524,0,0,0,
8.511,0,29,0,1,0,0,20.225,3.333,0,0,1.124,5.882,0.952,54.444,2.752,1.869,0,0,0.935,0,0,1.031,0,5.405,24.576,31.092,4
,0,11.278,0.763,5.495,17.526,0,5.714,9.155,5.147,4.286,27.397,1.361,0,0,0.725,0,11.486,0,0,0,0,0,0,2.027,0,0,0,0,14.
865,0,0,0,0,0,0,100,0,0,0,0,0.685,2.083,11.034,2.041,2.721,0.694,2.721,35.616,19.355,0,0.699,0.694,0.699,56.25,2.041
,4.138,4.965,13.953,24.779,0,0.758,0,0,0,0,0,0,0,0,6.667,1.389,4.861,3.472,1.379,9.655,7.639,2.667,22.667,2,0,22,2
.667,14.667,0,0,64,98,0,0,0,0,0,71.333,0,0,0,0,0,0,99.333,0,26.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,1.333,0.667,0,0,0,0,0,0.667,0.667,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0.667,0,0,0,70.66
7,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,99.333,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,12.
667,32,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0)
> x1 <-
c(0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,31.544,0,0,0,1.333,0,86,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0.671,0,0,0,0,0,0,0,0,0,2.685,0,0,0,0,0,0,0,0,0,0,0,77.333,0,0,0,0.667,0,0,0,0,0,0,30,0,0.667,0,0,0,1.333,0,0.
671,14.966,0,2.083,0,0,4.167,76.552,1.379,0.694,0,0,0,0.685,0,57.778,0,0.685,1.37,0,0,0,0,41.958,0.694,0,1.37,0,1.36
1,0.685,0.685,0,1.389,0,15.862,50,0,0.68,5.442,1.361,0.68,10.345,7.586,0,0.694,0.69,0,11.972,0,2.817,0,2.113,0,0,0.6
99,0,0.694,0.699,0,0,0,0,0,0,0.694,0,0,0,0,0,0,0,0,0,0,0,0.667,3.333,0,99.333,0.667,25.517,0,0,0.667,0,0,0,3.333
,0.667,0,1.333,3.333,1.333,4.667,0,1.342,0.671,0.671,0,0,0,0,0.667,0,0.667,0,98.667,0.667,0.667,4,11.333,0,6,0,1.333
,0.667,0,0.671,0,0.671,0.667,0,1.333,0,0,0,0,0,1.342,0,0.671,0,0,8.725,0.671,0,0,0,0,0,0,0,0,2.013,0,0,0,0,0,0,0
,0,0.676,0,0,1.351,0,0,0,0,0,0,8.054,0,0,0,0,0,0,6.04,0,4.698,0,0,0,0,0,2.027,6.081,0,0.676,0,0,42.568,0,0,0,5.442
,4.762,0.68,0,0,0,0,0,0,0,0,0,0)
> x2 <-
c(0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.676,0,0,0,0,0.68,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,16.892,0,0,0,
0,0,0,30.405,0,0,0,0,0,0,0,0,0,0,0,0,0,0.676,0,2.027,0,0,0,0,0,0,0,0,0,2.055,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,10.345,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.379,2.759,51.034,0,0,98.039,0,0,5.405,
2.273,0,0,29.091,2.817,0,0,1.515,4.918,13.235,3,23.276,33.6,2.985,0,2.273,0,2.857,0.719,2.143,2.797,2.703,2.759,27.5
86,0,0,0.685,0,13.014,0.685,0,0,0,0,0.685,0.685,0,0,0,0,19.863,0,0,0,0,0,0,100,0,0,0,0,0.699,0,15.972,3.521,2.817,0,
2.778,41.304,0,0,4.854,0,32.374,3.571,6.429,6.14,17.544,20.741,0,1.471,1.481,9.524,0.794,6.557,3.279,1.429,9.286,7.7
46,3.401,19.178,1.361,0,23.81,2.041,14.286,0,0,65.306,99.32,0,0,0,0,0,67.347,0,0,0,0,0,0,0,99.32,0,23.288,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.361,0,0,0,0,0,0,0,0,1.351,0,0,0,0,0,0,0,0,0,0,0,0)
> x3 <-
c(0,0,0,0,0,0,0,0,0,0,0,0,2.013,0.671,0,0,0,66.443,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,99.333,0.667,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,17.333,28.667,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,28.859,0,0,0,1.333,0,84.667,0,0.667,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,1.35
1,0,0,0,0,0,0,0,0,1.342,0,0,0.676,0,0,0,0,0,0,0,0,0,80.537,0,0,0,0,0,0.671,0,0,0,0,33.557,0,0.68,0,0,0,2.013,0,2,12.
329,0,0.694,0,0.69,4.895,78.767,0,0,0,0,0,0.685,0,61.069,0,0,0.685,0,0.69,0,0.735,46.528,1.389,0,0.694,0.68,0.685,2.
778,2.069,0,0.69,0,13.194,49.306,0,0,3.521,0,0.719,10.072,4.317,0,0,0,0,7.639,0.694,4.196,0,2.797,0,0,0.699,0,0.699,
0.699,0,0,0,0,0.68,0,0.685,0,0,0,0,0,0,0,0,0,0,2,0,0,0.667,0,98,1.333,25.333,0,0,2,0,0.671,0.671,4,0,0,1.333,1.333
,1.333,4,0,1.342,0,0,0.671,0,0,0,0.667,0,0.667,0,98.667,0.667,0,9.333,13.333,0,8.054,0,0,0,0,0.671)
> x4 <-
c(0,0,0.685,0,0.69,0,0,0,0,0,0,4.73,0,0,0,0,6.711,0,0,0,0,0.671,0,0,0,0,0.671,1.351,0,0,0,0,0,0,0,0.671,0,0,1.342,
0,0,0,0,0,0,0,8.725,0,0,0.667,0,0,0,6,0,2,0,0,0,0,0.667,4,8,0,1.333,0,0,38.667,0,0.667,0,6.04,4.698,1.342,0,0.671,0,
0,0,0,0,0,0,0,0.667,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,18.6
67,0,0,0,0,0,0,36,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2,0,0,0,0,0,0,0,0,0,0,0,6,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
11.565,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.069,53.103,0,0,0,0,1.19,0,0,3.191,11.34,0,0
,1.02,1.02,1.02,0,9,0,0,4,0,0,0,1,0,0,0,2.041,59.794,0,1.053,0,0,0,0,6.977,0,0,0,11.579,0,25,0,1.905,0,0,24.176,3.22
6,0,1.087,5.376,4.808,0,51.648,1.818,1.835,0,0,1.111,0,1.075,19.802,4.386,40,32.231,1.681,0,4.762,0,0,0,13.077,2.256
,18.841,0.714,0,0,0,7.746)
> x5 <-
c(0,0,0,0.704,0.704,0,1.408,0,0,0,0,12.676,0,0,0,0,0.699,0,99.301,0,0,0,0,1.418,0.709,17.391,0.741,2.985,1.493,0.719
,39.535,0,0.758,0,0,49.02,1.852,6.475,7.857,17.829,32.743,0,0.855,0,7.031,1.439,10.791,2.158,1.439,5,7.143,0,19.858,
0.704,0,26.761,1.399,9.79,0,0,75.524,100,0,0,0,0,0,79.021,0,0,0,0,0,0,0,100,0,30.769,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,1.389,0.694,0,0,0,0,0,0.694,0.694,0.699,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.68,0,
```

```
0,0,0,78.912,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,99.32,0.676,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.68,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,10,34,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,33.108,0,0,0,0.671,0,91.946,
0,0.671,0.671,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.351,0,0,0,0,0,0,0,0,4.054,0,0,0,0,0,0,0,0,0,0,0,0,83.333,0
,0,0,0,0,0,0,0,0,0,0,36,0,0)
> x6 <-
c(0,0,0,2,0,0.667,9.459,0,1.361,0,0.68,0.68,74.324,0.676,0,0,0,0,0.68,0,56.923,0.699,0.685,0.685,0,0,0,1.481,36.364,
0,0,0.704,0.699,0.699,2.817,0.709,0,1.418,0,9.859,40.559,0,1.408,2.143,1.418,0,7.299,5.882,0,0,0,0,6.475,0.709,2.113
,0.709,0,0,0,1.429,0,0.714,0,0,0.725,0,0,0.719,0,0.709,0,0,0,0,0,0,0,0,0,0,2,0,0,2,0,98.667,0.667,26.667,0.68,0,0.
667,0,1.333,0.667,8,0,0,0.667,2,0.667,3.333,0,2.013,0,0.671,1.342,0,0,0,0,0,0.671,0,99.329,0,0.667,4.667,11.333,0,6.
711,0,0.671,0.671,0,0.68,0,0,0.676,0,0,0,0,0,0,0,0,4.698,0,0.671,0,0,13.423,0.671,0,0,0,0,0,0,0,0,0.671,1.342,0,0,0,
0,0,0,0,0,0.676,2.027,0,0.676,0,0,0,0,0,0,0,5.442,0,0,0,0,0,0,4.73,0,2.703,0,0,0,0,0.676,3.378,5.405,0,1.351,0,0,49.
324,0,0.676,0,3.378,4.054,0.676,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.685,
0,0.685,0,0,0,0,0,0,0,0,0,0,0,0,0,0,13.605,0,0,0,0,0,0,22.449,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.68,0,0,0,0,0,0,0,0,0,0,3
.401,0,0.694,0,0.694,0,0,0,0,0)
> x7 <-
c(0.699,0,0,0,0,0,0,0,0,0,0,0,0,12.587,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.408,2.128,5
1.773,0,0,0,1.961,24.074,2.564,9.615,0,0,0,0,0,0,0,0,1.709,0,0,0,0,8.475,3.279,0,0,32.8,60,0,64.286,0,0,0,0,0,0.752,
0.719,7.692,0,0,0,0,0,0,0,0,0,0,0.671,10.067,0,0.671,5.405,0,3.101,0.725,5.6,0.704,6.294,18.121,4,0,0,1.333,0,0,9.
333,0,14,0,0,0,2,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.333,0,8.667,75.333,0,0,0,0,7.333,2.667,0,0,1.333,0,2.66
7,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,86.667,0,37.333,1.333,0.667,4.054,2.703,3,0,1.22,2.797,0.676,0.676,1
6.667,2,4.027,0,0,0,15.333,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0.699,18.31,0,0,0,0,0,45.652,0,0,5.185,32.5,0,1.695,3.39,
0.806,0,0,0,7.317,37.398,1.639,5.645,0.806,3.478,3.738,0,19.231,4.808,7.759,4.31,7.759,3.448,0.862,0,0,0.877,0,0,0.9
9,2.564,0,3.448,0,0,0,0,0,2.273,5.435,3.297,0,84.946,63.441,1.064,1.266,26.667,5.405,17.808,5.479,16.667,8.571,5.263
,12.698,3.279,0,100,2.381,48.485,0,0,0,14.545,0,4.545,0,0,0,0,0,0,0,0,1.653,0)
> x8 <-
c(0.82,0,10.4,2.381,0,2.344,21.875,60.769,0,67.424,0,0,0,0,0,0,0.725,2.92,0,0,0,0,0,0.667,0,0,0,0,0,0,6,0,0,2.013,0,
0,4.38,2.564,0.781,2.899,14.094,2.667,2.667,0,1.333,0,0,12.081,0,11.333,0,0,0,2.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,2.667,0,10.667,68.667,0,0,0,0,11.409,2.013,0.671,0,1.342,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,84,0,39.333,4,2,3.333,2.083,1.681,1.01,0,0.667,23.649,2,2.667,0,0,0,15.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,17.266,0,0
.714,0,0,0,46.043,0,0,5.839,26.016,0,1.626,2.5,0.781,0,1.626,31.452,4.032,12.903,0.98,0.806,0.855,3.419,15.044,2.128
,7.5,3.738,4.673,1.802,0,4.386,0.943,0,1.02,0,1.149,5.376,2.105,6.863,5.882,1.961,85.294,48.039,1.961,0,0,2,26,8.081
,14.286,8.791,7.955,13.953,5.063,1.235,1.22,86.25,2.632,0,0,0,0,1.786,21.739,0,1.887,0,0,0,0,0,0,0,0,2.419,0,0,0,0,6
.923,5.344,0,0,25.185,51.825,0,67.391,0,0,0,0.709,0.709,0,0,5.442,0,0,0,0,0,0,0,0,0,0,1.342,7.383,0,0,5.369,0,0.73
,1.504,2.5,1.724,4.286,14.765,5.369,4.667,0,1.333,0,0,6.897,0,14.094,0,0,0,2,0,0.667,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0
,0,0,0,0,0,1.333)
> x9 <-
c(0,10,64,0,0,0,0,10,1.333,0,0,0.667,0,3.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,84.667,0,38.667,4,1.333,3
.401,2.027,2,0,1.923,0.84,1.333,20.667,0.667,1.351,0,1.333,0,16.667,0,0,0,0,0,0,0,0,0,0,0,0,0,17.808,0.69,0,0,0,
0,44.056,0.704,0,5.714,29.921,0,0,4.132,0.833,0,0,0,1.653,39.344,2.479,9.091,0,3.448,0.901,1.961,21.978,3.67,14.019,
1.77,1.786,1.802,0.926,0,3.03,0,1.22,5.747,2.174,0,1.389,1.351,6.931,6.931,5.882,0.99,90.291,48.077,1.905,0,0,0.952,
20,11.458,23.333,11.364,10.588,8.889,4.651,14.035,3.614,0,91.667,2.469,8.75,0,0,0,5.882,0,0,0,0,0,95,0,0,0,0,0,0,0,0
.99,11.278,0,0,22.222,74.265,0,55,0.719,0,0,1.429,0.719,0.704,0.69,1.351,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,12.667,0,
1.333,2.667,2,1.515,1.342,26.174,4.698,1.333,0,0,0,0,11.333,0,23.333,0.667,0,0,0.667,0,0,0,0,0,0,0,0,0,0,2.667,0,0
,0,0,0,0,0,0,0,4,0,5.333,69.333,0,0.667,0,0,4,2,0,0,0,0,8.725,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,98,0,59.
333,6,0,3.333,4.73,2.797,1.667,0.68,2.027,14.667,0.667,0.667,0,0,0,3.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,38.194,0,0)
> x10 <-
c(0,0,0,51.799,2.273,0,6.667,15.854,0,0,0,0,0,0,10,13.333,3.448,0,0,0,0,8,0,0,0,0,4,0,0,0,0,0,0,0,0,6.667,0,0,0,0,0,
0,0,0,0,0,0,0,0,13.636,0,0,0,0,0,0,0,0,0,0,5.556,0,0,0,0,0,0,0,0,0,0,0,50,0,0,0,0,0,0,0,0,0,26.316,57.895,0,0,0,14.8
94,0,36.364,0,7.143,0,0,0,4.167,0.826,0,0,0,0,1.6,0,0,19.403,0.725,0,0,0,0,0,0,0,0,0,0,0,0,3.401,0,11.565,0,7.483,
0,5.442,0,12.245,0,6.122,0.685,1.449,1.515,11.628,2.759,0.68,9.028,1.379,0,6.122,0.68,4.762,0,2.027,0,0.68,0,1.361,0
,6.711,49.324,4.698,3.356,1.342,6.081,0,1.333,0.671,0,1.361,5.517,2.837,3.448,3.356,4,1.333,0,0,8.667,0.667,0,0,0,0,
0,0,30.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,41.611,1.342,1.342,0,12.081,14.765,0,2.013,0.671,0,0,4.027,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,4,0,0,12,1.333,0,0.667,0,0,0,0.667,0,2,9.524,0,5.479,5.303,6.202,0,4.0
82,3.333,0,9.333,8.276,21.875,0.8,0.746,2.013,0,4,2.667,0,7.333,0,0,1.333,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0)
> x11 <-
c(0,0,17.431,1.869,18.812,3.061,8.333,8.791,9.091,2.857,0,21.918,9.333,10.667,37.333,1.333,1.613,0,0,0,0,0,0,81.25,3
9.13,22.222,11.111,0,100,0,28.571,0,0,0,0,17.778,77.778,0,0,0,0,45.455,40.909,0,0,0,51.22,2.439,12.5,0,2.5,75,64.103
,4.167,0,0,0,0,0,0,0,0,57.143,18.75,5.882,0,0,0,93.75,57.692,0,0,0,90.909,79.167,0,6.667,0,0,0,0,0,12.5,83.871,0)
> Q <- c(x0,x1,x2,x3,x4,x5,x6,x7,x8,x9,x10,x11)
> y0 <-
c(0,0,0,0,0,0,0,0,2.128,0,57.292,1.042,0,0,0,0,0,3.158,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,3.614,0,0,3.158,0,0,0,0,0.99,0,0,
0,0,0,0,0,0,0,0,0,1.124,0,0,0,0,0,0,0.901,0,0.84,0,0,0.752,0,0,0,0,0,1.408,1.471,1.429,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.685,0,0,6.122,1.361,0.694,0,6.164,0,11.888,0.699,25,1.399,0,6.122,9.655,0,0,0,14.91
2,0,0,100,0,0,0,0,0,0,0,12.593,1.389,0,54.861,1.379,0.69,0,1.333,4,0,0,6.667,0,0,98,0,0,0,0,0,41.611,0,34.667,0,0,0,
0,0,0,0,0,0,0,2,99.329,0,11.409,0,93.333,0,84,0,99.333,0,0,0,0,0,0,0,0.667,0,0,0,0,1.333,0,98,0,0,0,0,1.333,0,11.333,0
,56.667,0,0,0,0,0,0,2.013,99.329,0,61.745,5.369,0,0,81.333,0,0,0,10.667,0,0,6,30,4,0,0,80,0,0,0,21.333,0,0,0,0,0,99.
333,66.667,2,0.667,66.443,0,5.333,0,2,2,0,0,0.667,61.333,0,0,0,0,0,0,0,0,12,0,97.333,14.667,1.333,0,76.667,47.333,0,
0,2.041,0,0,0,0,0,11.333,0,0,0,0,0,0,0,0,0,0,100,0,0,0,0,0,0,0,0,0,99.333,0,0,99.333,0,0,0,0,0)
> y1 <-
c(0,3.333,0,0,10.667,0,0,0,0.667,0.667,0,0,2.667,0,0,0,0,0,0,0,0,0,0,0,0.671,0,1.333,0,1.333,0,0,0,0,0,0,4.667,0,0,49.
333,0,0,2,66,0,0,7.333,1.333,0,23.49,0.671,0,96.644,2.013,0.671,0,0,0,0,0,0,39.597,99.329,0,0.667,0,0,0,0,0,0,0,0,
0,98.667,0,4.667,0,0.667,0,0,0.667,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0.671,0,1.389,0,2.083,3.472,0,0,25.517,0,0.694,58.2
19,1.37,0.685,7.534,0,0.694,0.685,1.37,1.379,0.694,2.778,1.504,6.294,1.389,2.759,26.712,10.204,0.68,18.493,17.808,0.
699,38.889,31.034,3.448,8.904,2.721,12.925,25.85,2.041,14.286,39.31,2.069,18.621,15.278,0,0.699,1.408,20,0,11.268,1.
408,0,41.958,9.79,60.417,1.389,0,0.699,0.709,6.993,0.694,42.361,0,10.417,0.676,0,0,0,100,0,0,0,0,0,0,0,0,0,0,80.667,
```

```
0,0.667,1.379,0,0,0,6.667,2,4.667,0.667,10,0.667,2,0,0.667,0.667,4.667,0.671,0,1.342,0,0.667,0,0,0,92.667,0,0,0,2,0,
3.333,0,0.667,11.333,2,5.333,0,0,0,0.671,12.752,0,27.333,0,22,0,0,0,3.333,0,0,0,0,46.98,0,2.685,0,0.671,2.041,0,0,0,
0.671,0.671,0,5.369,0,0,5.369,0,0,0.676,0,0,2.027,3.378,0.676,0,31.757,1.351,0.676,0,0,0,58.108,0,0.671,0.671,0.671,
37.584,2.685,0,1.342,0.671,33.557,2.013,0,0,0,0.676,51.351,1.351,0,0.676,0,0,0,9.459,54.73,0,0.676,0.68,0,0,0,0,0,0,
0,25,0,0,28.378,0.676)
> y2 <-
c(0,0,99.324,0,0,100,0.676,0,99.324,0,0,0,0,0.676,0,0,99.324,79.73,0,0,0,1.351,0,0,73.649,0,0.676,69.595,0,0.68,0,0,
30.612,39.726,0,0,0.685,0,0,0.676,6.757,99.324,3.378,14.865,0,0,0,0,0.676,1.351,0.676,0.676,37.838,68.919,0,97.959
,0,0,0,38.514,0,0.676,0,0,0,0.676,0,85.135,0,0,27.027,0,0,0,85.811,0,0,0,0,0,0,0,0.68,0,0,2.041,71.429,0,0.68,76.8
71,0,0,74.15,0.68,0,0.68,87.075,0,0,34.014,0,0,0,0,37.241,0,0,0,0,0,0,1.379,0,0,92.414,60.69,0,0,0.69,0.69,100,1.379
,5.517,0,0,66.897,48.276,0,88.966,0,99.31,0,0,0,0,0,4.138,2.098,100,0,0,0,2.703,0,0,0,0,1.408,0.926,0.893,0,0,0,0,0,
0,0,0,3.03,0,0,0,0.714,1.399,2.703,0.69,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.685,0,0,0,0,0,0,0,0,0,2.797,0,0,4.22
5,0,0.699,0,2.899,6.294,0,36.893,0.735,2.158,3.571,9.286,0,0,0,17.164,0,1.481,11.905,2.381,0,61.475,2.143,2.143,0,0.
68,6.164,0,0,8.844,0,0,97.959,0,0,0,0,0,38.095,0,31.973,0,0,0,0,0,0,0,0,0,2.055,99.315,0,6.849,0,95.89,0,84.247,0,
99.315,0.685,0,0,0,0,0,0.68,0,0,0,0,0.68,0,97.959,0,0,0,0,0.68,0,12.162,0,59.459,0,0,0,0,0,0,4.054,98.658,0,61.745,6
.04,0,0,83.333,0,0)
> y3 <-
c(1.333,11.333,0,0,6.667,24.667,8,0,0,82.55,0,0,0,24.832,0,0,0,0,0,100,65.101,0.671,0.671,68.456,0,6.04,0,2.685,3.33
3,0,0,0.667,65.333,0,0,0.667,0,0,0,0,0,12,0,96.667,14.667,2,0,80.667,45.333,0,0,1.342,0,0,0,0,0.667,15.333,0,0,0,0,0
,0,0,0,0,98.667,0,0,0,0,0,0,0,98.667,0,0,98,0,2,0,0,0.667,4.667,0,0,10.667,0,0,0,1.333,0,0,0,1.333,0.667,0,0,0,0
,0,0,0,0,0,0,0,0,0,2,0,0.667,0,0,0,0,4.027,0,0,51.333,0,0,2.667,66,0,0,6.122,2.027,0.676,29.054,0.676,0,97.297,0,0,0
,0,0,0.667,0,0,0,48.322,99.333,0,1.351,0,0,0,0,0,0,0,0,0.671,99.329,0,1.342,0,0,0,0.671,0,0,0,0,0,0,0.671,0,0,0,0,0,
0,0.667,0,0,1.399,0,2.069,0.69,0,0.685,19.863,0,0.676,56.757,1.37,0.685,6.164,0.763,0,1.361,0.685,1.361,0.69,4.828,1
.471,4.167,0.694,1.399,24.306,8.163,1.37,20.833,17.241,1.37,40.69,26.897,1.389,13.194,2.055,13.889,28.169,0.704,10.0
72,35.971,0,23.741,15.603,2.778,0,0.694,22.222,0.699,14.789,2.098,0,43.357,7.692,57.343,2.797,0.699,3.472,2.069,8.78
4,1.351,38.776,2.055,12.329,0,0,0,0,100,0,0,0,0,0,0,0,0,0,76,0,0,0,0,0,0.667,5.333,1.342,1.342,0.667,6.667,1.342,1
.333,0,0.667,1.333,4,0.671,0,1.342,0,2,0.667,0,0,91.333,0,0,0,2,0,2,0,0,10.067,6.04,2.685,0,0,0)
> y4 <-
c(0,13.103,0,27.586,0,19.178,0,0,0,6.711,0,0,0,0,52.703,0,2.685,0,0.671,4.027,0,0,0,1.342,1.342,0,9.396,0,0,6.081,0,
0,0.68,0,0,3.378,4.027,0.671,0.671,29.53,2.685,1.342,0,0,0,68.243,0.671,0,0.671,0.667,35.333,2.667,0,0.667,0,34,2,0,
0,0,0.667,47.333,0.667,0,1.333,0.667,0,0,10.667,54,0,3.333,0.671,0.671,0,0,0,0,30,0,0,32.215,0.671,0,0,98.667,0,0,98
.667,0.667,0,98.667,0,0,0,0,0.667,0,0,98.667,80,0,0,0,2.667,0,0,71.333,0,1.333,62.667,0,1.351,0.676,0.676,36.054,38.
