```
R version 4.3.1 (2023-06-16 ucrt) -- "Beagle Scouts"
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Platform: x86_64-w64-mingw32/x64 (64-bit)

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> rm(list = ls())
> x0 <- c(0,0,0,0,0,0,0,25,0,25,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10,10,13.333,16.667,0,0
,0,0,6.25,0,0,0,0,4.545,0,3.704,0,0,0,0,0,0,3.947,2.83,0,0,0.806,0,0,0,0,0,13.492,0,0,19.048,0.794,
0,3.15,46.457,0,0.787,12.598,24.219,0,1.55,0,0,19.685,0.787,0,0,0,0,12.598,0,0,0.787,0,0,0,0,0.78
7,0,1.575,78.74,0,0,14.961,48.031,3.937,1.575,20.472,14.173,11.024,0,44.882,0,7.087,1.575,3.937,0
.787,0,5.512,5.512,12.598,0,0,0,0,0,5.512,0,0,39.844,0.781,18.11,0,0,42.52,1.562,0.781,21.094,0,0
,0,31.061,0,7.519,0,8.333,10.606,26.515,46.97,5.303,3.788,14.394,7.752,1.515,31.818,0.758,0,29.54
5,16.667,72.727,44.697,0,5.303,5.303,17.424,0.758,0,1.515,9.091,0,0,1.515,0,1.515,1.504,0,0,0,0,0.7
58,0.781,0,0,0.763,0,0,0,0,0,1.527,0,6.015,3.008,6.767,0.752,4.464,1.724,0.84,0.84,0,6.757,5.333,
5.455,7.353,6.329,4.762,2.308,6.818,1.471,4.348,1.439,2.143,7.092,0,1.351,4.73,8.054,0.671,0,0,0.
671,1.342,2.013,7.383,1.333,0,27.333,0,0,0,0,0,58,0,0,20.667,0,2,34,0.667,1.333,0,3.356,2.685,10.
067,0,1.342,6.04,6.711,2.685,0.671,32.886,38.926,14.765,2.013,0.671,3.356,34.667,14.667,0,0,39.33
3,0,0,0,0,0,8,2,0,6.711,0,0,13.423,0.671,0,1.342,14.094,16