095,0.68,0,1.351,0,0,0.671,6.711,100,4.027,17.45,0,0,0,0,0.667,0.667,1.333,1.333,0,38,64,0,97.987,0,0,0,34.667,0,0,0
,0,0,0,0,81.333,0,0,26.667,0,0.667,0,90.667,0.667,0,0,0,0,0,0,0,0,0,0,2.041,76.871,0,0,80.405,0,0,70.946,0,0,0,0.676,8
4.459,0,0,29.932,0,0,0,0,31.973,0,0,0,0,0,0,2.041,0,0,91.837,65.986,0,0,0,0,99.315,1.37,2.74,0,0,68.707,44.218,0,91.
837,0,99.315,0,0,0,0,0,2.759,0,100,5.195,0,0,0,1.149,0,0,0,0,1.02,0,60.204,1,0,0,0,0,0,4,0,0,0,0,0,0,0,0,0,0,0,1.136
,0,0,0,2.353,0,0,0,0,0,0,0.952,0,0,0,0,0,0,0,0.952,0,0,0,0,0,0,0,0,0,0.87,0,0,0,0,0,0,0,2.308,1.504,0.725,0,0,0,0,
0)
> y5 <-
c(0,0,0.704,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.699,0,0,2.837,0,0,5.185,0,0,0,1.55,11.852,5.303,24.812,1.504,0,5.556
,6.475,0,0,0,22.124,0,0,14.062,4.317,0,53.237,1.439,0.714,0,0.704,2.837,0,0,7.042,0,0,99.301,0,0,0,0,0,47.552,0,38.4
62,0,0,0,0,0,0,0,0,0,0,1.399,100,0,7.692,0,97.203,0,84.615,0,98.601,1.399,0,0,0,0,0,0,0,0,0,0,0.694,0,98.611,0,0,0,0
,1.389,0,9.028,0,57.639,0,0,0,0,0,0,0.719,99.286,0,55.556,0,0,0,84.354,0,0.685,0.68,10.884,0,0.68,3.401,23.129,4.082
,0.685,0,81.633,0,0.685,0,17.007,0,0,0,0,0.68,98.639,76.871,0.68,0,60.959,0,2.721,0,0,0.68,0,0,0,61.905,0,0,1.361,0,
0,0,0,0,8.108,0,96.622,15.541,0.676,0,72.297,51.351,0,0,0.685,0,0,0,0,0,8.667,0,0,0,0,0,0.667,0,0,0,0,100,0,0,0,0,0,
0,0.667,0,100,0,0,98.667,0,2,0,0,0,2.013,0,0,4.698,0,0,0,0.671,0.671,0,0,2.013,0,0,0,0,0.667,0,0,0,0,0,0,0,1.342,0,1
.342,0,0.671,0,0,0,0,1.342,0,0,46.309,0,0,0,67.333,0,0,0.671,2.013,0,18.243,1.351,0,97.973,0.676,1.351,0,0,0,0,0,0,0
,35.616,99.32,0,0,0,0,0,0,0,0,0,0,99.333,0,4,0,0,0,0,0,0,0,0,0,0,0,0)
> y6 <-
c(0,0,0,0,0.667,0,0,0.685,0,2.041,2.041,0,1.351,23.649,0,0.68,67.568,1.361,0.68,6.164,0.769,0.699,1.37,1.37,0.69,0.6
9,6.897,2.963,9.79,0.694,0.704,27.465,13.287,0,20.423,15.603,2.128,39.716,39.437,0.704,10.49,3.425,11.268,34.286,1.4
18,9.929,37.226,2.206,17.391,14.493,2.158,0,0,18.44,1.408,9.929,2.128,0.709,35.461,6.429,56.429,1.429,2.857,5.036,3.
623,13.669,3.571,43.165,2.113,7.092,0,0,0,0,100,0,0,0,0.667,0,0,0,0,0,0,85.333,0,0,0,0,0,0,8,1.333,3.333,0.667,8.667
,1.333,2.667,0,0,2,4,0.671,0,0,0,0.671,0,0.671,0,92.617,0,0,0,3.333,0,2,0,0,11.409,2.685,7.383,0,0,0,0,15.541,0,27.7
03,0,14.865,0,0,0,4.027,0,0,0,0,46.309,0,5.369,0,0,2.703,0.676,0,0,0.671,0,0,10.738,0,0,4.698,0,0,0,0,0,1.351,3.378,
0,0,31.757,0.676,0.676,0,0,0,59.864,0,0,0,0,39.456,1.361,0,0.676,0,37.162,4.054,0,0,1.351,0,42.568,0,0,0,0,0,0,11.48
6,50,0,0,0,0,0,0,0,0,0,20.27,0,0,22.297,0,0,0,100,0,0,99.324,0,0,99.324,0,0,0,0,0,0,99.324,87.162,0,0,0,0.676,0,0,
81.081,0,0.676,77.703,0,0.68,0,0,22.603,46.575,0.685,0,0,0,0,0,2.721,100,1.361,12.925,0,0,0,0,0,0,0.68,1.361,0,38.77
6,77.551,0,98.639,0,0,0,44.218,0,0,0,0,0,0,0,85.714,0,0,29.932,0,0,0,93.878,0.68,0,0,0,0,0,0,0,0,0,0,2.098,67.832,0)
> y7 <-
c(0,78.169,0,0,74.825,0,0,0,89.51,0,0,39.86,0,0.699,0,0,42.958,0,0,0,0,0,0,2.113,0,0,95.07,61.972,0,0,0,0,99.296,0.7
04,4.225,0,0,67.606,41.549,0,90.071,0,100,0,0,0,0,0,2.837,0.709,99.291,2.597,0,0,0,0,0.901,0,0,0.885,0,22.124,0,0,0,
0,2.586,0,15.385,16.102,0,8.065,24.8,1.6,0,0,0.794,0,7.937,64.062,0,17.188,43.609,2.158,8.392,41.611,0.671,0,24.161,
0,0,3.356,0,0,8.054,8.054,0,0,0,0,10.135,1.504,3.101,4.348,2.4,1.408,0,0.671,31.333,8,0,13.333,4.667,0,0,0,0,0.667,0
,0,0,0.667,0,1.333,0,0,0,8.667,50.667,0,3.333,81.333,2.667,0.667,20.667,14,1.333,63.333,8,55.333,0,6,16,4.667,0,2.66
7,2.667,0,0,0.667,0,2,0,0.667,0.667,16,1.333,59.333,19.333,0,60,8.667,6.667,0,0,32.667,5.333,0,6,80,0,1.333,0,0,0,0,
12,95.333,0,0,2,0,0,1.333,0,1.351,7.432,0,2.899,17.073,3.497,29.054,13.514,2.667,0,1.342,0,0,0.667,0,0,0,0.667,2,0,0
,2.667,1.333,0,0,7.333,0,0,0.68,20.28,59.155,2.128,13.475,40.714,0,25.18,5.072,0,11.594,7.407,25.833,0,2.542,0,0,5.4
79,75,4.878,1.626,1.626,0,0.806,6.452,0,2.804,0.813,2.885,1.923,3.448,1.724,3.448,0,0,0,0,1.754,0,0,0,0,9.615,0,0,0,
0,0,10,1.136,1.087,1.099,1.111,0,0,0,0,0,0,13.699,0,0,0,0,1.587,0,0,0,2.381,0,0,0,0,0,0,0,0.84,0.847,0.855,0.855,0.8
55,23.932,0,0,0,0,4.098)
> y8 <-
c(0,18.548,13.6,1.587,2.326,26.562,0,0,0,3.03,0,10.687,61.832,0.758,22.556,41.176,1.449,8.759,32.667,0.667,0,19.333,
0,0,1.333,0,0,3.333,1.333,0,0,0,0,7.383,2.113,2.941,2.19,0,0.781,0,0,32,11.333,0,11.333,1.333,0,0,0,0,0,0,0,0,0,0.66
7,0.667,0.667,2.667,0,4,46,0,2,80.667,1.333,0,18,12.752,2.667,66.667,6,56,0,9.333,10.667,6.667,0.667,3.333,2.667,0,0
,1.342,0,1.342,0,0,1.342,14.094,0.671,57.718,19.463,0.671,60.403,8.054,2.013,0,0,34.667,6.667,0,2.667,83.333,0,0,1.3
```

```
33,0,0,0,11.333,96,0,0,2,0,0,1.333,0,5.333,6.25,0.84,1.01,29.054,10,2.027,0.667,0.667,0,0.667,1.333,0,0.667,0,0.667,
0.667,0.667,0,2,0,0,0,12.667,0,0,0,15,63.309,0,17.857,40,0,38.129,1.439,0,10.791,8.759,30.081,1.639,1.626,0.833,0.78
1,4,2.439,2.419,0.806,0,16.667,0,0,0,0.885,0,3.75,0,0,0.901,0,0,0,0,0,0,1.075,1.053,0,1.961,0,0,0,0,0,2.083,1,0,1.
01,21.978,0,0,0,0,0,1.22,1.25,0,0,5.128,0,0,1.786,0,0,0.943,0,0,0.813,0,0.806,23.387,0,0,0,0,4.032,0,19.231,9.231,1.
527,2.256,21.642,2.222,0,0.725,0.725,0.725,9.22,67.376,0.709,19.149,41.844,0.704,8.163,42.282,0.671,0,20.134,1.342,0
.671,1.342,0.671,0,5.369,4.698,0,0,0,0,8.054,2.899,3.65,3.008,0.833,1.724,0,0,28.859,6,0,11.333,3.356,0,0.69,0,2.013
,0,0,0,0,0,0,0.667,2,3.333,0,14.667,48,0,6.667,85.333,2.667,0.667,18.667,9.396,2,71.333,11.333,65.333,0,5.333,13.333
)
> y9 <-
c(6,0,1.333,4,0,0,0,0,0.667,0,0,1.333,7.333,0.667,58.667,20,0,55.333,4.698,6.04,0,0,26.846,6,0.667,6,74,0,1.333,0.66
7,0,0,0,11.333,96,0,0,0.667,0,0,0.667,0,1.361,6.081,0.667,1.942,3.846,41.176,14.667,4,0,2.027,0,0.667,1.333,0,0,0,1.
333,0.667,0,0,1.333,1.333,0,0.667,13.333,0,0,0,18.367,59.589,0.69,9.655,41.379,0,27.586,4.895,0,14.085,12.143,29.134
,0.806,1.653,0.826,0.833,3.797,86.667,1.639,2.479,3.279,0,5.785,11.765,0,0,0,2.198,0.917,1.869,0.885,0,0.901,0,0.99,
1.01,0,0,0,0,11.538,0,1.351,0,0,0,0.99,0,0,0,0.952,1.923,0,0,0,17.778,0,1.176,0,2.326,3.509,0,0,0,0,0,1.449,0,10,0,1
2.5,0,0,0,89.474,0,0,90,5,0,4.545,0,10.843,17.822,0.752,2.963,33.333,1.481,0,0.719,2.143,0,10.791,51.799,0,19.424,42
.254,0.69,1.351,30,1.333,0,33.333,0,0.667,8,0.667,0,16.667,12,0,0,0,0,11.333,0,4,1.333,0,1.515,0.671,0.671,39.597,5.
333,0,0,12,0,0,0,1.333,0.667,0,0,0,0.667,0,0.667,0,1.333,0,10.667,70,0,4.667,88,0.667,0,32.667,18,0.671,76.51,6.667,
77.333,0,4,2.667,3.333,0,2.667,3.333,0,0,0,0,3.333,0,0,0,14.094,2.685,63.087,24.161,0,38.926,5.369,9.396,0,0,39.333,
2,0,6,64,0,2,3.333,0,0,0,7.333,99.333,0,0,0.667,0,1.333,1.333,0,0.667,6.757,0.699,0,45.578,22.973,16,0.667,0,0,0,0,0
,0,0,1.333,0,0,0,0.667,1.333,0,0,18.667,0.667,0,0,17.241,47.917,0.68,14.966)
> y10 <-
c(56.552,0,32.867,1.439,0,31.2,1.667,12.195,1.887,2.174,2.778,0,0,16.667,0,3.333,0,73.333,0,0,0,0,4.167,0,72,0,0,68,
0,8,4,0,0,0,0,6.667,0,0,12.5,0,0,0,4,0,0,0,56.522,0,0,0,0,0,0,65,0,0,0,60,0,0,0,0,5.882,0,0,100,0,0,0,0,0,0,0,100,10
0,100,0,0,0,0,5.714,2.632,2.632,0,78.049,9.302,0,0,34.043,0,20.968,0,3.67,76.068,5.932,6.667,0.826,90,1.667,1.653,4.
959,0,24.194,78.571,0.746,4.348,34.932,2.055,0,0.68,5.442,0,0,0,0,0,0,0,0.68,0,0,0,18.367,0.68,19.048,8.844,9.524,2.
721,0,1.361,2.055,1.449,1.515,1.163,0.69,0.68,30.556,4.138,14.286,2.041,3.401,0.68,0.676,0,0,0,1.361,0,94.667,0.671,
0,0.671,2.685,12.081,2.027,1.351,2,17.45,0,0,0,1.418,0.69,1.342,0,24,0,93.333,6,0,0,0,0,0,0.667,0,0,0,0,0,2.667,0,10,0
,0,32,0,2,94.667,0.667,0,24.667,12.667,0,76.667,18.121,36.242,0,45.638,4.027,4.698,7.383,0,22.819,0,6.04,0,0,0,2.685
,16.779,1.342,36.242,4.698,0,36.913,22.819,5.369,0,10.738,7.383,14.667,0,4,60.667,0,96,0,0,0,0,0,0.667,0,0,0,0,93.333,
0.667,1.333,2,0,4.667,0,0,0,0,1.333,2.381,22.973,20.548,18.939,41.86,32.09,2.041,10.667,0,1.333,2.759,2.344,0,1.493,
5.369,0,4,0,11.333,0,6,0.667,6.667,4,0,4.667,95.302,0,0.671,0,4.082,4.73,5.442,0,6.207,78.621,0,48.951,10.417,82.639
,0.694,2.083,0.694,0,20.833,0,2.083,5.556,1.389,0,0,0,0,15.328)
> y11 <-
c(4.8,0,1.835,0.935,4.95,0,5.208,1.099,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,11.111,0,0,0,0,0,0,17.5,2.222,0,0,0,0,4.5
45,0,2.273,0,0,0,7.317,0,2.439,0,12.5,0,0,2.564,0,0,0,0,0,0,0,5.556,0,0,0,0,0,2.941,0,3.125,0,7.692,0,0,0,0,3.704,6.
667,0,0,0,0,0,0,0,0)
> L <- c(y0,y1,y2,y3,y4,y5,y6,y7,y8,y9,y10,y11)
> z0 <-
c(9,4,4,2,3,4,5,5,4,5,5,4,5,8,9,6,6,6,8,5,6,6,7,4,5,6,3,6,8,5,4,5,3,4,5,4,5,4,6,5,7,5,2,4,5,7,4,5,5,4,3,3,3,4,4,2,3,
3,2,1,1,2,4,3,1,2,3,2,2,1,1,3,1,4,3,5,4,5,6,7,9,7,6,9,9,9,8,9,7,5,8,8,7,9,9,9,9,9,9,9,8,9,5,3,3,4,1,3,2,2,2,1,3,4,1,
3,2,2,1,1,4,3,2,4,4,6,6,6,4,4,7,6,4,1,2,3,2,4,3,4,5,3,4,5,4,6,6,8,8,6,9,9,9,4,9,5,7,8,9,8,9,8,6,8,9,9,4,9,7,4,8,7,9,
6,9,9,9,9,9,9,8,9,9,7,8,9,9,6,8,8,8,9,9,9,9,5,9,8,9,5,8,5,7,5,8,8,8,9,9,7,5,9,7,5,7,9,9,4,9,9,5,3,7,9,7,5,8,9,7,4,9,9,
7,6,4,9,4,4,5,8,5,4,8,6,4,8,6,6,5,9,9,9,8,9,5,9,5,4,9,8,4,7,9,5,2,8,9,4,9,9,9,9,6,7,9,8,9,8,7,6,7,7,9,8,9,5,8,8,9,9,
9,9,9,9,9,9,9,8,9,9,8)
> z1 <-
c(9,5,9,8,8,9,9,8,7,8,9,9,7,9,9,9,9,9,9,8,9,8,8,9,9,8,6,7,8,6,9,9,9,9,9,9,8,6,7,8,7,6,9,5,6,3,7,7,5,8,8,4,6,8,9,9,9,
9,9,7,4,9,8,4,7,8,9,9,9,8,8,9,7,9,8,4,7,9,9,9,9,9,8,9,8,9,4,8,9,5,9,9,7,9,4,3,8,5,5,5,4,5,1,6,5,4,5,5,5,4,4,4,5,3,4,
1,3,3,5,1,1,3,4,1,1,3,3,1,1,4,4,1,1,5,3,1,2,5,3,3,3,3,3,4,3,4,5,2,4,6,4,4,6,5,4,5,5,7,4,8,7,8,9,9,8,9,9,9,9,9,9,9,7,
5,5,9,3,5,4,8,4,6,4,4,6,1,5,1,2,6,2,5,3,5,4,5,6,9,8,8,7,7,9,9,4,8,2,4,5,1,4,3,5,6,5,8,3,3,4,5,4,7,5,8,4,8,5,7,7,4,9,
4,4,8,3,9,6,6,6,5,8,4,4,7,1,9,4,8,9,8,5,3,3,5,1,8,4,7,8,8,5,3,1,3,6,5,4,3,5,1,4,3,9,5,5,7,1,4,4,8,4,8,9,5,5,6,4,5,5,
6,3,7,8,9,7,7,7,9,8,9)
> z2 <-
c(8,9,9,9,9,9,9,9,9,9,9,9,7,9,9,9,7,9,9,7,6,9,9,7,6,7,8,7,7,9,9,5,7,9,7,4,8,8,8,7,9,7,7,9,6,8,8,8,7,8,9,6,5,9,9,8,
9,7,8,5,8,8,9,9,9,9,7,8,7,9,6,9,7,9,7,7,9,7,5,8,9,5,9,9,8,9,7,8,9,7,4,7,8,4,9,8,8,5,8,8,6,9,9,6,8,7,9,5,7,8,8,6,4,9,
9,7,6,9,8,3,8,9,7,1,9,9,6,6,7,7,8,9,9,7,9,8,4,6,7,9,8,4,4,3,3,1,1,3,1,2,5,2,2,2,1,1,1,3,3,2,3,3,2,1,1,4,1,4,3,5,5,6,
8,9,8,6,9,9,9,8,9,6,5,8,9,7,9,9,9,9,9,9,9,8,9,5,3,3,5,1,4,2,3,2,3,3,1,4,1,2,1,2,3,1,3,4,4,3,1,3,2,4,3,4,5,3,5,6,4,6,
5,8,8,7,9,9,9,4,9,5,7,9,9,8,9,9,6,9,9,9,4,9,8,4,8,8,9,7,9,9,9,9,9,9,9,9,7,8,9,9,5,9,7,8,9,9,9,9,7,9,7,9,7,8,5,7,5,7,
8,7,8,9,7,5,9,8,6,8,9)
> z3 <-
c(9,3,9,8,5,3,5,9,8,6,8,9,7,4,9,9,7,6,5,9,4,5,5,8,5,4,8,6,4,8,6,8,7,9,9,9,8,9,5,9,6,3,9,7,4,7,9,5,3,9,9,5,9,9,9,9,6,
7,9,8,9,8,7,6,6,8,9,7,9,6,7,8,9,9,9,9,9,8,9,9,8,7,8,8,8,9,5,9,9,7,7,9,8,7,8,9,9,7,9,9,9,8,9,9,8,8,9,8,8,5,5,5,8,6,
9,9,8,9,9,9,8,5,8,8,6,5,9,5,6,3,6,7,4,8,8,4,6,8,9,8,9,9,9,6,4,9,8,4,7,9,9,9,9,8,7,9,7,9,8,4,8,9,9,9,9,8,7,9,9,9,4,9,
9,6,9,8,7,9,5,4,8,6,6,4,5,5,3,6,5,5,6,5,5,4,4,4,5,4,5,1,2,3,5,1,1,4,4,1,1,3,3,1,1,4,6,1,1,6,4,3,3,5,4,3,4,3,2,4,3,4,
5,1,3,5,4,3,5,3,3,4,4,6,4,7,6,9,9,9,7,9,9,9,9,9,9,9,7,5,6,9,3,4,4,9,4,5,4,5,6,2,6,1,1,5,2,5,2,4,3,5,7,9,8,7,8,7,9,9,
4,9,1,4,6,1,4,4,5,7,5)
> z4 <-
c(8,3,2,5,5,3,5,5,8,4,9,5,5,6,3,9,4,3,8,1,8,5,6,5,5,8,4,4,7,1,8,3,8,9,7,4,3,3,4,1,7,3,7,8,8,5,3,1,3,6,5,4,3,5,1,3,3,
8,4,5,6,1,4,4,8,4,7,8,5,5,6,4,4,5,5,8,8,6,7,7,9,7,8,9,8,9,8,9,8,9,9,8,9,9,9,9,8,9,9,8,7,9,9,8,6,9,9,6,6,8,8,7,6,9,8,
5,5,9,7,5,8,7,8,7,9,7,6,9,5,8,8,7,7,8,9,5,7,9,9,9,8,7,7,5,8,8,9,9,9,9,8,8,6,9,5,9,8,9,7,5,9,6,5,8,9,6,9,9,9,9,7,8,9,
8,4,8,9,5,8,9,8,5,8,9,5,9,9,5,8,7,9,6,5,7,7,6,4,9,9,7,7,8,8,3,8,9,7,3,9,9,6,5,7,8,8,9,9,8,9,9,4,7,7,9,9,9,4,4,1,3,4,
5,5,5,6,7,4,4,9,9,5,7,6,8,5,7,5,7,4,4,5,3,8,7,4,4,4,3,4,7,4,4,3,7,4,8,5,3,4,5,7,3,5,6,4,4,3,3,4,4,4,1,3,1,1,1,4,3,1,
3,1,3,2,2,4,3,5,5,5,7)
> z5 <-
c(9,9,7,9,9,9,9,9,6,5,8,8,7,9,9,9,9,9,9,9,8,8,5,2,3,5,1,4,3,3,1,3,4,1,3,2,3,1,1,4,4,1,5,4,1,1,3,3,4,2,5,5,3,5,6,5,8,
7,9,8,7,9,9,9,4,9,6,7,8,9,8,9,9,5,9,9,9,4,9,7,4,9,8,9,6,9,8,9,9,9,8,9,9,7,8,9,9,5,8,7,8,9,9,9,8,6,9,8,9,5,8,6,6,4,7,
9,8,9,9,8,6,9,6,5,7,9,8,3,8,7,4,3,6,8,7,5,8,9,7,4,8,9,6,5,4,8,4,5,6,7,6,4,8,7,4,7,6,7,6,9,9,8,8,9,6,9,5,3,9,7,4,7,9,
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5,3,8,8,4,8,8,9,9,6,7,9,7,9,8,7,6,5,7,9,7,9,5,8,8,9,9,9,9,9,9,9,8,8,8,9,9,8,9,6,9,8,7,9,9,8,7,8,9,9,6,9,9,9,9,9,9,7,
9,9,8,9,9,7,6,6,8,7,9,9,9,9,9,9,9,5,8,8,7,5,9,5,7,3,6,6,5,7,8,5,5,7,9,8,9,8,9,5,3,9,7,4,8,9,9,9,9,8,8,9,7,9,8,5,8,9,
9,9,9,9,9,9,9,9,4,9,9)
> z6 <-
c(6,9,9,8,9,5,4,7,5,4,4,4,4,2,6,5,5,5,5,4,4,4,4,5,3,4,1,1,2,5,2,1,3,5,2,2,3,4,2,1,4,4,1,1,4,2,1,1,4,2,2,3,3,3,3,1,3,
4,1,2,4,4,1,4,3,3,5,4,5,4,6,7,9,9,9,7,9,9,9,9,9,9,9,8,6,7,9,3,5,4,9,4,6,4,4,5,2,6,1,2,6,2,4,3,4,4,5,7,9,9,8,8,7,9,9,
5,9,1,4,5,2,4,4,5,7,5,8,3,3,4,5,4,6,5,8,5,8,4,6,7,4,9,3,4,9,1,9,5,7,6,7,8,4,4,8,1,9,3,8,9,8,5,3,3,5,1,9,3,7,9,9,6,5,
2,3,8,5,4,3,5,2,4,3,9,5,5,6,1,5,5,9,4,9,9,5,6,7,4,4,5,6,7,8,9,7,7,7,9,8,8,9,9,9,9,9,9,9,9,9,9,9,9,8,9,9,9,7,9,9,8,
8,9,9,6,5,8,9,7,6,9,8,5,5,9,7,5,8,8,9,7,9,6,6,8,7,9,7,7,8,8,8,5,5,9,9,9,8,7,8,6,8,8,9,9,9,9,8,9,8,9,5,9,7,9,7,7,9,7,
6,8,9,6,9,9,9,9,7,8,9)
> z7 <-
c(7,5,9,9,5,9,9,8,5,9,8,6,9,9,6,9,8,9,4,7,8,8,5,4,9,9,7,5,8,8,3,8,9,7,1,9,8,7,5,7,7,8,9,9,8,9,8,3,6,7,9,9,9,5,4,5,9,
8,9,9,8,7,9,8,5,5,8,9,5,1,4,7,3,5,7,9,6,8,6,4,9,3,4,5,1,5,9,7,7,9,9,8,7,7,9,7,8,7,8,6,3,7,1,1,1,4,1,2,3,1,9,6,6,9,3,
8,4,5,9,9,6,8,7,7,4,7,9,6,6,8,9,6,6,6,4,4,9,4,4,6,9,4,5,7,7,8,8,9,8,7,6,6,9,8,5,6,9,4,5,9,6,4,5,9,6,4,8,6,8,7,7,9,8,
6,9,9,6,8,6,7,7,9,5,4,7,1,1,1,3,5,1,2,2,4,5,5,8,9,8,7,8,8,8,5,9,7,9,9,9,7,4,6,8,5,2,5,5,3,4,8,2,3,8,4,5,5,8,6,4,4,6,
5,7,4,4,4,6,3,6,6,4,3,4,3,3,5,5,7,6,6,5,6,3,4,3,3,3,4,5,3,5,3,4,4,4,8,7,7,6,5,3,4,4,4,4,3,5,4,6,8,9,5,8,4,8,8,6,4,4,
7,6,9,8,7,7,8,9,5,5,6)
> z8 <-
c(8,4,1,4,7,3,5,6,9,5,8,6,4,8,2,4,5,1,4,9,7,7,8,9,9,6,7,9,7,7,8,8,6,4,7,1,1,1,4,1,4,4,2,9,6,6,9,3,8,4,5,9,9,5,8,8,6,
4,7,9,7,6,8,9,7,6,6,4,4,8,5,4,5,9,4,4,7,7,7,7,9,8,8,6,6,9,8,5,6,9,4,5,9,6,3,6,9,5,3,8,6,8,7,7,9,8,6,9,9,6,9,6,7,7,9,
6,4,7,1,1,1,3,2,1,5,5,4,7,8,8,7,8,7,8,5,9,8,9,9,9,8,5,7,9,4,1,5,6,3,4,8,2,4,8,4,5,5,7,5,4,4,7,4,3,4,5,3,5,4,4,3,4,3,
3,4,4,7,5,6,6,7,2,2,3,5,4,4,7,7,6,7,9,7,5,3,4,3,3,3,3,3,4,7,7,6,9,5,5,7,9,6,5,5,9,7,9,8,8,6,9,9,5,4,7,8,6,2,3,7,3,5,
5,9,5,8,5,4,8,3,4,6,1,5,8,7,6,8,8,8,7,6,9,6,7,7,8,7,2,7,1,2,1,3,1,3,3,1,9,5,6,9,2,7,4,5,9,9,6,6,5,6,4,6,9,6,6,8,9,7,
6,6,4,3,8,4,4,6,9,4,5)
> z9 <-
c(7,7,6,8,9,9,8,6,6,9,8,5,5,8,4,5,9,5,4,6,9,6,3,6,6,7,6,7,9,8,6,9,9,6,8,6,8,8,9,6,3,7,1,1,2,1,2,4,1,4,6,4,7,8,7,7,8,
8,8,6,9,8,9,9,9,8,4,6,9,4,2,4,5,3,3,7,1,3,8,3,5,4,9,6,4,5,5,6,7,4,5,4,5,4,4,5,4,3,3,4,4,6,5,5,5,6,3,5,3,2,3,4,4,4,4,
4,8,6,7,8,7,5,3,4,4,3,3,3,3,3,5,7,8,6,9,4,9,7,5,3,7,5,8,7,8,6,7,7,3,6,7,5,3,4,8,3,5,6,8,5,8,5,4,9,3,3,5,3,5,8,8,7,
8,8,8,7,6,9,5,8,8,9,9,4,9,1,3,1,5,3,3,4,2,9,6,7,9,4,9,3,4,9,9,5,8,7,6,4,6,8,5,4,7,8,6,5,6,2,2,9,5,4,6,9,4,5,7,5,5,8,
8,7,6,6,6,9,7,5,7,8,5,5,9,5,4,5,9,6,3,6,6,5,5,9,9,8,7,9,9,5,9,8,8,9,9,5,4,7,1,1,1,4,4,2,4,5,5,7,9,9,8,9,7,8,5,9,7,9,
9,9,8,4,6,9,3,1,4,4,2)
> z10 <-
c(4,7,1,3,6,2,4,2,6,4,5,5,5,5,5,4,7,5,8,7,5,3,5,6,4,7,5,4,5,6,4,5,4,2,7,5,4,4,1,4,6,3,2,7,5,6,3,4,6,4,6,6,5,3,5,5,3,
2,4,6,6,6,2,7,6,8,5,8,6,6,7,5,5,6,6,6,5,4,9,4,3,6,5,5,4,4,6,3,6,5,5,3,6,5,8,8,9,8,8,8,7,7,4,7,5,3,4,7,8,9,7,9,9,8,9,
8,8,8,6,6,8,3,7,4,4,5,6,3,9,1,3,2,4,1,2,4,2,4,6,3,6,1,7,3,9,9,9,8,8,5,4,5,3,6,2,5,4,2,6,5,2,2,3,3,1,1,4,8,3,8,8,4,9,
9,8,9,8,9,8,9,7,6,7,9,5,7,8,8,8,6,6,6,8,8,5,5,9,5,7,4,5,5,4,9,7,4,7,5,6,5,8,4,5,9,7,4,5,9,5,3,6,7,7,6,9,8,8,7,8,8,9,
9,9,7,7,8,7,7,8,9,1,7,9,6,7,2,3,5,3,1,3,4,1,3,9,2,1,1,1,5,1,9,1,4,3,4,2,7,5,7,8,6,9,9,7,9,8,7,7,9,8,7,9,5,5,7,9,5,7,
9,6,8,9,8,7,9,9,9,5,5)
> z11 <-
c(7,5,4,4,3,5,4,5,3,2,4,5,5,4,3,7,5,6,4,4,5,4,4,6,4,3,4,4,8,5,5,8,5,3,2,4,7,5,6,5,4,5,4,4,5,4,5,4,3,2,4,7,4,2,4,5,4,
4,5,4,6,4,6,1,3,3,4,5,8,5,3,6,2,7,5,4,3,8,6,8,8,5,9,7,7)
> CS <- c(z0,z1,z2,z3,z4,z5,z6,z7,z8,z9,z10,z11)
> a0 <-
c(0,0,0,28.049,0,0,0,1.075,74.468,0,0,0,0,0,0,2.105,0,1.053,1.053,0,0,1.031,0,0,1.031,15.625,4.255,0,2.439,1.205,3.5
71,1.19,2.381,3.614,1.087,0,1.053,19,0,2,0,38.542,0,0,2.222,0,15.73,2.941,0,1.111,0,0.935,0,2.857,0.935,1.802,0,0,0,
9.009,0,1.681,0,0.752,0.752,4.58,1.099,3.093,5.072,3.571,1.408,5.147,2.143,1.37,0,0,0,0,0,0,0,0,100,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,2.055,3.472,0.69,1.361,0,3.472,0,0,6.452,1.399,2.098,1.389,2.098,4.167,1.02,4.828,1.418,1.55
,0,8.772,0,1.515,0,0,0,0,0,0,0,0,0,4.167,0,4.861,2.069,5.517,0.694,0,0.667,2,0,0,0,2,0,0,0,0,0,0,24.161,0,0,0,0,0,0,
0,0,0,0,0,0,48,0,0,1.342,2.013,2.667,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,32.667,0,0,0,0.667,2,0.667,0,0,
0,0,0.671,0,0,0,0.671,1.342,0,0,1.333,0,0.667,0,1.333,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,14,0,3.333,2.667,0,0,5.333,8
.667,0.667,0,1.333,0,1.333,0.667,0,0,0,0,0,0,0,0,0,24,0,0,0.667,0,0,0,0.667,0,0,0,0,0,0.676,0,0,9.333,0,0,7.333,0,0,4,
0,0,3.333,0,0,0,1.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0)
> a1 <-
c(0,2,0,0,0,0,0,0,0,14.667,0,0,1.333,0,0,0,0,0,0,0,0,0,0,0.671,0,0,26,0.667,0,0,0,0,0,0.667,0,0,0,0,0,0,0.667,0,1.333,0,
0,1.333,2,3.333,0,0,0,0.671,0,0,63.087,20.805,0.671,0.671,0,0,0.671,0,0,0,0,0,0,5.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,
667,97.333,0,0,0,0,0,0,0,2.667,0,0,0,0,0,64,0,35.57,18.367,1.389,0.694,63.889,0.694,0.694,1.379,2.069,0.694,0.694,0,2.
055,1.37,4.11,0,12.5,0,58.904,1.379,42.361,1.389,0.752,0,0.694,0,4.795,2.721,0.68,7.534,14.384,46.853,8.333,3.448,0.
69,1.37,0,2.041,0.68,23.129,1.361,0,4.828,0.69,0,11.034,0.699,0,0.69,0,0,25.352,74.126,2.797,0,0.694,7.639,2.797,0.6
99,0.709,0,67.361,0,0,0,0,0,0,0,0,41.333,0,0,0,0,0,2,0,0,0,0,0,0,0,0,0,0,0.667,0,35.333,0,18,0,17.333,0,0,1.333,5.33
3,2.013,0,0.671,78.523,0.667,0,0,82.667,0.667,0.667,0,0,0,0,14,0,0,5.333,0,0,0,0.667,0,0,7.383,0.667,0,0,0,0,2.013,0
,44.667,0,0,0,4.698,22.148,0,0.671,0.671,0,6.122,0,0.671,0,0,69.799,4.698,28.859,0,73.154,0.671,0,0,0,0,94.595,0,3.3
78,0.676,64.865,4.73,0.676,0,0,96.644,0,0,0,1.342,4.027,0,0,4.698,0,15.436,2.685,0,2.013,0.676,14.189,77.027,0,9.459
,0,0.676,0,33.108,0,0,0.676,0,33.108,3.378,2.041,0,0.68,0,0,1.361,0,0,0,1.351,0,0,0)
> a2 <-
c(2.027,0,0,0,68.243,0,0,1.351,0,0,0,0,0,0.676,0,0,0,0,0,0,0,1.351,0,0,0,10.135,0,0.676,0,0,0,0,0.68,0,0,0.685,0,1.3
51,16.216,0,0,0,0,0,0,33.784,0.676,0,0,2.027,0,0,0,0,0,0,0,0,0,0,0,9.459,10.135,0,0,0,0,0,0,0,0,0,0,96.622,14.189,0,0.
676,0,0,55.102,0.685,0,0,29.452,98.639,0,0,0,0,0,0.68,0,0.68,0,0,0.68,0,0,0,0,2.041,0,0,0,1.361,2.721,0,0,22.069,0,0.69,0,
0.69,0.69,95.172,0.69,1.379,0,0,0,0,0,0,0,18.621,0.69,0,1.379,2.069,0,0,0,0,0,7.586,0,0,0,0,100,0,6.897,0,0,0,0,0,0,
0,0,4.762,0,1.818,1.408,19.444,0,4.545,1.639,1.471,7,2.586,2.4,0,1.55,2.273,0.769,2.857,9.353,0.714,2.098,3.604,2.75
9,0,0,0,0,0.758,0,0,0,0,99.315,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.69,4.196,2.098,0.694,2.817,0,6.294,0,1.449,3.49
7,1.942,0.971,5.147,5.036,1.429,3.571,2.632,0.877,0.741,5.224,0,0.741,0,5.556,0.82,1.639,2.143,11.429,1.408,0.68,0,2
.721,0,0,0,2.041,0,0,0,0,0,0,0,28.571,0.68,0,0,0,0,0,0,0,0,0,0,0,51.37,0,0,2.74,2.74,1.37,0,0,0,0,0,0.685,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,32.653,0,0,0,0.676,3.378,0.676,0,0,1.351,0,2.027,0,0,0.671,2.013,0,0,0,0,0.667)
> a3 <-
c(0,1.333,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,14.765,0,2.013,1.342,0,0,6.711,6.04,0.671,0,0.667,0,0,0,0,0,0,0.667,
0,0,0,0,19.333,0,0,0,0,0,0.667,0,0,0,0,0,0.671,0,0,9.333,0,0,6.667,0,0,7.333,0.667,0.667,3.333,0,0.667,0,0.667,0,0,0
```

```
,0,0,0,0,0,0,0,0,0,0,0.667,0,0,5.333,0,0,0,0,0,0,18,0,0,3.333,0,0,0,0,0,0,0,0,0.671,0,0,0,30,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,1.333,0,0,1.342,5.442,5.405,0,0,1.351,0,0,61.486,20.27,0,0,0,0,0,0,0.671,0.671,0,0,8.784,0,0,0,0,0,0,0.671,0,
0,0,0,0,0,0,0,97.987,0,0,0,0,0,0,6.04,0,0,0.676,0,0,64.43,0,39.333,21.233,0.699,0,68.966,0.69,2.098,0,1.37,0.68,1.35
1,0,1.37,0.685,2.74,0,11.644,0,62.329,2.041,49.655,1.379,1.471,0,2.083,0,6.25,2.041,0.685,5.556,15.172,54.795,8.276,
2.759,0.694,1.389,0,1.389,0.704,24.648,0,0.719,7.194,0,0,6.25,0,0,0,0,0.704,18.182,74.306,5.594,0,1.399,9.79,3.497,0
.694,1.379,0,60.811,0,0,0,0,0,0,0,40,0,0,0,0,0,2.667,0,0,0,0,0,0,0.667,0,0,0.667,2,0,34.228,0,14,0,15.333,0.667,0,
2,3.333,0.671,0,0,69.128,0,0,0,82,0,0,0,0,0,0,12.667,0,0.671,6.711,0,0.671,0,0.671,0.671)
> a4 <-
c(0,11.034,0,0,1.379,0,0,1.342,0,38.926,0,0,0,10.811,15.541,0,0.671,0.671,0,2.685,0,0.671,0,1.342,67.785,6.711,33.55
7,0.676,75,0.676,0,0,0.68,0,93.919,0,2.013,0.671,67.114,4.027,0.671,0,0,94.631,0,0,0,0.671,4.698,0,0,5.333,0,16,3.33
3,2,3.333,0,18.667,76.667,0,8,0,1.333,0,28.667,0,0,0.667,0,27.333,4,2.685,0,0.671,0.671,0,0.667,0,0,0,0,0,0,0,0,62
.667,0,0,0.667,0,0,0,0,0,0.667,0,0,0,0,0,0,1.333,0,0,0,14,0,1.333,0,0,0.676,0,0,1.361,0,0,0,0,18.121,0,0,0,0,0,0,3
2,2.667,0,0,2,0.667,0,1.333,0,0,0,0,0,0,10,12.667,0,0,0,0,0,0,0,0,0,94.667,10,0,0,0,0,54.667,1.333,0,0,29.054,10
0,0,0,0,0,0,0.68,0,0,0,0,0,0.676,0.676,0,0,0,2.041,7.483,0.68,0,17.687,0,0.68,0,0,0.68,92.517,1.361,2.041,0,0,0,0,0,
0,0,26.712,0.685,0,1.37,0.685,0,0,0,0,0,5.442,0,0,0,0,99.315,0,6.207,0,0,0,0,0,0,0,20.69,0,0,0,2.041,72.449,1.02,0,0
,0,0,0,1,0,1,1,0,0,2,4.082,0,1.031,13.542,4.211,0,1.136,2.273,1.136,1.163,1.163,0,2.105,0,2.105,15,0,0,0,44.33,0,1.0
75,5.376,0,12.903,1.923,0,1.099,0,0,0,0,0,0,3.226,0,3.509,4.348,1.653,0,1.613,4.762,0,12.389,0.862,2.308,1.504,0.725
,0,0,0,0,0)
> a5 <-
c(0,0,0,99.296,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.709,3.546,0.709,0.725,3.704,0,5.224,0,0,2.222,0,2.256,1.504,8.8
24,0.926,5.755,1.429,0.775,0.885,4.425,0,0,0,3.597,0,2.158,1.439,7.857,0,1.408,0,1.408,0,0,0,2.098,0,0,0,0,0,0,30.76
9,0,0,0,0,0,0,0,0,0,0,0,0,46.154,0,0,2.098,5.556,1.399,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,38.194,0,0,0,0,0,
0,0,1.399,0.704,0,0.719,0.714,0,0,2.083,0,0,1.361,0,1.37,0.68,1.361,0.68,0,0,0,0,0,0,0,0,0,0,0,0.68,0,0,0,17.687,0,0
.68,1.361,0,0,2.721,4.762,0,0,1.361,0,0.68,0.68,0,0,0,0,0.68,0,0,0,0,25.676,0,0,0,0,0,0.676,0,0,0,0,0,0.676,0,0,7.33
3,0,0,8,0,0,4.667,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.685,0,0,0,0,0,0,0,10.738,0,0,2.685,0,0,0,0,0,0
,0,0,0,0,0,0,16.779,0.671,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,2.685,4.027,0,0,0.676,1.351,0,74.324,23.649,0,0,0,0,
0.671,0,0,0,0,0,11.333,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0.667,98.667,0,0,0,0,0,0,2.667,0,0)
> a6 <-
c(0,0,0,64,0,34,20.946,0.685,0,60.544,1.361,2.041,1.351,0.676,0.685,1.361,0.676,1.361,0,2.055,0,14.685,0,52.74,5.517
,40.69,0.69,1.481,0,2.083,0,1.408,1.399,1.399,4.225,14.184,48.936,5.674,1.408,0,1.399,0,2.817,1.429,33.333,1.418,2.1
9,4.412,0,0,8.633,0,0,0.709,0,0,20.567,75.887,4.255,0,2.143,10.714,2.857,0.719,1.449,0.719,61.429,0,0,0,0,0,0,0,0,39
.333,0,0,0,0,0,1.333,0,0,0,0,0,0,0,0,0,0,0.667,0,36,0.667,16.667,0,14.667,0.667,0,2.667,3.333,2.013,0,0.671,77.852,0
,0,0,88.591,0,0,0,0,0,0,18,0,0.667,4.698,0,1.342,0,0,0.68,0,8.108,1.351,0,0.676,0,0,0,0,50.336,0,0,0,6.711,21.477,0,
0.671,0,0,6.081,0,0,0.671,0.671,73.826,6.04,24.161,0,67.785,0,0,0,0.676,0,95.946,0,2.027,0.676,64.865,2.703,0,0,0,97
.315,0,0,0,0,3.401,0,0,6.803,0,15.541,0.676,0.676,2.703,0,9.459,76.351,0,7.432,0,2.027,0,40.541,0,0,0,0,38.514,4.054
,3.378,0,0.676,0,1.351,0,0.676,0,0.676,0,0,0,0.676,0,0,0,77.703,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.676,0,0,0,16.892,0
,0,0,0,0.685,0.685,0,0.685,0,0.69,0,0.68,12.245,0,0,0,0,0,0,41.497,2.721,0,0,1.361,0.68,0,0.68,0,0,0,0,0,0,0,5.442,1
4.966,0,0,0,0,0,0,0,0,0,0,100,11.565,0,0,0,0,57.143,0,0,0,27.083,99.306,0,0,0,0,0,0.699)
> a7 <-
c(0,0.704,0,0,0,0,1.399,0,0,0,1.399,3.497,0.699,0,18.881,0,0,0,0,0,95.07,0.704,0,0.704,0,0,0,0,0,0,25.352,0,0,0.704,
1.408,0,0.704,0,0,0,5.674,0,0,0,0,98.592,0,9.22,0,0,0,0,0,0,3.846,5.769,0,0,0,0,0.893,0,4.386,0,1.709,8.621,0,0,0.85
5,0.847,30.328,0,0.8,3.2,0,0.794,0.794,61.6,0.794,6.25,0,0,3.008,1.439,1.399,0,0,0,0,0,0,0,0,12.081,0,18.121,7.383,0
,0,0,8.108,0.752,10.853,6.522,8.8,4.93,2.098,4.027,6.667,2,0,0,0,0,0,1.342,2.667,2,1.333,0,2.667,0,0.667,4,17.333,0.
667,0,2.667,0.667,2.667,0,0,8,1.333,2,0.667,0,1.333,0.667,0.667,0,0.667,0,0.667,0.667,0.667,0,4,0.667,6.667,12.667,1
4.667,0,3.333,2,0.667,0,2.667,0.667,0,0,0.667,3.333,0,0.667,0.667,0,42.667,0,0,0,0,0,0,0,0,0,0.667,30.667,0,0,0,2.66
7,0.667,56.667,14.189,6.081,5,0,1.22,4.196,2.703,4.054,2,0.667,10.067,0,0.667,0,0.667,0,6.667,0,36,0,4,0,0,0,4.667,0
,55.333,0,0.68,1.399,1.408,29.787,2.837,0,0.714,0.719,2.174,0,0,0.741,1.667,0,19.492,4.237,4.032,5.479,13.636,0,14.6
34,17.886,4.918,0,16.935,5.217,1.869,20.325,3.846,1.923,0.862,11.207,31.897,0.862,0,13.043,2.655,0.877,2.885,16.346,
5.941,10.256,25,3.448,17.204,0,6.667,22.222,0,17.045,7.609,20.879,0,0,0,2.128,50.633,2.667,22.973,2.74,1.37,30.556,2
0,5.263,1.587,1.639,0,0,2.381,0,0,0,0,0,14.458,5.455,0,0,0,0,0,0.855,0,4.237,0,4.065,5.785,0)
> a8 <-
c(0.82,0,1.6,23.016,0,0,6.25,0,1.515,0,62.308,0.763,3.053,0,0,2.941,4.348,1.46,0,0,0.667,0,0,0,0,0,10.667,0,16,7.333
,0,0,0,10.738,2.113,8.824,3.65,11.111,6.25,3.623,3.356,6,1.333,0,0,0,0,0,0.667,4.667,1.333,0.667,0,2.667,0,0,2.667,2
0,0,0,4,0,2,0,0,8,2,3.333,0,0,1.333,2.667,0.667,0,0,0,0.667,0,4.667,0,3.333,0.671,0.671,12.081,13.423,0,0,0,4.027,2.
013,0.671,0.671,0,0,0.671,0.671,0,0.671,0,0,38,0,0,0,0,0,0,0,0,0,35.333,0.667,0,0,2.667,0,65.333,12,5.556,5.882,1.
01,4.054,4,1.351,1.333,5.333,0,1.333,0,0,0.667,8.667,0,30.667,0,1.333,0,0,0.667,4.667,0,58,0,0.685,2.857,1.439,35,2.
143,0.714,1.429,0,0,0.714,0,0,1.626,0,21.951,4.167,2.344,0,17.073,17.742,10.484,0.806,19.608,0.806,4.274,18.803,5.31
,1.064,1.25,12.15,30.841,1.802,1.754,10.526,2.83,0,3.061,10.753,2.299,21.505,25.263,9.804,19.608,0,0,0,1.961,3,1.042
,45,1,30.303,3.297,2.198,28.409,13.953,6.329,4.938,1.22,1.25,7.895,0,10.256,0,0,0,0,3.371,1.887,1.626,0,0,0,0,0,0.80
6,0,1.613,9.677,0.806,0,0.769,0,21.374,0,0,5.185,0.73,0,2.899,63.043,1.418,0.709,0,0.709,4.255,3.521,2.041,0,0,0,0,0
,0,0.671,0,12.752,0,20.805,8.725,0,0,0,4.027,3.623,8.759,7.519,13.333,6.034,0.714,2.013,5.369,1.333,0,0,0,0,0,0.671,
5.369,2.013,0.671,0,0.667,0,2,4.667,18,2,0,4,0,0.667,0,0,5.333,1.333,4.667,2.013,0,4.667,0.667,0.667,0,0,0)
> a9 <-
c(0.667,0.667,2,0,3.333,0,2,7.333,12.667,0,3.333,0.667,0,0,2,1.333,0,0,1.342,0.671,1.333,0,0,0,40.667,0,0.667,0,0,0,
1.333,0,0,0,0,30,0,0,0,2,2,58.667,19.048,4.054,6.667,0.971,1.923,3.361,4,2,0,5.405,2,0,0.667,0.667,0.667,6.667,0,37.
333,0,2,0,0,0,0.667,0,62,0,0.671,0.68,2.74,33.793,0.69,0,2.069,0.69,0,0.704,0,0.714,0.787,0,23.14,4.959,1.667,13.924
,2.222,0,18.182,22.131,6.612,0.826,17.647,5.172,8.108,13.725,1.099,13.761,24.299,3.54,0.893,11.712,1.852,2.97,4.04,1
1.579,2.439,8.046,19.565,15.385,4.167,22.973,23.762,13.861,23.529,0,0,0.962,0.952,0.952,2.885,41.905,4,19.792,1.111,
2.273,24.706,12.222,8.14,7.018,8.434,0,3.571,8.642,1.25,27.536,0,0,0,0,0,0,0,0,0,0,0,0,0,1.205,0,33.083,0,0.741,
4.444,0,0,0.714,79.137,0,7.914,0,0.719,2.817,0.69,0.676,0,0,0.667,0,1.333,0,0,0,8.667,0,12.667,16.667,0,0,0,6.667,0,
10,12.667,10,3.03,4.027,2.013,4.027,2.667,0,0,0,0,0,0,1.333,2,0.667,0,1.333,0,0.667,0,29.333,1.333,0,13.333,0.667,1.
333,0,0,12,1.333,7.333,2,0,1.342,1.333,0.667,0,3.333,0.667,0,2.667,4,0,4.667,0,12,14.667,1.333,0.667,9.333,0,2.013,0
.671,0.671,2.013,0,0,2.685,1.342,0,0.667,0,0,36,0,2,0,0,0,0,0,0,0,0,28,0,0,0,2,1.333,46.667,11.333,4.73,1.399,0,3.40
1,1.351,0.667,0,8,0.667,0,0,0,0,9.333,0,45.333,0,4,0,0,0,0,0,58.667,0,0,2.759,2.778,27.211,3.401)
> a10 <-
c(0,0.694,0,0,3.03,0,0.833,0,0,17.391,0,0,9.677,3.333,6.667,3.333,6.897,6.667,0,0,0,4,0,4,4,73.077,68,4,4,0,0,20,20,
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36,8,0,0,13.333,31.25,5.556,66.667,50,4,0,8,17.391,0,13.043,0,18.182,4.545,0,9.524,0,5,0,10,5,52.632,77.778,0,0,0,5.
882,0,0,20,0,0,0,0,0,0,0,0,0,0,0,0,0,37.143,0,2.632,2.632,0,6.977,8.696,12.766,0,9.091,1.613,7.143,0.917,0,0,0,0,0,0
,0,0,1.6,0.806,0.794,0.746,2.174,0,10.274,5.442,0,0,0,0,0,84.354,25.17,2.721,0.68,0,7.483,2.721,15.646,44.898,7.483,
0,13.605,0.68,5.442,0,2.041,2.055,5.797,30.303,10.465,4.828,8.163,4.861,28.966,0,16.327,2.041,12.925,0,6.081,0.68,0,
0,0,0,0.671,10.811,1.342,3.356,0,3.378,2.703,2,18.792,8.667,2.721,2.069,18.44,18.621,17.45,13.333,19.333,0.667,0,16.
667,0,0.667,0,0.667,5.369,0.667,1.333,0,0,0,0,0,56,2.667,0,0,0,2.667,0,0.667,0,4.667,27.333,2,18.667,18.667,0,2.685,0,
0.671,0,0,3.356,0.671,0,0,5.369,1.342,12.752,6.04,0.671,0.671,0,6.711,9.396,0,0,0,1.342,92.617,0,2.685,2.667,24,0.66
7,0,0,0,1.333,0,13.333,0,0.667,0,0.667,0,3.333,0,33.333,2.667,0,0,16,2,94,0,10.667,11.333,14.286,0,1.37,15.909,11.62
8,2.985,3.401,2,0,3.333,3.448,6.25,7.2,8.955,24.161,0,19.333,4,17.333,3.333,6,13.333,1.333,4,1.333,10.667,0,1.342,32
.215,0,0,2.027,0,0,0,0,0,0.699,0,0,0,4.167,0,0,0,0,0,2.083,0,0,0,99.306,0.699,0)
> a11 <-
c(0.8,6.14,8.257,7.477,3.96,4.082,5.208,1.099,21.591,1.429,10.256,5.479,2.667,0,1.333,0,0,11.111,0,0,6.061,0,4.255,0
,0,11.111,0,0,0,0,0,0,0,0,0,2.222,0,4.444,4.545,0,0,2.273,6.818,0,4.444,0,0,0,2.5,0,0,0,0,0,0,0,33.333,0,0,0,0,2.941
,0,6.25,0,0,0,0,0,0,0,0,8.696,0,0,3.704,0,0,83.333,0,0,9.677,0,6.452,0)
> T <- c(a0,a1,a2,a3,a4,a5,a6,a7,a8,a9,a10,a11)
> b0 <-
c(0,0,0,0,1.136,0,0,0,0,0,0,37.5,0,0,0,0,0,2.105,13.684,0,9.278,50.515,0,0,0,6.25,20.213,0,0,83.133,2.381,0,26.19,71
.084,0,1.064,16.842,0,0,0,0,1.042,0,0,0,0,1.124,0,0,0,0,0,3.371,0,0,0,0,0,0,1.802,0,0,0,0.752,0.752,0,1.099,0,0,0.71
4,0.704,0.735,0,0,0,0,0,0,0.671,0,0,0,8.784,0,0,0,0,0,0,0,0,7.432,0,0,0,0,0,0,0,14.865,0,0.68,1.37,0,0,13.605,0,3.
472,1.361,1.37,6.452,28.671,4.196,9.028,4.196,3.125,3.061,24.138,4.255,0,1.77,0,0,0,0,0,0,0,0,0,0,1.481,0,4.167,1.
389,1.379,0.69,0,0,6.667,0,0.667,0,0,0,0,0,0,0,0,0,2.013,0.671,0,0.667,0,0,0,0,0,0,0,0,0,0.667,0,0,10.067,93.289,0.6
67,0,0,0,0.667,0,0,0,0,98.667,0,54,0,97.333,100,0,0,94,0,0,0.667,0,0,0.667,0,1.333,0,24,0,0,0,0,0,0,0,0,0,0,11.409,9
7.333,0,9.333,0,0,0,69.333,0,0,4,24,0,0,0,0,0,0,0,38,0,0,0,0,3.333,0,4,10.667,3.333,0,0.667,28,0,0.667,37.333,0,2,1.
333,0.667,0,0,0,80.667,0,0,0,2.667,3.333,0,0.667,5.333,0,0,2,10.667,0,0,32.653,0,0.676,0,0,1.333,41.333,0,4,98,0,0,0
,0,0,0,29.333,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0)
> b1 <-
c(0,6,0,0,0.667,0,0,0,1.333,0,0,0,0.667,1.333,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,95.333,0,94.667,32.667
,91.333,0,3.333,0,0,0,67.333,2.667,0,36.913,53.691,0,1.342,2.013,0.671,2.013,0,0,0,0,0,0,0,0.671,0,21.333,0,0,0,0,0,
0,0,0,23.333,0.667,0,0,59.732,0,0,0.667,0,0,0,0,0,0,0,0,0,0,99.333,0,0,98.658,0.671,0.68,0,0,4.861,22.222,1.389,0,6.
897,0,0.694,0.685,46.575,0,0.685,0,0.694,0.685,0.685,2.069,6.944,0.694,26.316,0.699,0.694,15.172,2.055,44.218,1.361,
7.534,3.425,1.399,6.944,8.276,1.379,0,53.741,0.68,4.082,0,19.048,5.517,0,3.448,4.861,1.379,0.699,0,22.069,0,0.704,3.
521,0.699,6.993,0.699,0,3.472,20.979,79.021,0.709,0,1.389,0.694,0,0,0,0,0,0,0,0.667,98,0,0,0,0,35.333,0,0,0.667,0,0,
0,0.69,0,0.667,4,0,0.667,47.333,1.333,32.667,2.667,6,0,1.333,0,60,2.013,0,23.49,0,1.333,0.667,0,0,0.667,4,0,0,32.667
,0.667,0.667,0,0.667,14.667,0,10.667,0,1.333,0,0,6.711,0,2,0.667,0,0,0,71.141,23.333,0,5.369,0,0,18.792,0,1.342,0.67
1,0,0.68,0,0.671,0,47.651,0.671,0,26.846,0,0,8.725,0,0.676,0,0,0,0,13.514,0.676,2.027,25,0,0.676,0,0,0,0,0.671,0,0,0
.671,0,18.792,0,0,0.671,29.53,18.792,0,3.378,1.351,0.676,2.027,0,0.676,0,0.676,0,0,0,2.703,0,6.081,2.721,0,0,0,0,0,0
,9.459,4.73,41.216,0,0.676,86.486)
> b2 <-
c(0,0,0,0,0,0,0,98.649,0,0,0,0,0,72.297,0,0,0,0,1.351,0,0,8.108,0,0,6.081,0.676,0.676,0,0,0,0,0,58.503,0.685,0,0,27.
397,0,0,0,0,0.676,0,0,0,0,0,0,0,2.027,2.703,1.351,0.676,0.676,0,0,2.041,0,0,0,20.27,0,15.541,0,0,0,0,0,0,0,99.324,39
.189,0,76.351,0,0,0,0,0,6.849,0,0,0.685,0,0,0,0,12.245,0,0,0,2.041,0,0,2.041,0,0,73.469,0.68,0,0,2.721,0.685,0,0,0,0
,97.241,0,4.828,0,0,23.448,47.586,0,1.379,0,0,0,0,1.379,37.931,0,63.448,8.276,0,0,0,0.69,42.759,0,0,0,0,0,0,0,0,0,86
.713,0,0,5.882,0,0,0,0,0,0,0,0,0,0,0,0,0,2,0,0,0,0,0.775,0.758,0,0,0,1.429,0,3.604,2.069,0,0,0,0,0,0,0,0.685,14.384,0,0,
0,0,0,0,0.685,0,0,5.479,0,0,0,0,0,0,0,0,11.644,0,0,0,0,0,19.718,0,3.497,2.083,4.348,23.077,2.913,10.68,7.353,2.158,1.4
29,25,4.386,0,2.222,2.239,0,0.741,0.794,0,4.918,0.82,1.429,1.429,0,1.361,6.849,0,0.68,0,0,0,0,0,0,0,0,0,0.68,0.68,0,
0.68,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10.274,95.205,0.685,0.685,0,0,0.685,0,0,0,0,99.32,0,49.66,0,97.959,100,0,0,86.395,0,0,0
,0,0,0,0,0,0.676,0,20.946,0,0,0,0,0,0,0,0,0,0,7.383,99.329,0,10,0,0)
> b3 <-
c(0,62,0,0,4.667,31.333,0,0,0,0,0,0,0,40.268,0,0,0,0,6.711,0,4.027,12.081,4.027,0,0.671,29.53,0,0.671,37.333,0,2,0.6
67,0.667,0,0,0,78,0,0,0,1.333,2.667,0,1.333,4,0,0,0,0.667,8,0,0,32.215,0,1.342,0,0,1.333,42.667,0,6,96.667,0,0,0,0,0,0
,30,0,0,0,0.667,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,6,0,0,2.667,0,0,0,0.667,0,0,0,0.667,1.333,1.333,0,0,0,0,0,0,0,0,0,0
,0,0,0.667,0,0,0,0,0,0,95.302,0,93.289,30,91.333,0,4,0,0,0,67.347,7.432,0,33.784,56.081,0,2.027,4.054,0,0,0,0,0,0,0,0
,0,0,0,20.946,0,0,0,0,0,0,0.671,0,0.671,16.107,0,0,0,62.416,0,0,0,0.671,0,0,0,0,0,0,0,0,0,0,0,99.329,0,0,97.333,0.667,0,0,
0,3.448,22.069,0.699,0,6.849,0,0.676,0.676,42.466,0,0.685,0,0.685,0.68,0.685,0.68,5.517,0.69,21.324,1.389,0.694,9.79
,4.167,52.381,0,10.417,4.138,2.055,6.897,11.034,0,0,56.849,0.694,4.225,0,21.583,5.036,0,5.036,8.511,0,0,0.694,0,21.528
,0,1.408,2.797,2.083,10.49,2.797,0.699,2.797,23.776,75,0,1.351,2.027,2.041,0,0,0,0,0,0,1.333,100,0,0,0,0,34.667,0.
667,0,0.667,0,0,0,0.667,0,0,2,0,0,48.322,0,42,1.342,10,0,0.667,0,66,0.671,0,22.148,2.685,0,0.667,0.667,0,0.667,4.667
,0,0,28.667,0,1.333,0,0.671,9.396,0,14.765,0,0,0)
> b4 <-
c(0,5.517,0,1.379,0,0,0,0.671,73.154,24.161,0,4.73,0,0,16.216,0,0.671,0.671,0,1.342,0,0.671,0,44.966,0.671,0,20.134,
0,0,8.784,0,0.676,0,0,0.676,1.351,13.423,0.671,1.342,24.161,0,2.685,0,0.671,0.671,0,0.671,0,0,0,0,19.333,0,0,1.333,2
2,16.667,0,3.333,1.333,0,1.333,0,1.333,0,0.667,0,0,1.333,1.333,0,6.667,4.027,0,0,0,0,10.667,5.333,37.584,0,0.671,90.
604,0,0.667,0,0,0,0.667,0,99.333,0,0,0,0,0,64,0,0,0,0,2,0,0,6.667,0,0,10,0.667,0.667,0,0,0,0,0,48.98,3.401,0,0,31.75
7,0,0,0,0,0,0,0,0,0,0,0,0,0,2,5.333,3.333,0.667,0,0,0,2.013,0,0,0,20,0.667,16.667,0,0,0,0,0,0.667,0,100,36,0,84,0,0.66
7,0,0,0,4.667,0,0,0,0,0,0,0,0,14.966,0,0,0,3.378,0,0,0.676,0,0,69.595,1.351,0,0,2.721,0,0,0,0,0,95.918,2.041,10.204,0,
0,22.449,50.34,0,2.041,0,0,0,0,1.37,34.932,0,65.068,9.589,0,0,0,0,68,46.259,0,0,0.68,0,0,0,0,0,0,0,0,2.069,84.138,0,0,0,0,
0,0,1.064,0,0,0,0,0,0,0,36,0,0,0,0,2,1,7,0,10,43,0,0,0,7.292,28.421,0,0,78.409,1.136,0,24.419,74.118,0,2.105,14.737,0,
0,0,0,2.062,0,0,1.075,0,1.075,0,0,0,0,0,2.174,0,0,0,21.505,0,0,0.87,0.826,0,0.806,1.587,0.787,0,0,0.769,2.256,0,0,0,
0,0,0.709,0.704)
> b5 <-
c(0,0,9.859,0,0,0,0,0,0,0,0,0,3.521,0,0,0,0,0,0,0,16.783,0,0,0.709,0,0,17.037,0,2.985,1.439,0.775,33.333,0.758,9.774
,7.519,0.98,2.778,29.496,3.571,0,0.885,2.655,0,0,1.562,0,5.036,0.719,0,0.714,0,0.704,6.383,0.704,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0.699,0,0,0,0,0,0,0,0,0,0,0,0,0,8.392,93.75,0,0,0,0,0,0.699,0,0,0.699,0,0,99.301,0,53.147,0,99.306,100,0,0,90.278,0
,0,0.694,0,0,0,0.694,0,0,0,27.083,0,0,0,0,0,0,0,0,0,0.69,0,8.333,98.63,0,6.122,0,0,0,70.068,0,0,3.401,25.85,0,0,0,0,0,0,
0,44.218,0,0,0,0,2.041,0,2.721,13.605,0,0,1.361,34.014,0,0,37.415,0,2.041,0,0.68,0,0.68,0,85.034,0,0,0,3.378,2.027,0
,1.351,5.405,0,0,2.027,12.162,0,0,35.616,0,2.027,0,0,1.333,48.667,0,4.667,98,0,0,0,0,0,0,37.333,0,0,0,0,0.667,0,0,0,0,
```

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0,0,0,0,0.667,0,0,0,0,0,6.04,0,0,1.342,0,0,0,2.013,0,0,0,0,1.342,0.667,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0.671,0,0,0,0
,98.658,0,99.329,34.899,94.631,0,4,0,0,0,79.866,4.027,0,44.595,56.081,0,0,2.027,0,2.703,0,0,0,0,0,0,0,0.68,0,26,0,0,
0,0,0,0,0,0,24,0,0,0,54.362,0,0,0.667,0,0,0,0,0,0,0,0,0)
> b6 <-
c(0,100,0,0,98.667,0.667,0.676,0,0,4.082,22.449,2.041,0,4.054,0,0,0,52.381,0,0.685,0,0.699,0,0.685,1.379,6.897,0.69,
22.222,0.699,0.694,21.127,2.817,42.657,0,10.563,2.837,0.709,4.965,9.859,0,1.399,47.945,0,4.286,0,14.184,2.19,0,3.623
,5.072,0.719,0,0,34.752,0,0.709,2.837,1.418,12.766,3.571,0,0.714,20,75.54,0,0.719,0.714,2.158,0,0,0,0,0,0,0,0.667,99
.333,0,0,0,0,44,0.667,0,0,0,0,0,1.333,0,0,4.667,0,0,46.667,0,31.333,2,7.333,0,0.667,0.667,54.667,3.356,0,24.161,0.67
1,1.342,0,0,0,0,0,0,0,26.667,0,1.333,0,2,16.107,0,7.383,0,0.671,0,0,10.811,0,2.027,0.676,0,0,0,71.141,27.517,0,2.685
,0,0,15.436,0,0.671,0,0,0.676,0,0,0,51.678,0,0,26.846,0,0,8.054,0,0.676,0,0,0.676,0.676,16.216,0,1.351,22.297,0,2.02
7,0,0,0,0.68,0.68,0,0,0,0,19.048,0,0,1.351,31.757,18.243,0,5.405,0,0.676,0.676,0,0.676,0,1.351,0,0,1.351,2.703,0,6.0
81,2.703,0,0,0,0,0,8.108,2.027,44.595,0,0,88.514,0,0,0,0,0,0.676,0,100,0,0,0,0,0,81.081,0,0,0,0,2.027,0,0,8.108,0,0,
8.108,0,0,0,0,0,0,0,63.014,2.74,0,0,28.767,0,0,0,0,0,0,0,0,0,0,0,0,1.361,2.721,4.082,0,1.361,0,0,1.361,0,0,0,17.687,
0,8.163,0,0,0,0,0,0,0,100,44.218,0,78.231,0,0,0,0,0,4.762,0,0,0,0.694,0,0,0,13.287,0,0)
> b7 <-
c(0,1.408,0,0,1.399,0,0,81.818,0,0,0,2.098,0,0,0,0,0,98.592,1.408,5.634,0,0,14.789,46.479,0,0.704,0,0,0,0,1.408,45.0
7,0,63.38,9.155,0,0,0.704,51.408,0,0.709,0,0,0,0,0,0.704,0.709,2.128,87.234,0,0,0,0,3.846,0,3.604,0,0,2.655,0,0,0,0,
0.855,3.448,2.586,0,2.564,17.797,0,3.226,31.2,0,0,0,1.587,30.4,18.254,15.625,0,13.281,36.09,0.719,0.699,36.913,0.671
,0,6.711,65.101,86.577,0,0,0,4.698,24.161,0,0,0,0,29.73,0.752,3.101,0.725,4,1.408,8.392,3.356,2,8.667,0,31.333,0,0,0
,0,2,2,0.667,0,0,0,0,58,0.667,28.667,0,66.667,3.333,0,0,2.667,0.667,0,21.333,11.333,0,0.667,28.667,19.333,0,30.667,0
,1.333,0,0,1.333,0.667,0,53.333,0,0.667,0,0.667,0.667,7.333,92.667,5.333,2.667,0,4,9.333,20,0,5.333,14.667,0,1.333,0
.667,4,0,1.333,82,0,0,0,8.667,1.333,2.667,0,0,0,3.333,20,0,2.027,3.378,0,1.449,2.439,6.993,16.892,0.676,19.333,0,11.
409,0,0,14.667,0,0.667,12.667,10.667,5.333,0,0,0,0.667,0,8,4.667,4,0,10.204,9.79,0.704,2.837,16.312,2.143,0,13.669,1
.449,0,0.725,0,0.833,0.833,39.831,0.847,0.806,4.11,0,8.13,2.439,0,0,0,17.742,0.87,0,5.691,0.962,0,5.172,0.862,2.586,
1.724,1.724,0,0.885,1.754,3.846,5.769,7.921,0,7.692,1.724,2.151,0,0,0,10,11.364,0,0,0,0,0,0,1.266,0,2.703,0,0,0,0,0,
0,0,0,0,19.048,0,0,0,3.774,0,0,0.909,5.882,0.847,0,1.709,0.855,0,0.847,0,0.813,0.826,2.459)
> b8 <-
c(0,3.226,20,0,1.55,28.125,0,0,0,0,29.231,21.374,20.611,0,14.286,34.559,2.174,0.73,42,0,0,8,68.667,87.333,0,0,0,2.66
7,32.667,0,0.667,0,0,32.215,2.113,3.676,1.46,0.855,1.562,6.522,3.356,3.333,7.333,0,26,0,0,0,0,0.667,1.333,0,0,0,0,0,
54.667,2.667,30,0,67.333,4.667,0,0,2,0,0,24.667,10.738,0,0.667,34,20.667,0,32.667,0.667,1.333,0,0,1.333,0,0,57.047,0
.671,0,0,0,0.671,7.383,94.631,4.698,2.685,0,3.356,8.725,17.45,0,2.013,10.667,0,0.667,0.667,2.667,0,0,90,0,0,0,10,0,0
.667,0,0,0,1.333,18,0,1.333,0.694,0.84,1.01,19.595,1.333,17.568,0.667,12.667,0,0,7.333,0,0.667,10.667,14,7.333,0,0,0
,0,0,4.667,2,4.667,0,17.808,14.286,0.719,2.143,23.571,1.429,0,6.475,2.158,0,0.719,0,0.813,1.639,34.959,0,0,11.2,2.43
9,0,0,0,19.608,0.806,1.709,1.709,1.77,3.191,6.25,0.935,3.738,1.802,0.877,0,0,0,4.082,8.602,3.448,1.075,11.579,0,0,0,
0,0,0,0,1.042,1,1,0,3.297,1.099,1.136,1.163,1.266,0,0,0,21.053,1.449,5.128,61.905,0,0,0,1.124,0.943,3.252,0,0.813,3.
252,0,0,0.806,0,0,1.613,2.419,0,2.308,28.462,0.763,2.256,26.119,0,0,0,0,26.812,16.312,15.603,0,17.73,31.915,0.704,0.
68,36.913,0.671,0,6.711,65.101,83.221,0,0,0,3.356,29.53,0,0,0,0,32.886,1.449,2.92,2.256,3.333,0,13.571,1.342,3.356,7
.333,0,31.333,0,0,0,0.671,0.671,0.671,1.342,0,0,0,0,65.333,1.333,26.667,0,55.333,9.333,0,0.667,0,1.333,0,23.333,9.39
6,0,0,30,14.667,0,27.333,0)
> b9 <-
c(0,0,0,0.667,0.667,0,57.333,0.667,0,0,0,0,10,90,3.333,2.667,0,8,13.423,17.45,0,4.027,11.409,0,2.667,0.667,3.333,0,1
.333,81.333,0.667,0,0.667,11.333,0,2.667,0,0,0,3.333,18,0,3.401,2.027,4,0,0.962,17.647,3.333,16.667,1.333,9.459,0.66
7,0,15.333,0,0.667,14,10.667,5.333,0,0,0,0,0,10,2,8,0,14.094,10.884,0.685,3.448,20.69,1.379,0,13.793,1.399,0,0.704,0
,0.787,0,35.537,0,0,3.797,0,9.016,0.826,0,0.826,0.826,9.244,2.586,0,4.902,1.099,0.917,2.804,0,1.786,0,0,0.99,2.02,8.
421,10.976,0,0,17.308,2.778,1.351,10.891,0,0,0,0,0,0,0,2.885,4.762,0,0,1.111,0,2.353,0,0,0,0,0,0,18.519,0,4.348,0,5,
0,25,0,0,0,0,0,0,0,0,0,0,4.819,47.525,2.256,0.741,19.259,0,0,0,0,11.511,25.899,16.547,0,12.23,31.69,1.379,0,52.667
,0,0,3.333,72.667,71.333,0,0,0,4.667,37.333,0,0,0,0,34,0,2,3.333,2,0.758,19.463,6.04,4.027,2,0,34,0,0,0,0,0,6,0,0,0,
0,0,63.333,0.667,31.333,0,51.333,4,0,0,1.333,0.667,0,22.667,8.667,0,0.671,26,14.667,0,37.333,0,0.667,0,0,2.667,0.667
,0,54.667,0.667,1.333,0,0,3.356,4.027,83.893,2.685,3.356,0,8.725,11.409,36.913,0,9.333,10,0,1.333,3.333,13.333,0,0,8
6.667,0.667,0.667,0,7.333,0,2,0,0,0,1.333,32,0.667,0,2.027,2.098,0,17.007,2.027,12,2,2.667,0.667,0,0,0,0,7.333,10,6.
667,0,0,0,0,0,12,2.667,6.667,0,15.068,12.414,2.778,7.483,14.286)
> b10 <-
c(2.759,0.694,9.091,1.439,0,0,0.833,1.22,1.887,28.261,0,48.485,6.452,3.333,0,0,0,3.333,0,0,0,0,66.667,56,0,0,4,0,0,0
,12,4,4,4,8,0,60,0,6.25,0,0,0,4,4,0,0,0,0,0,0,0,0,9.524,0,0,0,0,15,0,0,0,0,17.647,0,0,0,6.667,0,0,0,0,0,0,0,0,0,0,0,
0,0,37.143,71.053,0,0,4.878,60.465,4.348,6.383,0,0,0,1.429,24.771,11.966,0,8.333,0,0.833,0,2.479,14.876,0,54.032,11.
111,0,0,28.082,0,0,6.122,0,2.041,0,0,0,0.68,1.361,0,0,2.041,0,3.401,3.401,8.844,24.49,2.041,73.469,2.041,0,2.041,1.3
7,6.522,4.545,2.326,6.897,3.401,1.389,1.379,27.891,2.041,24.49,9.524,3.378,0.676,0,0,0,0,0,1.342,0,52.349,5.369,0,6.
757,22.297,0.667,2.013,5.333,0.68,0.69,6.383,13.103,2.685,8,16,8,0,24.667,0.667,0.667,1.333,0,0.667,0,4,0,0.667,0,95
.333,0,32.667,0,88,4.667,14,0,1.333,0,0,1.333,5.333,0.667,0.667,43.624,40.94,0,24.832,0.671,0,0,0,24.161,0,0,0,0,0,0
.671,4.027,1.342,4.027,22.148,0.671,1.342,38.926,68.456,0,28.188,37.584,1.333,6.667,2,0,0,0.667,82.667,0,0,0,4,0,0,0
.667,0,4.667,0.667,0,67.333,0.667,10,2.667,0.667,0,1.333,2,2.381,32.432,25.342,0.758,0.775,5.224,0.68,19.333,0,0.667
,8.276,3.906,2.4,22.388,9.396,0,2,16.667,19.333,1.333,19.333,0.667,19.333,4,0,0,0,0,21.477,0,91.156,49.324,0,0,0,5.5
17,0,6.993,25,10.417,0,13.194,0.694,0,4.167,0,0,64.583,0,0,0,0,1.399,1.46)
> b11 <-
c(2.4,0,2.752,0,4.95,1.02,1.042,0,3.409,2.857,1.282,0,0,0,10.667,0,0,0,0,0,0,0,0,0,0,0,0,22.222,0,0,0,0,0,7.5,2.222,
0,0,0,0,0,2.326,0,0,0,0,0,0,0,0,0,0,2.5,5.128,0,0,0,0,33.333,0,0,0,0,0,12.5,0,0,0,0,0,0,7.692,4.167,0,0,0,0,6.667,0,
0,0,0,0,0,3.226,0)
> V <- c(b0,b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11)
> d0 <-
c(0,0,0,1.22,2.273,0,0,0,0,0,1.042,33.333,0,0,0,0,0,84.211,0,0,0,0,0,0,0,0,0,0,0,1.205,0,0,2.381,2.41,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.901,0,0,0,0,0,0,0,0,0,0,0,0.704,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,74.324
,0,0,0,0,0,0,0,84.459,0,0,0,0,0,14.966,0.68,0,0,5.479,0,1.399,0,0,0.699,0,0,4.828,0,0,0,1.754,0,0,0,0,0,0,0,0,0,0,4.
444,0,0,0.694,4.828,0,0,0,1.333,0,0,0,0,0,0,0,0,0,0,0,0,99.329,39.333,0,0,0,0,0,0.667,0,0,0,0,3.333,0,0,4.698,0,0.66
7,0,0.667,0,0,0,0,0,0,0.667,0,26,0,1.333,0,0,0,0,0,0,0,0,0,0,1.333,0,0.667,0,12.667,0,0,0,0,0,0,0,0,0.671,78.523,1.3
33,0,0.667,0,0,0,2,0,0,2,7.333,0,0,0,0,0,0,0,30.667,0,0,0,0,2.667,0,18.667,72,0,0,0.667,51.333,0,0,11.333,0,0.667,0.
667,2.667,0,0,0,0,0,0,0,0.667,2.667,0,2,0,0,0,0,20.667,0,0,17.687,0,98.649,0,0,0.667,44.667,0,88.667,0,0,0,0,0,0,0,0
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,0,0,0,0,0,0,0,0,0,0,0,0.667,0,2,0,0)
> d1 <-
c(0,78.667,0,0,88.667,0,0,0,1.333,0.667,0,0,0,98.667,100,0,0,0,0,0.667,0,0.671,0,2.685,0,0,0,0.667,0,2,0,0,0,0,0,0,4
.667,16.667,4,0,1.333,0,0,0,21.333,0.667,0,38.255,14.094,0,1.342,3.356,0.671,2.013,0,0,0,0,0.671,0,0,0,0,6.667,0,0,0
,0,0,0,0,0,75.333,0,0,0,38.255,0,0,1.333,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,2.041,93.75,0,19.444,6.25,1.389,0,17.931,
0.694,0,2.055,46.575,0.685,45.89,1.481,1.389,0,0,0,3.472,0,3.759,0,0,0.69,2.74,9.524,0.68,34.932,1.37,0,2.083,10.345
,0,0,38.095,1.361,2.041,1.361,8.844,2.759,1.379,5.517,0,2.759,0,0.704,2.759,0.704,0.704,3.521,0.699,22.378,4.895,1.3
89,0.694,37.762,15.385,0,0,0,3.472,0.69,0.694,0,0,0,0,0,4,2,0,0,0,0,0.667,100,0,0,8.667,0,0,3.448,0,0,0,0,0,2,0,26,1
.333,7.333,0.667,0,0.667,24,0,0,6.04,1.342,5.333,0,0,0,0,0,0,0,64.667,0.667,2.667,0,0.667,0.667,0,36.667,0.667,0.667
,0,0,46.309,0,21.333,0,6.667,0,0,3.356,8.667,0,20.805,0.671,0.671,1.342,0,2.013,0,0,1.361,0,0,0,51.007,0.671,0,4.027
,0,0,4.027,0,0,0,0,1.351,30.405,56.757,0,0.676,6.081,0,0.676,0,0,0,27.027,0,0.671,0,0.671,0.671,66.443,0,0,0,2.685,5
0.336,0,0.676,0,0,2.027,0,0.676,0,2.703,0,0,3.378,14.189,0,4.054,0,0,0,7.692,0,0,0,7.432,0,56.757,0,0,12.838)
> d2 <-
c(0,0,0,0,0.676,0,0,0,0.676,0,0,0,99.324,25.676,0,0,0,0,0,0,0,87.838,0,0,19.595,0,10.811,29.054,0,0,0,0,8.163,47.26,
0,0,54.11,0,0,0,0,0,0,0,0,0,0,0,0,14.865,97.297,0,0.676,0,0,0,0,0,0,25,0,81.757,0,0,0,0,0,14.189,0,0,32.432,0,0,0,
3.378,0,0,0,0,0.685,0,0,0,0,0,15.646,0,0,0,5.442,0,0,1.361,0,0,25.85,2.721,0,32.653,0.68,97.945,0,0,0,0,2.759,0.69
,93.103,0,1.379,4.828,48.276,0,98.621,1.379,0,0,0,0.69,0,0,0,0,0,0,8.276,0,0,0,0,0,0,0,0,0,0.69,9.79,0,0,0,3.333,0
,0,0,0,0,0,0.926,0,0,0,0,2,0,0.8,0,0,0,0,0,0,0,0.699,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,72.603,0,0,0,0,0,0,0,88
.356,0,0,0,0,0,14.789,0,0,0,2.899,1.399,0,2.913,0.735,0,0,5.714,0,0,0,1.493,0,0,3.175,0,0,1.639,4.286,0,0,0,1.37,0,0
,0,0,0,0,0,0,0,0,0,0,98.639,37.415,0,0,0,0,0,0,0,0,0,4.795,0,0,4.795,0,0,0,0.685,0,0,0,0,0,0,0.68,0,27.211,0,1.361
,0,0,0,0,0,0,0,0,0,0,1.361,0,2.027,0,16.892,0,0,0,0,0,0,0,0,0,0,0,0,81.879,0.671,0,0,0,0)
> d3 <-
c(0,2,0,0,0,6.667,0,0,0,0,0,0,0,26.174,0,0,0,0,1.342,0,19.463,66.443,0,0,0.671,53.691,0,0.671,10.667,0,0,0,4.667,0,0
,0,0,0,0,0,0.667,0,0,2,0,0,0,0,25.333,0,0,20.134,0,97.315,0,0,0.667,40.667,0,87.333,0,0,0,0,0,0,0,0,0,0.667,0,0,0,
0,0,0,0,0,0,1.333,0.667,5.333,0,0,0,74.667,0,0,84.667,0,0,0,1.333,0,0,0,0,98,98.667,0,0,0,0,0,0,0,0.671,4.027,0,0,0,
2,0,0.667,0,0,0,0,0,0,6.04,17.333,3.333,0,1.333,0,0,0,19.728,0,0,33.784,11.486,0,0.676,2.703,0.676,2.027,0,0,0,0,0,0
,0,0,0,4.054,0,0,0,0,0,0,0,0,82.55,0,0,0,35.57,0,0,0.671,0,0,0,0.671,0,0,0,0,0,0,0.671,0.671,0.671,0,0,2.055,95.105,
0,16.552,5.517,0.699,0,21.918,0.68,0,0.676,52.74,0.685,54.795,0.763,0.685,0,0.685,0,1.379,0.69,5.882,0,0,0.699,3.472
,9.524,1.37,25.694,0.69,0.685,3.448,6.897,0.694,0,36.301,1.389,0.704,0.704,7.194,0.719,2.158,5.036,2.837,1.389,0,0.6
94,3.472,0,0,3.497,0.694,14.685,7.692,1.399,0.699,32.867,18.056,0,0.676,0.676,2.041,0,1.37,0,0,0,0,4.667,0,0,0,0,0
,0,99.333,0,0,8.667,0,0,2,0,0,0,0,0,0.671,0,18.667,1.342,7.333,0.667,0,0.667,23.333,0.671,0,4.698,0.671,8,0,0,0,0,0,
0,0,68,0,3.333,0,0,2.013,0,40.94,0,0,0)
> d4 <-
c(0,43.448,0,22.759,0,6.164,0,0.671,2.013,6.04,0,16.892,0.676,0.676,2.703,0,0.671,0.671,0,1.342,0,0.671,0,51.007,0.6
71,0,2.685,0.676,0,4.73,0,0,0,0,1.351,31.757,48.993,0,0.671,9.396,0,0.671,0,0,0,22.973,0,0.671,0,0.667,1.333,63.333,
0.667,0,0,4,50.667,0,0.667,0,0.667,4,0.667,1.333,0,2.667,0,0,2,17.333,0,5.333,0,0,0,0,0,9.333,0,61.745,0,0,8.725,0,0
,0,0,0,0,0,0,1.333,0,0,0,99.333,34.667,0,0,0,0,0,0,0,88,0,0,18,0,16.667,35.333,0,0,0,0,13.605,44.898,0,0,43.243,0.67
1,0,0,0.671,0,0,0.671,0,0,0,0,0,0,15.333,95.333,0.667,0,0,0,0,0,0,27.333,0,78.667,0,0,0,0,0,17.333,0,0,36.667,0,0,
0,0.667,0,0,0,0,0.667,0,0,0,0,0,0,17.687,0,0,0,6.757,0,0,0.676,0,0,29.73,4.73,0,29.252,2.041,97.959,0,0,0,0,4.082,0.
68,88.435,0,1.361,7.483,44.898,0,97.279,0,0,0,0.685,0,0,0,0,0,0,0,0,8.163,0,0,0,0,0,0,0,0,0,0,0,0,14.483,0,0,0,0,0,0,0,0
,0,0,0,0,1.02,34,0,0,0,0,0,88,0,0,0,0,0,0,0,0,1.053,0,0,1.136,0,0,1.163,3.529,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0)
> d5 <-
c(0,0,0,0,0,0,0,0,0,0,0,80.986,0,0,0,0,0,0,0,81.818,0,0,0,0,0,6.667,0.746,0,0,5.426,2.222,0.758,2.256,0.752,0,0,5.
755,0,0,0,1.77,0,0,4.688,0,0,0.719,3.597,0.714,0,0,0.709,0,0,0,0,0,0,0,0,0,0,0,0,0,0,100,39.161,0,0,0,0,0,0,0,0,0,0,3.49
7,0,0,3.497,0,0.699,0,0.699,0,0,0,0,0,0,0.699,0,31.469,0,0,0,0,0,0,0,0,0,0,0,0,1.389,0,1.389,0,11.806,0,0,0,0,0,0,0,0,0,
0,0,86.806,0,0,0.68,0,0,0,1.361,0,0,0.68,4.082,0,0,0,0,0,0,31.973,0,0,0,0,1.361,0,12.925,74.15,0,0,0,51.701,0,0,10
.204,0,0.68,0.68,2.041,0,0,0,0,0,0,0,0.676,1.351,0,2.027,0,0,0,0,18.919,0,0,11.644,0,96.622,0,0,0,40.667,0,86,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,3.333,0,0,0,82.55,0,0,93.289,0,0,0,0,0,0,0,0,98.658,98.667,0,0,0,0,0.667,0
,0,0,0,0,0,0,1.342,0,0,0,0,0,0,0,0,0.671,17.45,2.013,0,0,0,0,0,14.765,0.671,0,34.459,4.73,0,0,0.676,0,2.027,0,0,0,0,
0.68,0,0,0,0,3.333,0,0,0,0,0,0,0,0,75.333,0,0,0,44.966,0,0,0.667,0,0,0,0,0,0,0,0,0)
> d6 <-
c(0,0,0,0,0,0,2.703,93.836,0,23.129,6.803,2.041,0,23.649,0,0,0,40.136,0.68,45.205,1.538,1.399,0,1.37,0,1.379,0.69,2.
222,0,0,0,4.93,10.49,0.699,39.437,0.709,0,1.418,4.225,0,0,44.521,2.113,1.429,0.709,6.383,0.73,2.206,5.797,2.899,1.43
9,0,0,2.837,0.704,0.709,6.383,0.709,19.858,4.286,3.571,1.429,30.714,15.108,0,0.719,0,1.439,0,0,0,0,0,0,2,0,0,0,0,0
,0,99.333,0,0,8,0,0,3.333,0,0,0,0,0,2.667,0,20,2,9.333,0,0,0,30.667,0.671,0,4.027,0.671,7.383,0,0,0,0.671,0,0,0,70,0
,4,0,0.667,0.671,0,40.268,0,0.671,0,0,45.946,0.676,18.243,0,3.378,0,0,0.671,1.342,0,24.832,0.671,0.671,2.685,0,2.685
,0,0,0.676,0,0.671,0,46.98,0,0,4.698,0,0,1.342,0,0,0,0,1.351,24.324,59.459,0,0.676,6.757,0,0.676,0,0,0,30.612,0,0,0,
0.68,2.041,68.027,0,0,0,3.378,53.378,0,0.676,0,0,1.351,0,1.351,0,0.676,0,0,2.703,16.892,0,4.73,0,0,0,0,0,0,4.73,0,54
.73,0,0,11.486,0,0,0,0,0,0,0,0,0.676,0,0,0,100,18.919,0,0,0,0,0,0,0,90.541,0,0,10.135,0,10.811,22.297,0,0,0,0,12.329
,38.356,0,0,56.164,0.68,0,0,0.68,0,0,0.68,0,0,0,0,0,0,10.884,94.558,0.68,0,0,0,0,0,0,0,27.891,0,85.714,0,0,0,0,0,14.
286,0,0,25.17,0,0,0,1.361,0,0,0,0,0,0,0,0,0,0,7.692,0,0)
> d7 <-
c(0,2.113,0,0,0,0,0,18.182,2.098,0,32.168,1.399,99.301,0,0,0,0,1.408,0.704,92.958,0,0.704,3.521,49.296,0,98.592,0.70
4,0,0,0,0.704,0,0,0.704,0,0,0,0,5.634,0,0,0,0,0,0,0,0,0,0,10.638,0,0,0,0,1.282,0,0,0,0,0,0,0,0.87,0,0,1.724,0,2.56
4,22.881,0,0,24.8,0.8,0,0,0.794,1.6,69.841,2.344,0,32.031,3.759,0.719,1.399,20.805,0,0,63.758,34.899,13.423,0,0,0,86
.577,7.383,0,0,0,0,23.649,0.752,6.202,1.449,0.8,0,0.699,2.013,0,2,0,42.667,2.667,0,0,0,0,0.667,0,0,0,0,0,25.333,0.66
7,55.333,0,9.333,34.667,0,0,4,3.333,0.667,25.333,4,0,11.333,11.333,4.667,0,12.667,1.333,0,0,0,70.667,0,0.667,6.667,0
,1.333,0,0,0.667,17.333,0.667,16,1.333,0,25.333,6.667,3.333,0,0,2,0,0,0,4,0,0,16.667,0,0,0,0,0.667,0,0,0,0,0,0.667,0
,1.351,0.676,0,1.449,0,1.399,0.676,1.351,16,0.667,0,0,0,3.333,0,0,2.667,88.667,1.333,0,0,0,0,0,86,14,4.667,0,3.401,6
.993,1.408,3.546,0,1.429,0,1.439,0,0,0,0,4.167,0,3.39,0,0,5.479,4.545,1.626,8.13,3.252,0,0,3.226,0,0,0,0,0.962,0,0,3.4
48,0,0,0,0,0,5.263,0,0,3.96,0,15.385,3.448,0,0,0,0,0,0,0,1.099,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.381,0,0,0,0,0,0,0.9
09,0,0,0,0,0,0,0,0,0,0,2.459)
> d8 <-
c(0,3.226,19.2,0,0,22.656,0,0,0,0.758,0,62.595,1.527,0,24.06,6.618,0,2.92,22.667,0,0,66,28,12,0,0,0,94,11.333,0,0,0,
0,26.174,0.704,7.353,2.92,0.855,0.781,0.725,0,0.667,0,0,50.667,0.667,0,0,0,0,0,0,0,0,0,0,32.667,1.333,56.667,0,14.66
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7,34,0,0,4,2,0,26,2.013,0,10.667,12.667,6.667,0,14.667,0.667,1.333,0,0.667,67.333,0,0,5.369,0,0.671,0,0,0.671,18.121
,0.671,18.121,1.342,0,21.477,4.027,4.027,0,0,2.667,0,0,0,0.667,0,0,8.667,0.667,0,1.333,0.667,0,0,0,0,0,0,0,0,0,1.389
,0.84,1.01,1.351,2,14.865,1.333,0,0,0,4,0,0,2.667,85.333,0.667,0,0,0,0,0,88,22,2.667,0,1.37,9.286,4.317,4.286,2.143,
0,0,2.158,0.719,0,0,0,4.065,0,1.626,0,0,1.6,5.691,0.806,0.806,0,0,0,0,0,0.885,0,1.25,0.935,0.935,0,1.754,0,1.887,0,0
,3.226,2.299,1.075,0,0,3.922,0,0.98,0.98,0,0,0,3,1,0,0,0,0,1.163,1.266,1.235,0,0,3.947,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0.806,0,0,6.452,0,0.769,23.077,0.763,0.752,28.358,1.481,0,0,0.725,2.174,65.957,2.837,0,28.369,5.674,0,1.361,18.792,
0,0,65.101,30.872,13.423,0,0,0,90.604,6.04,0,0,0,0,24.832,0.725,10.219,0.752,1.667,0,0,0,0.671,1.333,0,42.667,2.685,
0,0.69,0,0,0.671,0,0,0,0,0,22.667,0,52,0,13.333,27.333,0,0,5.333,2,0,20.667,5.369,0,4,14,2.667,0,14.667,0.667)
> d9 <-
c(2,0,0,72,0,0,8,0.667,4.667,0,0,0.667,21.333,3.333,20,3.333,0,21.333,7.383,5.369,0,0.671,5.369,0,0,0.667,3.333,0,0,
18,0.667,0,0,0,0.667,0,0.667,0,0,0,0,0,1.361,1.351,2.667,1.942,0,0.84,2,14.667,0.667,0,0,0,3.333,0,0.667,1.333,87.33
3,0.667,0,0,0,0,0,88.667,20,0.667,0,4.027,4.762,2.055,2.069,1.379,0,0,4.138,0.699,0,0,0,4.724,0,0.826,0,0.833,1.266,
2.222,0,4.132,1.639,0,0,1.681,0,0,0,1.099,3.67,0,0,0,0,2.778,0,0,0,0,0,0,17.308,0,0,0,0,1.961,0,0,0,0,0,0,0.952,0,0,
0,0,1.176,0,0,1.754,0,0,0,1.235,0,8.696,0,0,0,56.25,0,0,0,0,0,0,5,0,0,0,0,0,14.851,0,0,30.37,0,0,0,0,0.719,58.993,2.
878,0,43.165,2.113,0,0.676,17.333,0,0,58.667,24.667,27.333,0,0,0,78,7.333,0,0,0,0,24.667,0,6,2,0,0,0.671,0.671,0.671
,0,0,60.667,0,0,0,0,0.667,0.667,0,0,0,0,0,27.333,1.333,33.333,0,8,10,0,0,2,0.667,0,10,2.667,0,3.356,6.667,2,0,20.667
,0,0,0.667,1.333,88.667,1.333,0,5.333,1.333,0,0,0,0,18.792,1.342,16.779,2.013,0,34.228,9.396,2.013,0,4.667,6,0,0,1.3
33,5.333,0,0,9.333,0,0,0,0,0.667,0,0,0,0,0,0,0.667,0.667,0.676,2.098,0,0,0.676,14,1.333,0.667,0,0,0,0,0,2,88.667,2,0
,0,0,0,0,87.333,9.333,2.667,0,8.219,2.069,0.694,2.721,2.721)
> d10 <-
c(0.69,0,1.399,0,0,0,1.667,6.098,1.887,2.174,0,12.121,0,0,0,0,0,0,0,0,0,0,4.167,4,0,0,0,4,0,0,0,0,0,0,0,0,20,0,0,0,0
,5,20,0,0,0,0,0,0,0,0,0,0,5,0,0,0,0,0,0,0,5.556,0,0,0,0,0,6.667,20,0,0,0,0,0,0,0,0,0,0,0,8.571,7.895,0,0,7.317,0,0,0
,0,0,3.226,0,6.422,5.128,0,0,0,2.5,0,0,74.38,0,12.903,5.556,0,1.449,23.288,0.685,0,91.156,0.68,0,0.68,0.68,0,2.041,0
,0,0,0,0,0,2.041,4.082,22.449,1.361,10.204,0.68,0,2.721,0,0.725,6.061,0,1.379,0.68,1.389,0,54.422,2.041,17.687,0.68,
1.351,0,0,0,0,0,0.667,0,0.676,4.698,3.356,2.685,6.081,6.757,0.667,2.013,1.333,0,0.69,2.128,0,0.671,6,6,0,0.667,18,0,
0,0,0,0,0,0,0,0.667,0,1.333,0.667,44,0,8,3.333,1.333,0,0.667,0,0,13.333,1.333,2,1.333,16.779,14.765,0,26.174,1.342,0
.671,0,0,6.04,0,1.342,0,2.013,0,1.342,2.013,0,23.49,42.282,0,0,14.765,16.779,0.671,6.711,24.832,4.667,0,2.667,0,0,0.
667,5.333,0,0,2,0,0,0,0.667,0,0.667,0,0,29.333,0.667,8,0,1.333,0,0,0,0.794,39.865,26.027,1.515,3.876,38.06,0,0,0,0,1
.379,0.781,1.6,5.224,5.369,0,1.333,1.333,4,2,2.667,0.667,2.667,0.667,0,2,0,0,18.792,0,1.361,30.405,1.361,0,0,7.586,0
,2.098,55.556,6.25,0,0,0,0,25,0,0,23.611,1.389,0,0,0.694,0.699,8.029)
> d11 <-
c(5.6,0,0,0,3.96,0,1.042,0,0,0,0,0,0,0,1.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.222,0,0,0,0,0
,5,0,0,0,0,0,0,0,0,0,2.703,2.778,0,0,0,0,0,2.941,0,0,0,0,0,0,0,0,0,0,0,0,3.333,0,0,0,0,0,7.692)
> I <- c(d0,d1,d2,d3,d4,d5,d6,d7,d8,d9,d10,d11)
> e0 <-
c(0,0,0,9.756,1.136,0,0,0,4.255,32.632,0,8.333,0,0,100,0,1.053,0,85.263,0,0,48.454,0,0,0,70.833,37.234,0,0,1.205,1.1
9,1.19,22.619,4.819,0,0,50.526,12,0,0,0,5.208,0,0,2.222,0,2.247,0,0,0,0.917,0,0,1.905,0,0,3.738,1.031,4.167,21.622,1
.695,0,3.2,3.008,0,2.29,0,4.124,5.072,1.429,9.859,30.882,15.714,0.685,0,0,28.571,1.449,51.678,20.946,0,0,66.892,0,0,
0,2.027,0,0,0,0.676,0.676,0,0,0,0,0,0,0,0.676,0,16.327,32.192,1.389,2.069,6.803,0.68,33.333,19.048,0.685,6.452,12.
587,52.448,22.222,15.385,7.292,29.592,18.621,24.113,17.054,14.159,3.509,2.273,6.061,0,0,0,50,0,0,0,50,2.963,28.472,1
2.5,6.944,16.552,37.241,3.472,6,2,32.667,0,0.667,0,0,0,90.667,0,0,0,0,6.04,0,0,0.667,0,0,0.667,0,0,0,0,0,0,4.667,0,0
,0.671,3.356,2,0,0,99.333,0,0,73.333,0,0,0.667,0,0,0,0,0,9.333,0,6,0,0,0,100,0,0,0.667,0,0,0.667,0,0,18,0,14.667,0,0
.671,0,0,0,0,0,0,0,2,0,0,5.333,0,96.667,0,0,0,0,6,0,72,0,0,1.333,0,0,0,0,0.667,0,0,0.667,21.333,0,16.667,0,0,12,5.33
3,2,76,0,0,0,0.667,0,17.333,0,0,0,0,3.333,0,0,0,0,0,0,7.333,14,0,0.68,0,0,0,0.667,36.667,2.667,0,0,2,0,11.333,0,0,34
,0,0,0,58.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0)
> e1 <-
c(0,0,0,4,0,0,100,4,79.333,0,100,0,67.333,0,0,0,0,0,0,0,0,0,3.356,0,0.671,0.667,69.333,0,0,0,0,0.667,0,0,0,0,0,0,1.3
33,6,88.667,0,0,22.667,0.667,40.667,65.333,0,13.423,79.195,0,0,6.711,0,0,0,0,0,0,0,0,0,1.333,12.667,0,0.667,0,0,87
.333,0,0,0.667,0,0.667,0,0,0,0,0,0,0,0,98.667,0,0,0.667,0,0,0.667,0,0,0,0.671,3.356,0.68,0,0,5.556,1.389,0,4.828,0,0
,0.694,0.685,0.685,0,0.685,1.481,4.167,8.904,4.11,21.379,13.194,11.111,4.511,5.594,0,5.517,7.534,2.721,0,2.055,0.685
,12.587,0,4.828,0,1.37,1.361,0.68,4.762,0,2.721,7.586,13.793,0,2.083,11.034,11.888,0.704,0.69,0,1.408,7.746,2.098,0,
0,0,53.472,31.469,0,0,1.399,1.389,0,26.207,0,0,0,0,0,0,1.333,0,0,0,0,0,0,0,0,0,0,26.667,0,7.586,0,50,4.667,0,2.667
,0,0,0,2.667,0,0,0,0,4.027,0,2.685,0,0,0,0,0,0,2.667,0,0,0,0,0,1.333,1.333,0.667,0,0,0,0.667,0,0,4.027,2.667,0,0,0,0
,6.711,0,1.333,0,0,0,0,1.342,0,0.671,0.671,0,0,0,0,0.671,0,0,0,1.342,0,0,0,0,0,0,0,0,0,16.216,12.838,0,0,0,0,0.671
,0.671,1.351,0,0.671,2.013,0,0,0.671,0,0,0.671,0.671,0,0.676,3.378,0,0.676,3.378,0.676,0,0.676,0.676,0.676,0,0,0,0,1
.351,1.361,0.68,0,15.385,0,0,71.429,0,0,0.676,0,0,0)
> e2 <-
c(0,0,0,0,0,0,87.838,0,0,0,0,0,0,0,0,99.324,0,0,0,0,0,0,0,0,0,0,0,0,0,0,32.432,0,0,0,0,2.74,0,26.712,2.055,0,0,0.676,0,0
,0,0.676,0,0.676,0,0.676,14.189,51.351,0,0,45.27,0,0.676,0,0,0,0,1.351,6.757,0,2.027,61.486,67.568,0,0,39.865,0,0,0,
0,0,9.459,0.676,0,0,0,8.163,2.055,0,0,33.562,0,62.585,0,0,0,0,0,79.592,0,0,0,8.844,91.156,96.599,0,0,3.401,0,1.361,0
.685,0,28.276,4.138,0,0,0,0,0.69,0,64.828,0.69,0.69,0,0,0,87.586,8.966,17.241,57.931,0,31.724,23.448,0,1.379,0,0,61.
379,0,0,0,0,0,0,0,14.483,0,1.399,0,0,5.882,0,5.405,0,0,2.128,0,0,0,0,9.091,1.639,1.471,23,1.724,4,1.493,3.101,0,3.84
6,5.714,5.755,0.714,12.587,38.739,15.172,0,0,0,2.055,56.818,23.288,0,0,59.589,0,0,0,2.74,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,9.655,22.378,4.895,2.778,8.451,0.704,32.867,22.222,4.348,6.993,43.689,7.767,37.5,28.777,21.429,14.286,28.07,8.772
,10.37,18.657,1.471,8.148,2.381,26.984,13.115,1.639,17.857,32.143,4.93,9.524,2.74,31.973,0,0,0,0,0,85.714,0,0,0,0,5.
442,0,0,0,0,0,0.68,0,0,0,0,0,0,4.795,0,0,0.685,2.055,2.055,0,0,98.63,0,0,77.397,0,0,0,0,0,0,0,0,11.565,0,13.605,0,0,
0,100,0,0,0,0,0,0,0,0,20.946,0,10.811,0,0.676,0.671,0,0,0,0,0,0,3.333,0)
> e3 <-
c(0,8.667,0,96,0,0,0,0,4.667,0,78.523,0.671,0,2.013,0,0,0,0,2.685,0,0,0.671,21.477,0,24.832,0,0,16.107,6.667,1.333,7
5.333,0,0,0,0,0,20,0,0.667,0,0,5.333,0,0,0,0,0,0,8,12.667,0,0,0,0,0,0,37.333,0,0,0,2.667,0,15.333,0,0,31.333,0,0,0,6
0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,3.333,0,0,100,6.667,75.333,0.667,99.333,0,62,0,0,0,0,0,0,0,0,0,4.698,0
,1.333,0.667,64,0,0,0,0,0,0,0,0.671,0,0,0,0,8.667,84.667,0,0,25.503,0.68,39.189,64.865,0,14.865,74.324,0,0,5.405,0,0
.671,0,0,0.667,0,0,0,0,0.671,0.676,17.568,0,0,0,0.671,89.262,0,0,0,0,0,0,0,0,0,0,0,0,97.315,0,0,0.671,0,0,0,0,0.67
1,0,1.333,2.667,0,0,0,6.897,1.379,0,7.534,0.685,0,0,0.676,0,0,0.685,1.527,5.479,12.925,3.425,17.687,14.483,15.862,2.
206,3.472,0,4.895,9.028,2.721,0,2.083,0.69,8.904,0,3.448,0,2.083,1.37,0,4.93,0,6.475,12.23,11.511,0,2.128,11.806,10.
417,0.694,1.389,0,0,9.091,1.389,0,0,0,54.545,30.769,0,0,2.027,2.027,0,33.562,0,0,0,0,0,0,1.333,0,0,0,0,0,0,0,0,0,0
```

```
,28.667,0,6,0,48,6,0,2.013,0,0,0,0.667,0,0,0,0,4.698,0,7.383,0,0,0,0,0,0,1.333,0.667,0,0,0,0,0,0.671,0.671,0,0.671,0
,0.671,0)
> e4 <-
c(0,3.448,0,0,0,0,0,8.054,0,1.342,0,0,0,0,0,0,0.671,0,0,0,0,0,0.671,0.671,0,0,1.342,0,0,0,0,0,0,0,0,0,0,14.094,7.383
,1.342,0,0,0,0,0.671,0.676,0,0,0,0,0,0,0,0.667,0,0.667,0.667,0.667,0.667,1.333,0,0.667,2,1.333,0,0.667,1.333,0.667,0.667,0
,0,0,0.667,0.671,0.671,0,0,64.43,0,0,0.671,0,0,0,0,0,0,0.667,0.667,0,83.333,0,0,0,0,0,0,0,2,97.333,0,0,0,0,0,0,0,0,0
,0,0,0,29.333,0,0.676,0,0,3.401,0,29.252,3.378,0,0,0,0,0,0,0.671,0,0,0,0,12.667,54.667,0,0,44,0,0,0,0,0,0,2.667,8,0,
4.667,64,69.333,0,0,42.667,0,0,0,0,0,5.333,0,0,0,0,10.667,1.333,0,0,41.892,0,66.667,0,0,0,0,0,79.054,0,0,0,10.135,87
.162,97.973,0,0,3.401,0,1.361,0,0,27.891,5.442,0,0,2.041,0,4.082,0,63.265,0.68,1.361,0,0,0,85.034,13.014,21.918,55.4
79,0,30.137,20.548,0,0,0,0,62.585,0,0,0,0,0,0,0,11.724,0,1.379,0,0,0,0,0,13.793,1.064,0,0,0,4.082,30.612,0,7,0,0,99,
0,1,0,91,0,0,53,0,0,0,72.917,31.579,0,0,4.545,0,0,31.395,4.706,0,0,51.579,9,0,0,0,3.093,0,0,5.376,0,4.301,0,0,0,0.90
9,0,0,1.064,0,0,11.828,1.98,22.807,2.609,3.306,1.681,1.613,1.587,6.299,6.195,0.862,10.769,22.556,0.725,0,0.709,1.562
,44.681,16.197)
> e5 <-
c(0,0,60.563,0,0,0,0,0,0,0,0.699,0,0,0,0,0,0,0,0.699,0,0,0.699,0,19.858,31.915,6.383,0,10.37,0,35.075,15.827,3.101,8.8
89,59.091,18.045,15.038,3.922,28.704,10.072,31.429,18.605,7.08,6.195,0,3.39,1.562,21.583,13.669,7.194,12.23,25.714,3
.571,7.042,2.837,38.732,0,0.704,0,0,0,90.909,0,0,0,0,2.797,0,0,0,0,0,1.399,0,0,0,0,0,0,6.993,0,0,0,0.694,0,699,0.699
,0,99.301,0,0,69.231,0,0,0,0,0,0.699,0,0,0,9.028,0,9.028,0,0,0,99.306,0,0,0,0,0,0.694,0,0,13.194,0,17.606,0,0,0,0,0,0,
0,0,0,0,0,0,5.442,0,93.878,0,0,0,0,6.122,0,73.973,0.685,0,1.361,0,0,0,0,2.721,0,0,0,17.687,0,14.966,0,0,8.163,2.721,
2.041,80.952,0,0,0,0,0,12.245,0,0.676,0,0.676,3.378,0,0,0,0.676,0,0,8.108,13.514,0.68,0.685,0,0,0,0,43.333,1.333,0,0
.667,1.333,0,8,0,0,40.667,0,0,0,70,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0.671,0,2.013,0,0,100,6.711,83.893,0.671,100,
0,75.168,0,0,0,0,0,0,0,0,0,0,0,0.676,0,0,0.671,77.852,0,0,0,0,0.671,0,0,0,0,0,0,0,6.667,92,0,0,16,0.671,32.215,71.141,0.
676,18.243,79.054,0,0,6.081,0,0,0,0.671,0.671,0,0,0,0,0,1.333,10.667,0,0,0,0,89.333,0,0,0.667,0,0,0,0,0,0,0,0,0,0,10
0,0,0,0.667,0,0)
> e6 <-
c(0.667,0,0,0,0,2.667,0,0,0,4.762,0.68,0.68,5.405,0.676,0,1.361,0.676,0,0,0,0.769,5.594,8.904,5.479,23.448,16.552,11
.034,6.667,6.294,0,3.521,6.338,1.399,0,0.704,1.418,7.801,0,1.408,0,4.196,1.37,0.704,2.857,0,2.837,10.949,14.706,0.72
5,3.623,10.072,10.294,1.439,2.128,0.704,1.418,7.801,0.709,1.418,0.714,0,50.714,30.714,0.719,0.725,0.719,1.429,0.719,
21.831,0,0,0,0,0,0,0.667,0.667,0,0,0,0,0,0,0,0,0,33.333,0,4.082,0,58,4,0,2,0,0,0,2,0,0,0,0,4.027,0,4.027,0,0,0,0,0
,0,3.356,0,0,0,0,0.667,0.667,1.333,0,0,0.671,0,1.342,0,0,0.676,2.703,0,0,0,0,11.409,0,0,0,0,0,0,0.671,0,0,1.342,0,0,
0,0,0.671,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,17.568,12.162,0.676,0,0,0,0,0,0,0,2.721,0,0,0.68,0,0,0,0,0.676,0,2.027,0,0,5
.405,0.676,0,0,0.676,0,0,0,0,0,0.676,2.027,0,0,0,0,78.378,0,0,0,0,0,0,0,0,0,0,0,90.541,0,0,0,0,0,0,0,2.703,97.973,
0,0,0,0,0,0,0,0,0,0,0,0,32.432,0,0,0,0,0.685,0,20,0,0,0,0,0,0,0,0,0,0,0,9.524,45.578,0,0,50.34,0,0,0,0,0,0,1.361,4
.762,0,6.122,55.102,66.667,0,0,39.456,0,0,0,0,0,10.204,0,0,0,0,8.844,0,0,0,36.111,0,54.167,0,0,0,0,0)
> e7 <-
c(85.315,0,0,0,13.986,93.706,97.902,0,0,0,0,0.699,0,0,18.182,2.113,0,0,0.704,0,2.113,0,72.535,0.704,0,0,0,0,87.324,9
.859,13.38,49.296,0,32.394,22.535,0,0.704,0,0,50.704,0,0,0,0,0,0,0,13.475,0,0.709,0,0,0,0,8.974,5.769,81.081,0,0.885
,79.646,14.286,0,93.86,1.739,11.966,56.034,0,0,0.855,1.695,14.754,0,5.6,0.8,0,0,3.175,0.8,0,6.25,0.781,14.062,5.263,
10.791,6.294,0,0.671,34.899,0,0,0,0,22.148,0,0,14.765,13.423,0,3.356,0,1.351,0,2.326,5.072,0.8,0.704,4.196,2.013,10,
0,0,0,0,0,0,0,11.333,0.667,97.333,0,0,0,19.333,0,26,4.667,1.333,0,3.333,87.333,0,0,57.333,2,10.667,22,0,0,41.333,2,0
,29.333,0,0.667,3.333,0,0,0.667,0,30,0.667,0.667,0,0,2.667,42,0,0.667,37.333,0,0,7.333,0.667,3.333,43.333,6,2,32,0,0
,0,0,0,6,0,0,0,0,60.667,0.667,5.333,0,14,12,8.667,2.703,6.081,2,0,1.22,2.797,3.378,9.459,1.333,7.333,42.953,0.667,58
,78,0,90.667,74.667,0,52.667,0,4,0,0.667,1.333,0,8,5.333,0,44.898,16.783,1.408,43.262,4.965,0,90.714,0,2.174,0,0,0,1
1.667,0,25.424,2.542,12.097,46.575,0,0,22.764,0.813,0.82,0,4.839,13.913,0.935,17.886,6.731,9.615,12.931,18.103,17.24
1,16.379,0,15.652,6.195,0,7.692,7.692,14.851,5.128,3.846,1.724,6.452,0,26.667,0,20,6.818,2.174,3.297,1.111,1.075,3.2
26,6.383,8.861,1.333,14.865,23.288,6.849,19.444,1.429,10.526,7.937,0,0,0,7.143,0,30.769,0,0,1.818,7.229,13.636,71.42
9,0,0,82.051,14.53,0,89.831,0.813,11.382,49.587,0)
> e8 <-
c(0,2.419,4,18.254,0.775,8.594,0.781,0.769,0.758,1.515,0.769,0.763,5.344,0,18.045,4.412,4.348,3.65,0,0,34,0,2.667,0,
0,24,0,0,13.333,11.333,0,2.013,0,0.671,0.704,6.618,3.65,1.709,2.344,7.971,0.671,9.333,0,0,2.667,0,0,0,0.667,14,0,98,
0,1.333,0,16,1.333,20,0,0,1.333,3.333,85.333,0,0,56.667,3.333,12,30.201,0,0,34.667,2,0,25.333,0,0,0,0,0,0,32.215,0
,0.671,0,0,0,44.295,0,0.671,41.611,0,0,12.081,0.671,0,42.282,11.333,4,29.333,0,0,0,0,8.667,0,0,0,0,58,0.667,6,0,15
.333,14.667,10,4.667,6.25,3.361,2.02,6.081,10,2.703,5.333,44.667,0.667,63.333,79.333,0,92,73.333,0,58,0,2,0,0.667,2,
1.333,12,2.667,0,38.356,20,0,45.714,3.571,0,85,0.719,1.439,0,0,0,8.943,0.82,27.642,1.667,12.5,0.8,29.268,0.806,4.032
,0,8.824,4.839,18.803,13.675,7.08,2.128,7.5,13.084,20.561,17.117,3.509,17.544,6.604,6.863,4.082,6.452,18.391,7.527,2
.105,4.902,8.824,0,0.98,7.843,2.941,0,1.042,7,6,9.091,17.582,3.297,22.727,1.163,1.266,3.704,0,0,6.579,0,20.513,28.57
1,0,0,0,2.247,12.264,74.797,0.813,0,84.553,12.903,0.806,96.774,0.806,17.742,50.806,0,0,3.846,2.308,16.794,0,10.448,1
.481,0.73,0,1.449,0.725,0.709,7.092,0.709,15.603,5.674,11.268,4.762,0,0.671,32.215,0,2.685,0.671,0,28.188,0,0.671,16
.107,14.765,0.671,3.356,0,2.685,0.725,2.92,4.511,0.833,0,12.143,2.685,10.738,0.667,0,0,0,0,0,0,16.107,1.342,96.644,0
,0,0,17.333,0,20.667,2.667,0,2.667,4,83.333,0,0.667,55.333,3.333,8,30.872,0,0.667,33.333,1.333,0,30,0.667)
> e9 <-
c(0.667,0.667,0.667,0,2.667,0.667,29.333,0,0.667,0,0,4,44.667,1.333,0.667,39.333,0,0.667,11.409,2.013,4.667,51.007,1
2.752,2.667,26,0,0,0,0,0,6.667,0,0,0,0,60.667,0,8.667,0,11.333,10.667,10.667,6.122,6.081,2.667,0.971,2.885,3.361,9.3
33,3.333,6,32.432,0,60.667,74,0,88.667,71.333,0.667,52,0,5.333,0,0,1.333,0,7.333,4.667,0,41.611,20.408,0.685,43.448,
5.517,0.69,82.759,0,2.098,0,0,0,8.661,0.806,24.793,1.653,15.833,46.835,0,0.82,26.446,2.459,2.479,0,3.361,10.345,7.20
7,29.412,13.187,22.936,15.888,21.239,0,17.117,6.481,11.881,3.03,6.316,20.732,6.897,6.522,13.462,1.389,9.459,2.97,1.9
8,11.765,0,0,4.808,2.857,0.952,0,8.571,10,8.333,11.111,2.273,11.765,7.778,11.628,5.263,1.205,0,0,17.284,0,42.029,0,5
,0,0,0,0,5.263,0,0,0,0,80,4.762,4.545,0,19.277,2.97,10.526,0,5.185,0.741,0.735,0,0.714,1.439,0,10.791,0,5.036,4.225,
13.103,11.486,0,0,28,0,1.333,0,0,23.333,0.667,0.667,22,8,0,0,0,0,0,2.667,6,0.667,1.515,7.383,1.342,2.685,0,0,0,0,0,0
.667,0,9.333,3.333,99.333,0,0.667,0,27.333,0.667,20,11.333,2,0.667,4.667,77.333,0,0,36.667,2,10,33.333,0,0,48.667,1.
333,0,30.667,0,0,2,0,0.667,6.667,1.333,22,0,0,0,0,10.067,51.678,0.671,0,38.926,0,0,10.067,2.013,11.409,51.333,4,3.33
3,28,0,0,0,0,0,3.333,0,0,0,0,70,0,0,0,12,15.333,8.667,6,7.432,2.797,0,2.721,9.459,0.667,4,44.667,0.667,69.333,99.333
,0,99.333,74,0,44,0,14,0,0,0,0,4,1.333,0,36.986,20,0,42.857,6.122)
> e10 <-
c(1.379,82.639,1.399,3.597,0,0,0,8.537,0,32.609,2.778,6.061,3.226,3.333,0,0,0,0,0,3.448,3.571,12,0,28,0,7.692,4,0,8,
4,0,8,48,20,0,0,13.333,0,12.5,16.667,16.667,25,4,0,0,0,0,0,0,36.364,4.545,9.091,57.143,0,10,5.263,0,5,10.526,16.667,
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5.556,0,41.176,0,11.765,0,73.333,0,0,0,0,0,0,0,0,50,0,0,2.857,2.857,13.158,2.632,0,0,13.953,50,4.255,2.128,1.818,0
,4.286,2.752,1.709,0,0.833,0,0,12.5,0,0,0.8,4.032,0,4.478,0,0,6.164,59.184,0.68,0.68,94.558,0,72.789,0.68,1.361,1.36
1,0,0,1.361,0.68,2.041,1.361,4.762,7.483,2.721,2.721,1.361,0,15.646,0.685,2.174,12.121,5.814,4.828,2.041,2.778,3.448
,0.68,1.361,39.456,12.245,0,19.595,0,0,0,0,0,1.342,7.432,9.396,0,0,2.027,39.189,0,3.356,2,0,9.655,0.709,2.069,3.356,
3.333,1.333,0.667,0,1.333,0,0,2,8.054,4.667,9.333,92.667,0,0,0,0.667,16,0.667,39.333,2.667,0.667,58.667,0,0,0,4.667,
0.667,65.333,74,0.667,9.396,0,0,0.671,0,5.369,0.671,1.342,2.685,0,0.671,1.342,0.671,1.342,0,2.013,3.356,0,9.396,0,0,
6.711,3.356,0.671,39.597,17.45,6.667,46.667,0.667,0,0,0,8,8.667,8.667,15.333,87.333,0,81.333,2,26.667,0.667,10.667,0
,0,0,3.333,76,2.667,1.333,7.333,7.333,2.381,0.676,4.795,7.576,4.651,0.746,11.565,32,0.667,2.667,18.621,2.344,2.4,5.9
7,2.013,0,1.333,17.333,5.333,16.667,3.333,12,1.333,0,4,1.333,4.027,0,20.134,0.671,3.401,11.486,0.68,0,0,2.069,0,0,0.
694,0,0,51.389,2.778,0,20.833,0,0,4.167,0,0,0,0,2.098,0)
> e11 <-
c(1.6,19.298,5.505,7.477,11.881,4.082,18.75,15.385,7.955,11.429,32.051,9.589,2.667,4,17.333,12,58.065,1.852,0,0,33.3
33,2.128,6.383,0,13.043,11.111,0,0,0,16.667,0,2.273,0,12.5,4.444,0,0,4.444,2.273,0,30.233,0,6.818,0,4.444,2.439,2.43
9,12.195,0,0,2.5,0,2.564,12.5,33.333,0,0,0,16.667,0,0,0,0,3.125,8.824,0,0,2.941,0,0,7.692,0,4.348,0,4.167,11.111,53.
333,0,3.333,6.061,0,19.355,0,0,0)
> A <- c(e0,e1,e2,e3,e4,e5,e6,e7,e8,e9,e10,e11)
> f0 <-
c(0,0,0,0,10.227,0,0,0,0,1.053,39.583,2.083,0,0,0,0,0,0,0,0,0,0,0,0,0,3.614,0,0,0,1.205,0,0,0,0,0,0,0.99,0,0
,0,0,0,0,0,83.81,0,0,0,0,0,0,0,0,2.062,0,0,0,0,0,0,2.256,0.763,0,0,0,0,0.704,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.68,0,0,0,0,0,0,0,0,0,0,0.69,0,0,0,41.228,0,0,0,0,0,0,0,0,0,9.63,0,0.694,2.778,0
,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,98.667,0,0,0,0.671,65.772,69.799,0,0,0,0.667,0,0,0,0,0,0,0,0,
0,98,0,0,0,98.667,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.342,0,9.333,6.667,0,0,0,7.333,0,0,87.333,36,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,1.333,0,0,0,0.667,3.333,0,0,36.667,94.667,0,91.333,34.667,0,0,100,0,0,0,0,0,33.333,100,0,79.33
3,17.333,0,6.667,8.667,0,0,44.218,0,0,0,0,0,0,0,0,82,0,12,74,0,0,70.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,99.333,0)
> f1 <-
c(0,4,0,0,0,1.333,0,0,14.667,0.667,0,0,0,0,0,0,0,0,0,0,98.658,0,0,0,0,0,15.333,0,94,0,0,0,0,0,99.333,0,0.667,0,0,0
,34,0,0,0,8.667,0,0.671,0,0,0,0.671,67.785,0,0,0,0,0,0,95.302,25.503,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,2,0,0,0,0,100,0,0,0,0,0,0.694,0,0.694,0,0,0.69,0,0.694,35.616,1.37,0,0,0,0,0,0.685,0.69,0.694,2.083,17.293,0,0,4.
828,21.233,21.088,0.68,6.849,0.685,0.699,0.694,18.621,0,0,0.68,0.68,1.361,0,46.939,1.379,1.379,0,70.139,0.69,0.699,0
,8.966,0.704,4.93,0,0.699,9.091,18.182,0.694,0.694,1.399,0,0,88.811,0,0.694,0,83.333,0.676,4,0.667,0,0,0,0,0,100,0,0
,0,0,0,0,3.333,0,0.667,0,0,0,0,0,0,0,2.667,66.667,1.333,0,0,0,1.333,0.671,0,62.416,0,92,0,98.667,0,0,0,0,0,0,0,0,0
,0,0,38,34.667,0.667,0,0,97.987,0.671,0,0,0,30,0,0.671,0.671,0,98.658,0,0,1.342,1.342,99.329,0,0,0,3.401,99.324,0,0,
0,0,0,0,0,0.671,59.06,99.324,0,0,0,0,66.892,1.351,0,0,21.622,97.973,10.135,0,0,0,12.162,33.557,0,5.369,0,59.06,1.342
,0.667,0,0,20.134,1.342,0,0,0,96.622,2.027,0,0.676,0,0,0,0,0,0.676,0,80.405,0,0,0,69.231,0.952,0,0,13.514,0,0,0,69.5
95,0)
> f2 <-
c(0,99.324,0,0.676,0,0,0,0,0,0,0.676,0,0,0,0,0.676,0,18.919,0,0,0,0.676,0,0,0,0,0,0,2.041,0,0,0,0,0,0,0,0,97.973
,92.568,0,27.703,82.432,0,15.541,0,0,0,0.676,0,0,18.919,0.676,0,0,0,62.585,0.676,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1
4.189,0,0,0,0,0,0,0,98.639,0,70.068,0,0,0,2.041,0,0,12.245,0,0,0,4.762,0,0,2.721,0.685,100,0,0,61.379,0,0,0.69,0,0
,0,0,0,0,3.448,26.897,0,14.483,0,0,0,0,0.69,0,0,24.828,0,0,3.448,0,0,0,0,0,0,0,0,0,0,0,3.333,2.703,4.545,2.381,2.1
28,0,0,0.926,2.679,0,0,1.471,0,0.862,0,0,0,2.273,1.538,0,0,0,0.699,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.971,0,0,0,0,0,0,30.597,0,0,10.317,0,0,4.098,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,99.32,0,0,0,0.685,68.493,72.603,0,0,0,0,0,0,0,0,0,0,0,0,98.639,0,0,0,99.32,0,0,0,0.68,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,12,5.333,0,0)
> f3 <-
c(0,8,0,0,88,34,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.671,2.013,0,0,32.667,97.333,0,91.333,29.333,0,0,99.333,0,0
,0,0,0,37.333,100,0,81.333,18.667,0,6,7.333,0,0,44.966,0,0,0,0,0,0,0,0,0,78,0,10,72,0,0,68,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,98.667,0,0,3.333,0,0,0,2,0,0,18,0.667,0,0,0,0,0,0,0,0,0,0,98.658,0,0,0,0,0,14.667,0,91.333,0,0,0,0,0,99.329,0
,1.333,0,0,2,33.333,0,0,0,7.432,0,0,0,0,0,0.676,70.946,0,0,0,0,0,0,94.631,16.779,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.6
71,0,0,0,0,0,0,0,0,0.671,0,0,0,0,98.658,0.671,0,0,0,0.699,0,0,0.69,0,0,0.685,0,0.676,39.865,0.685,0,0,0,0,0,0,0.68,0
.69,1.379,18.382,0,0,6.993,18.056,17.007,0,9.722,0,1.37,0.69,24.828,3.472,0,0,2.083,0.704,0,48.921,1.439,2.158,0,65.
248,0.694,0,0,6.944,0,5.634,0,0.694,8.392,20.28,0,0.699,0.699,0,0.69,83.784,0.676,1.361,0,81.507,0.676,6,0,0,0,0,0,0
,100,0,0,0,0,0,0,8.667,0,2,0,0,0,0,0,0,0,0,3.333,74.497,5.333,0.667,0,0,0,1.342,0.671,57.047,0,90,0,98,0,0,0,0,0,0,0
,2,0,0,0,35.57,32.215,0.671,0,0)
> f4 <-
c(97.931,0.69,0,0,0,34.247,0,0.671,0.671,0,99.324,0,0,0.676,4.73,100,0,0,0,5.369,98.658,0.671,0,0,0,0.671,0,0,1.351,
53.378,97.973,0,0,0,0,62.838,0,0,0,17.45,95.973,14.094,0,0,0,7.432,30.201,0,4.698,0,58.667,0.667,0.667,0,0,22.667,0.
667,0,0.667,0.667,94.667,1.333,0,0,0,0,0,0,0,0,74,0,0,0,0,0,14,0,0,0,64.43,0,0,98.667,0,0.667,0,0,0,0,0,0,0.667,0,
0,0,0,0.667,0.667,17.333,0,0,0,0.667,0,0,0,0,0,0,0,3.378,0,0,0,0.68,0,0,0,0,0,98.658,92.617,0,32.215,77.852,0,19.333
,0,0,0,0,0,0,13.333,2,0,0,0,65.101,2.013,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,10,0.667,0.667,0.667,0,0,0,0,0,100,0,
65.306,0,0,0,2.027,0,0,15.541,0,0,0,4.054,0,0,5.442,1.361,100,0,0,66.667,0,0,0,0,0,0,0.68,0,0,5.442,25.17,0,17.123,0
,0,0,0,0,0,0,24.49,0,0,2.041,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10.638,0,0,0,0,0,37.755,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,6.818,0,0,0,0,0,0,0,0,0,0,0,0.952,0,0,0,0,0,0,0,85.714,0,0,0,0,0,0,0,8.602,0.99,0,0,0,0,0,1.587,0,0,0,0,0,0,0,0,0,0
,0)
> f5 <-
c(0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.752,0,0,0,0.719,0.714,0,0,40.708,0,0,10.156,0,
0,4.317,0,0,0,0,0,0,0,0,0,0,0.699,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,100,0,0,0,0,62.238,77.622,0,0,0,0,0,0,0,0,0,0,0,0,
98.611,0,0,0,98.611,0.694,0,0,0.694,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.694,0,8.844,6.803,0,0,0.68,8.163,0,0,90.476,
43.537,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.361,0,0,42.177,96.599,0.68,93.878,34.694,0,0,98.639,0,0,0,0.676,0,31.
757,100,0,79.054,12.162,0,2.027,6.081,0,0,47.26,0,0,0,0,0,0,0,0,0.667,86,0,10.667,68.667,0,0,61.333,0,0,0,0,0,0,0,0,
0,0,0.667,0,0,0,0.667,100,0,0,2.013,0,0,0,0.671,0,0,11.409,0,0,0,0,0,0,0,0.667,0,0,0,0,99.324,0,0,0,0,0,10.738,0,97.
315,0,0,0,0,0,100,0,0.671,0,0,2,32,0,0,0,7.383,0,0,0,0,0,0,65.541,0,0,0,0,0,0,94.521,24.658,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0)
> f6 <-
c(0,0,100,0,0,0.667,0,1.37,0.68,0,1.361,0,0,1.351,0,0,29.054,1.361,0,0,0,0,0,0,0.69,0.69,2.069,14.815,0,0,5.634,19.7
18,21.678,0,4.93,0,0,0.709,23.239,0.704,0,0,0,2.143,0,56.028,0.73,0,0.725,66.667,0.719,0,0,5.674,0,6.383,0,0.709,7.0
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92,14.286,1.429,2.143,2.143,0,0,79.137,0,2.878,0,81.56,1.351,3.333,0,0,0,0,0,0,99.333,0,0,0,0,0,0,4.667,0,1.333,0,0,
0,0,0,0,0,0,2.667,64.667,1.333,0,0,0,2,0,0,61.745,0,90.604,0,99.329,0,0,0,0,0,0,0,1.333,0,0,0.671,40.94,32.886,0,0,0
,98.649,0,0,0.676,0,39.865,0,0,0,0,98.658,0,0,1.342,2.013,99.329,0,0,0,6.081,99.324,0,0,0,0,0,0,0,0.671,56.376,100,0
,0,0,0,72.973,0.676,0,0,25.676,99.324,6.757,0,0,0,8.844,34.014,0,4.082,0,55.782,0.68,0,0,0,19.595,0.676,0,0,0.676,95
.946,3.378,0,0,0,0,0,0,0,0,0,80.405,0,0,0,0,0,0,8.108,0,0,0,77.027,0,0,100,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.676,11.486,
0,0,0,0,0,0,0,0,0,0,0,4.762,0,0,0,0.685,0,0,0,0,0,100,96.599,0,21.769,84.354,0,13.605,0,0,0,0,0,0,15.646,2.041,0,0,0
,55.102,2.041,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,6.122,0,0,0,0,0,0,0,0,99.301,0,76.923,0,0)
> f7 <-
c(0,0.704,0,0,7.692,0,0,0,2.098,0,0,2.098,0,99.301,0,0,56.338,0,0,1.408,0,0,0,0,0,0,1.408,28.873,0,12.676,0,0,0,0,0,
0,0,26.056,0,0,3.546,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.901,16.071,0,0,0,0.885,0,0,0,0,92.241,0,11.966,4.237,0,86.29,10
.4,0,0,0,0,0,0,0,0,9.375,3.008,0,0.699,0.671,97.315,0,0,0,0,94.631,0,0,0,6.711,0,0,0,2.013,0,0,0.775,0,0.8,0,0,0,0,1
4,0,0.667,67.333,0,0,0,0,0,0,0,9.333,0,0,7.333,0,0,2.667,1.333,0,96.667,9.333,0.667,0,1.333,28,88,21.333,0.667,0,0
,1.333,3.333,86.667,0,4,3.333,0,0,0,0,1.333,0,0,2.667,6,2,0,1.333,0,3.333,0,64,0,0,41.333,0,0,90,2,1.333,97.333,0,0,
100,0.667,54.667,0,0,0,0,0,0,1.333,0.667,0,0,0,0,0,1.399,8.784,0,1.333,0,0,0,0,0,0.667,0,0,0,1.333,100,0,97.333,97.3
33,0,0.667,61.333,0,2,0,6.294,0,0,24.823,40,0,27.338,0,0,28.261,0,0,0,0,0,0,0,0,83.74,0,0.813,0,4.032,6.452,0,0,2.43
9,0,0,0,0,0,0,6.034,0,0,9.649,0,0,0.99,0,0,0,0,0,0,0,0,0,0,2.222,0,0,0,0,0,0,17.808,0,0,1.429,0,0,0,3.279,0,0,0,0,
0,0,0,0,0,0,18.644,0,0,0,0,0,0,0,0,87.705)
> f8 <-
c(0,16.129,2.4,0,91.473,9.375,0,0,0,0.758,0,0.763,2.29,0,6.767,2.941,1.449,0.73,2,98,0,0,0.667,0,96.667,0,0,0,4.667,
0,0,0,1.342,0,0,0,0.73,0,0,0.725,0,0,11.333,0,0,76,0,0,0,0,0,0,0,0,4.667,0,0,6,0,0,1.333,3.333,0,98,12.667,1.333,0,0
.667,23.49,86,18.667,2.667,0,0,1.333,5.333,87.333,0,6.667,2,0,0,0,0,0,0,0,0,5.369,0.671,0.671,1.342,0,1.342,0.671,73
.154,0,0.671,36,0,0,96,4.667,0.667,99.333,0,0,100,0,58.667,0,0,0,0,0,0,0,0,0,0,0,0,2.027,1.333,2.027,0,0,0,0,0,0,0,0
,0,0,99.333,0,98,99.333,0,1.333,50.667,0,0,0,3.571,0,0.714,20.714,33.571,0,27.338,0.719,0,30.935,0,0,0,0,0.833,0,76,
0,0,0,7.258,11.765,0,0,0,0,0,0,0.935,0,0,2.632,0,0,12.745,0,0,1.149,1.075,0,0,0,3.922,0,0,0,0,88.542,0,0,0,7.692,0,0
,0,0,0,2.439,0,0,0,0,0,10,0,0,0,0,0.813,22.764,0,0,0,0.806,0,0,0,0.806,84.677,0,6.923,2.308,0,92.481,11.194,0,0,0,0,
0.725,0.709,0,0,4.965,4.255,0,0.68,2.013,95.973,0,0,0,0,95.302,0,0,0,2.013,0,0,0,0.671,1.342,0,0.73,0.752,0,0,0,0,0,
12,0,0.667,71.141,0,0,0,0,1.342,0,0,0,16.667,0,0,11.333,0,0,2.667,1.333,0,92.667,8,0,0,1.333,19.463,89.333,16,1.333,
0,0,5.333,2)
> f9 <-
c(86,0,5.333,2,0,0,0,0,3.333,0,0,2.667,8.667,0.667,0,0.667,0,4.667,0.671,66.443,0,0,41.611,2,0,89.333,2.667,2.667,97
.333,0,0,100,0,52.667,0,0,0,0,0,0,1.333,0,0,0.676,0,0,1.923,5.042,0,2.667,2,0.676,0,0,0,0,0,0,0.667,100,0,98.667,9
8.667,0,0,52.667,0,0.667,0,5.442,0,0.69,25.517,33.793,0,28.276,0,0,27.465,0,0,0,0.826,0,0,2.532,0,84.426,0,0,0,7.438
,5.042,0,0,0,0,0,0,0,8.036,0,0,6.931,0,0,0,1.149,0,0,0,0,0,0,0,1.98,0,0,0,0,84.615,0,0,0,6.667,0,0,0,0,0,0,17.857,0,
0,0,0,0,0,0,6.25,0,0,0,0,0,0,5,0,0,4.545,0,7.229,0.99,0,94.074,11.111,0,0,0,0,0,0,0,0,7.194,10.563,0,0,0,97.333,0,0,
0,0,92,0,0,0,6,0,0,0,1.333,0,0,0,0,0,0,1.342,0,0,20.667,0,0,74.667,0,0,0,0,0,0,0,0,13.333,0,0,8.667,0,0,6.667,0,0,94
.667,7.333,0,0,0.667,22.667,83.893,17.45,1.333,2.667,0,1.333,0,82,0,2,0,0,0,0,0,10.667,0,0,1.342,9.396,0.671,0.671,0
,0,8.725,0,47.651,0,0,37.333,0.667,0,76.667,2.667,0,98,0,0,99.333,0.667,80.667,0,0,0,0,0,0,0,0,0,0.676,0,0,10.204,1.
351,0,0,0,0,0,0,0,0,0,0,0,100,0,99.333,98.667,0,0.667,58,0,0,1.37,13.103,0.694,0.68,21.769)
> f10 <-
c(24.138,0,25.175,0,0,17.6,0,0,0,2.174,0,3.03,9.677,3.333,0,0,3.448,3.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,4,0,0,0,0,0,0,0,0,0,10,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.857,0,2.632,0,0,2.326,0,0,2.128
,0,59.677,0,0,4.274,0,0,0,0,0,94.215,0,0,0,0.794,0,4.348,13.014,76.712,0,0,85.714,0,99.32,0,0,0,0,0,24.49,0,0,0,14.9
66,0.68,17.007,1.361,0.68,6.122,0,0,0.685,0.725,0,0,0,2.041,0.694,0,0.68,0.68,2.041,0,91.892,0,0.68,0.68,96.599,0,1.
333,0.671,0,0.671,1.342,57.718,0,0,2,0.671,0,0,0,0,0.69,0,0,8,36.667,2,0.667,0,0,38,0,0.667,0,0,0,96.667,80.667,0,2,
9.333,0,0,57.333,0,96.667,1.333,0.667,0,0.667,1.333,0,0,1.342,3.356,0,0.671,34.899,24.832,6.711,0,1.342,0,0,0,0,0,9.
396,6.04,0,3.356,7.383,0,59.06,0,1.342,0,0,2.685,68.667,0,88,9.333,0,2,0,0,0.667,4,0.667,0,0,0.667,0,0,0,0,0.667,0,2
.667,0,0,0,0.667,0.667,2.381,0.676,0.685,0.758,3.101,1.493,0,3.333,0,0,0.69,0,0.8,0,1.342,0,1.333,14.667,0.667,0.667
,11.333,0,2,5.333,0,0,0,0,0.671,0,0,0,89.116,0.69,82.759,0.69,0,20.979,7.639,0.694,0,1.389,0.694,0,0,1.389,97.222,0,
40.278,0,0,0,0,26.277)
> f11 <-
c(5.6,0,0,21.495,4.95,0,1.042,0,0,0,0,0,0,0,0,0,1.613,0,16.667,0,0,36.17,0,0,0,0,0,0,0,0,0,0,0,0,2.222,0,0,0,0,31.81
8,0,0,0,0,0,17.073,2.439,0,0,10,0,0,0,0,0,0,0,0,0,0,11.111,0,0,0,0,0,23.529,0,0,0,0,0,0,0,4.167,0,0,0,0,0,93.75,0,0,
0,0)
> F <- c(f0,f1,f2,f3,f4,f5,f6,f7,f8,f9,f10,f11)
> g0 <-
c(0,0,0,0,75,0,0,0,0,0,0,8.333,0,0,0,0,0,0,0,1.053,0,0,2.083,0,0,0,0,0,0,0,1.19,0,0,0,0,0,0,0,1,0,96.04,0,0,0,0,96.6
29,0,0,15.238,1.111,0,0,0,0,12.15,0,0.935,55.67,4.167,5.405,4.237,0,0,0,57.895,51.145,20.879,0,13.043,2.143,14.085,9
.559,0,0,0.68,0,0,0,2.685,0,0,0,0,0,0,0,0,0,0,0,0,0,0,100,0,0,0,100,0,0,0,0,0,5.479,0,0,0,0,0,0,0,0,0,0,0.694,0,0,0,
0,0,0,0,17.544,0,0,0,0,0,0,0,0,0,0,0.741,0,0,8.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.667,0,100,0,0.671,0,0,0,0,0,0,0,0,0,0.6
67,0,0,0,0,34.228,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,89.333
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.333,0,0,0,3.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,100,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,18,0,87.333,26,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0)
> g1 <-
c(0,0,0,0,0,98.667,0,0,0,0,0,0,0,0,0,0,99.333,0,0,0,0,0,0,0,0,0,82.667,0,2,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0.671,0,0,0,0,0,0,0,3.356,34.899,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,19.333,0,0,0,0,0,0,0,0
,1.361,0,0.694,0,0,0,0.69,1.379,0.694,0.694,0,0,0,0.685,0,0,0,0,0,0,1.389,25.564,0,0,6.207,2.055,0.68,0.68,0.685,0,0
.699,0,0,8.966,0.685,0,8.844,0,0,0.68,0.69,9.655,0,0.694,0,30.769,0,34.483,0,0,0,0,6.294,0,0,0.694,0,0,0,0.699,0,0,0
,0.694,0,96,96,0,0,0,0,0,0,0,0,0,0,43.333,2.667,0,10.667,0,0,96.667,0,0,0,0,0,0.667,0.667,3.333,0,0,0,2.667,1.342,
0,0.671,0,0,0,0.667,0,0,0,0,0,0.667,0.667,0.667,0,3.333,58,2.667,1.333,0.667,0,0,2.685,0,0,2,0,0,2.685,0.671,1.333
,0.671,0,0,0,0.671,0,0,0,0.671,78.912,0,0,0.671,0,0,0,0,0,0,19.463,0,0,0,0,0,0,0,0,2.703,0,79.054,0.676,0,0,0,14.7
65,0,36.913,0,0.671,0,0,0,0,0,0,0.676,0,0,0.676,2.703,0.676,0,0,1.351,0,0,2.027,0,0,2.027,0,0,0,0,52.381,0,0,68.919,
0,0,99.324,0,0)
> g2 <-
c(0,0.676,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.676,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.351,0,0,0,0,0,
0,0,0,0,0,0,37.415,3.378,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,85.135,0,0,0,0,0,0,0,0,0,0.68,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0.69,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.379,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.703,75,7.143,36.17,0
```

```
,9.859,19.444,93.75,0,0,27.941,3,0.862,0,0,0,64.394,67.692,23.81,0,1.429,16.783,6.306,0.69,0,0,0,0,1.515,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,100,0,0,0,100,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.971,0,0,0,0,0,0,18.657,0,0,0,0.794,0,11.475,0,0,0,0,0
,0,0.68,0,0,0,0,0,0,2.721,0,100,0,0.68,0,0,0,0,0,0,0,0,0,0.68,0,0,0,0,31.507,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.361,0,0,0
,0,0,0,0,0,0,0,0,0.68,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,87.333,0,0,0)
> g3 <-
c(0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,5.369,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,100,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0.671,0,0,0,0,0,0,0,22,0,89.333,27.333,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0.667,0.667,0,0,0,0,0.667,97.333,0,
0,0,0,0,0,0,0,0,0,99.333,0,0.671,0,0,0,0,0,0,79.333,0,4,0,0,0,0,0,0.671,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.676,0,0,
0,0,0,0,0,3.356,34.228,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,17.45,0,0,0,0,0,0,0,0,1.37,0,0.694,0,0,0,0.
685,0,0.68,0,0,0,0,0.685,0,0,0,0,0,0,1.379,29.412,0,0,6.294,4.167,0.68,0.685,0.694,0,0.685,0,0,9.722,0,0,6.944,0,0,0
,0,11.511,0.719,0,0,27.778,0,31.944,0.699,1.408,0,0.694,9.091,0,0.699,0.699,0,0,0,1.351,0,0,0.685,0.685,0,94,96,0,0,
0,0,0,0,0,0,0,0,0,45.333,1.333,0,11.333,0,0,99.333,0,0,0,0,0,0.667,0,3.333,0,0,0,1.333,4.027,0,2.685,1.342,0,0,0.667
,0,0,0,0,0,0,1.333,0.667,0,0,2.685,57.718,2.013,1.342,0,0)
> g4 <-
c(0.69,4.138,0,0.69,5.517,0,0,2.685,0.671,0.671,0.676,0,0,0,0.676,0,0,0,0.671,74.497,0,0,0.671,0,0,0,0.671,0,0,23.64
9,1.351,0,0,0,0,0,0.671,2.013,0,4.027,0,75.168,2.027,0,0.671,0,14.094,0,36.913,0,3.333,0,0,0,0.667,0,0,0.667,0,0,0.6
67,3.333,0.667,0.667,0,1.333,0,0,0.667,0,0,2.667,0.671,0,0,0,0,64,0,0,99.329,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,2,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.671,0,0.667,0,0,0,0,0,0,0,0,0,0,0,34.228,4.698,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,88.667,0,0,0,0.667,0,0.676,0,0,0,0,0,0,0,0,0,0.676,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,69.149,0,0,0,0,0,0,10,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,98.095,0,1.099,0,0,96.739,0,0,13.333,0,0,0,0,0,0,0,19.355,55.446,18.421,0.87,0,0.84,0,52.38
1,74.803,0,0,3.846,0,0,0,0,0,1.418,0)
> g5 <-
c(0,0,0,0,0,0,0,0,0,0,0,0,0,99.296,0,0,0,99.301,0,0,0,0,0,5.674,0,0,0,0,0,0,0,0,0,0.752,0,0,0,0,0,0,0,12.389,0,0,0.7
81,0,0,12.95,0,0,0,0,0,0,0,0,0,0,0,0,0,1.399,0,100,0,1.399,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,37.762,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0.694,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,87.755,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.68,
0,0,0,1.361,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,99.324,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,13.333,0,88.667,30.66
7,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,99.329,0,0,0,0,0,0,0,0,0,0,0,99.333,0,0,0,0,0,0,0,0,0,85.906
,0,1.342,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,4.795,39.726,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.66
7,0,0,0,0,0,0,0,0,21.333,0,0)
> g6 <-
c(0,0,0,0,0,0,0,0,0,0,0,0.68,0.676,0.676,0.685,0,0,0,0,0.685,0.769,0,0,0,0,0,0.69,28.148,0,0,7.042,2.817,0.699,1.399
,0.704,0,0.709,0,0,13.38,0,0,4.225,1.429,0,1.418,0,7.353,2.174,0,0,38.971,0,27.66,0,0.709,0,1.418,6.383,0,0.714,0,0,
0,0,1.439,0,0,0.704,0,0,96.667,100,0,0,0,0,0,0,0,0,0,0,39.333,0.667,0,6.667,0,0,100,0,0,0,0,0,2,0,4.667,0,0,0,2.66
7,2.685,0,1.342,1.342,0,0,0,0,0,0,0,0,0.667,0.667,0.667,0,3.356,56.376,2.013,0.671,0,0,0,1.351,0,0,3.378,0,0,2.013
,0.671,0.671,0.671,0,0,0,0,0,0,0.671,0,74.324,0,0,0,0,0,0.671,0,0,23.49,0,0,0,0,0,0,0.676,0,0.676,0,79.054,1.342
,0,0,0,10.204,0,41.497,0,2.041,0,0,0,0,0,0,0,0,0.676,6.081,0,0,0,1.351,0,0,0,0,0,2.027,0.676,0,0,55.172,0,0,77.703
,0,0,100,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.351,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.68,0,0,0,0,
0,0,0,0,0,0,0,0,0,44.898,0.68,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,93.197,0,0,0,0,0,0,0,0,0,0,0,0,0,0)
> g7 <-
c(0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
83.036,0,0,0,0,0,0,0,0,0,0,4.237,0,2.419,0,0,0,0,0.794,0,0,0,0,0,0,1.439,0,0,0,0,0,0,0,0.671,0,0,0,0,0,0,0,80.537,
3.378,2.256,0.775,0.725,0,0,0,0.671,0,21.333,0,0,23.333,0,0,0,0.667,0,0,0,0,90,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10,0,0,0,
0,14,63.333,0.667,0,0,0,0,0,0,0,0,0,0,28,10.667,0,0,0,0,0,0,0,0,0,0,0,0,0,14,0,0,0,0,0,24,0,0,0,0,0,0,0.667,0,0,0.
676,1,0,0,0.699,0.676,2.027,8.667,0,0,0,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.098,0,0,23.404,0.714,0,28.058,0,0,57
.971,0,0,0,0,0,0,0,0,0.813,0,0,0,77.419,0,0,0,0.813,0,0,0.862,0,0,0,90.517,0,0,75.439,0,0,0,12.821,0,1.724,0,0,0,0,0
,0,0,0,90,0,0,0,0,0,0,1.37,0,0,0,0,0,0,96.721,0,0,0,0,95.652,0,0,0,0,0.84,79.661,0,0,0,0,0,0,0,0,0,0)
> g8 <-
c(0,0,4.8,0,2.326,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,1.333,0,0,0,83.221,4.698,0.704,0,0.73,0.855,0,0,
0,0,18.667,0,0,19.333,0,0,0,0.667,0,0,0,0,95.333,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10.667,0,0,0,0,13.333,64,0.667,0,0.667,
0,0,0,0,0,1.342,0,0,30.872,6.711,0,0,0,0,0,0,0.671,0,0,0,0,0,0,0,13.333,0,0,0,0,0,19.333,0,0,0,0,0,0,0,0,0,0,0.694,0,0
,0.676,0,8.108,0,0.667,0.667,0,0,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,3.571,0,0,18.571,1.429,0,19.424,0,0,55.396,0.73,0
,0,0,0,0.781,4,0,0,0.806,64.516,0,0,0,0,0,4.255,0,0,0,0,87.719,0,0,75.49,0,9.677,0,2.151,0,0,0,90.196,0,0,0,0,3.125,
0,0,0,2.198,1.099,0,0,0,0,91.463,0,0,0,0,4.762,90,0,0,0,0,0,76.423,0,0,0,0,0,0,0,0,0,0,0,2.308,0,1.504,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.685,0,0,0,81.879,4.698,0.725,0.73,0.752,0.833,0,0,1.342,0,16,0,0,20.134,0,0,0,0,0.6
71,0,0,0,0,82,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,6.667,0,0,0,0,14,60)
> g9 <-
c(0,0,0,0,0,0,0,0,2.667,0.667,0,26.667,7.333,0,0,0,0,0,0,0.671,0,0,0,0,0,0,13.333,0,0,0,0,0,24.667,0,0,0,0,0,0,0,0
,0.68,0.676,0,0.971,0,0.84,0.667,8.667,0.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.041,0,0,26.897,1.379,0,20.69,0,
0,57.042,0,0,0,0,0,0,0,0,1.639,0,0,0,63.636,0,0,0,0,0,0,0,0,84.821,0,0,64.356,0,12.632,0,1.149,4.348,0,0,0,0,0,0,0,94.
059,0,0.962,0,0,0.962,0,0,0,2.222,0,0,0,0,1.754,0,82.143,0,0,0,0,98.361,0,0,0,0,0,0,0,0,0,0,4.762,0,0,0,0.99,0,0.7
41,0,0,0,0,0.714,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0,0,98,0,0,0.667,0,0,0,0,0,0,20.667,0,0,13.333,0,0,0,0,0.
667,0.667,0,0,0,86,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,15.436,0,0,0,0,1.333,78.667,0,0,0.667,0,0,0.667,0,0,0,0,1.333,22.148,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1.333,0,0,0,0,0,4.667,0,0,0,0,0,0,0,0,0,0,0,0,0,4.082,2.027,1.333,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,6.897,0,0.68,20.408)
> g10 <-
c(0,0.694,24.476,1.439,0,49.6,0,0,0,0,0,0,66.667,0,0,20.69,0,0,0,0,0,0,0,0,3.846,0,4,8,0,4,0,0,0,0,0,0,6.667,0,0,0
,5,0,0,0,0,4.348,0,86.364,0,0,0,0,0,0,0,60,5,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,4.839,0
,0,0,0,0,0,0,0,0,0,0,0,0,0.794,0,1.449,0,0,0,0,0,0,0,0,0,0,0.68,0,0,74.15,5.442,0,0.68,0,0,0,0,0,0.68,0,0,0,0,0,0,0,1.163,0,
0,0.694,0.69,0,0,1.361,0,2.703,2.027,98.639,0,1.361,0,0.667,6.711,1.351,3.356,16.107,24.832,1.351,0.676,0,1.342,0,0,
0,0.709,2.069,0,0.667,8,22,0,1.333,0.667,0,36.667,0,0,0,0,0,1.333,19.333,0,0,0,0,0,0,0,0,0,95.333,0,0,0,0,0,0,0,100,
0,0.671,59.06,2.013,1.342,1.342,99.329,0,0,0.671,0,1.342,0.671,0,0,0,0,1.342,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.667,0,0
,0,0,0,0,0.667,0,0,4.667,4,0,0.667,0,0.667,0,0.676,0.685,2.273,0,0,0,1.333,0,0,0,0,0,2.239,0,0,3.333,0.667,0,2.667,6
,0,0.667,2.667,0,0,0,0,0,0,0,0,0,0,10.345,0,0.694,0,0,0,0,0,0,0.694,0,0,0.694,0,56.25,0,0,0,0,0.73)
> g11 <-
c(6.4,0.877,0,0,0.99,0,20.833,5.495,0,0,1.282,0,0,0,1.333,0,0,0,0,0,0,44.681,0,0,0,0,77.778,0,0,0,0,0,0,27.5,66.667,
```

```
0,0,0,0,56.818,0,0,0,0,0,73.171,0,0,0,62.5,2.5,0,0,0,0,0,0,0,0,0,77.778,0,0,0,0,0,67.647,0,0,3.846,0,91.667,0,0,0,0,
0,0,0,0,6.25,0,0,0,3.846)
> Y <- c(g0,g1,g2,g3,g4,g5,g6,g7,g8,g9,g10,g11)
>
>
>
>
> cor.test(Q, L,alternative = "two.sided", method = "spearman", exact=FALSE )

    Spearman's rank correlation rho

data:  Q and L
S = 6425330896, p-value = 0.7256
alternative hypothesis: true rho is not equal to 0
sample estimates:
        rho
0.006035743

> # ---- Confidence interval ----
> if(!"RVAideMemoire" %in% installed.packages()){install.packages("RVAideMemoire")}
> library(RVAideMemoire)
*** Package RVAideMemoire v 0.9-83-7 ***
> spearman.ci(Q,L)

    Spearman's rank correlation

data:  Q and L
1000 replicates

95 percent confidence interval:
 -0.02627823  0.03879387
sample estimates:
        rho
0.006035743

> cor.test(T, I,alternative = "two.sided", method = "spearman", exact=FALSE )

    Spearman's rank correlation rho

data:  T and I
S = 5040436481, p-value < 2.2e-16
alternative hypothesis: true rho is not equal to 0
sample estimates:
      rho
0.2202715

> # ---- Confidence interval ----
> if(!"RVAideMemoire" %in% installed.packages()){install.packages("RVAideMemoire")}
> library(RVAideMemoire)
> spearman.ci(T,I)

    Spearman's rank correlation

data:  T and I
1000 replicates

95 percent confidence interval:
 0.1867070 0.2489922
sample estimates:
      rho
0.2202715

> cor.test(T, V,alternative = "two.sided", method = "spearman", exact=FALSE )

    Spearman's rank correlation rho

data:  T and V
S = 4518732606, p-value < 2.2e-16
alternative hypothesis: true rho is not equal to 0
sample estimates:
      rho
0.3009763

> # ---- Confidence interval ----
> if(!"RVAideMemoire" %in% installed.packages()){install.packages("RVAideMemoire")}
> library(RVAideMemoire)
```

```
> spearman.ci(T,V)

    Spearman's rank correlation

data:  T and V
1000 replicates

95 percent confidence interval:
 0.2712841 0.3343107
sample estimates:
      rho
0.3009763

> cor.test(F, Y,alternative = "two.sided", method = "spearman", exact=FALSE )

    Spearman's rank correlation rho

data:  F and Y
S = 4128087606, p-value < 2.2e-16
alternative hypothesis: true rho is not equal to 0
sample estimates:
     rho
0.361407

> # ---- Confidence interval ----
> if(!"RVAideMemoire" %in% installed.packages()){install.packages("RVAideMemoire")}
> library(RVAideMemoire)
> spearman.ci(F,Y)

    Spearman's rank correlation

data:  F and Y
1000 replicates

95 percent confidence interval:
 0.3236928 0.3972008
sample estimates:
     rho
0.361407

>
>
> library(PResiduals)
> partial_Spearman(Q | L ~ CS)
                       est     stderr            p   lower CI   upper CI
partial Spearman -0.1974231 0.01579742 4.497743e-34 -0.2281793 -0.1662734
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
> partial_Spearman(T | I ~ CS)
                       est     stderr            p   lower CI  upper CI
partial Spearman 0.08557264 0.01778809 1.691646e-06 0.05061795 0.1203179
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
> partial_Spearman(T | V ~ CS)
                      est     stderr            p  lower CI  upper CI
partial Spearman 0.1460161 0.01759052 2.783753e-16 0.1113754 0.1803023
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
> partial_Spearman(T| V~ I)
                      est    stderr            p  lower CI  upper CI
partial Spearman 0.3219118 0.0160636 2.002199e-77 0.2900809 0.3530312
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
> partial_Spearman(T| I~ V)
                      est     stderr            p  lower CI  upper CI
partial Spearman 0.2289043 0.01674845 1.075356e-39 0.1958289 0.2614594
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
> partial_Spearman(V | I ~ CS)
                      est     stderr             p  lower CI  upper CI
partial Spearman 0.5804047 0.01452785 3.187806e-201 0.5512213 0.6081698
```

```
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
>
> partial_Spearman(F | Y ~ CS)
                     est     stderr            p lower CI  upper CI
partial Spearman 0.327812 0.01877844 7.208289e-59 0.290524 0.3641059
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
>
>
>
>
>
> cor.test(V, I,alternative = "two.sided", method = "spearman", exact=FALSE )

    Spearman's rank correlation rho

data:  V and I
S = 2485064632, p-value < 2.2e-16
alternative hypothesis: true rho is not equal to 0
sample estimates:
      rho
0.6155738

> # ---- Confidence interval ----
> if(!"RVAideMemoire" %in% installed.packages()){install.packages("RVAideMemoire")}
> library(RVAideMemoire)
> spearman.ci(V,I)

    Spearman's rank correlation

data:  V and I
1000 replicates

95 percent confidence interval:
 0.5891262 0.6407399
sample estimates:
      rho
0.6155738

>
> partial_Spearman(V| I ~ CS)
                     est     stderr             p  lower CI  upper CI
partial Spearman 0.5804047 0.01452785 3.187806e-201 0.5512213 0.6081698
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
>
> partial_Spearman(T | V ~ A)
                     est     stderr            p  lower CI upper CI
partial Spearman 0.2964541 0.01629872 1.394196e-65 0.2641874 0.328058
Fisher Transform: TRUE
Confidence Interval: 95%
Number of Observations: 3385
>
```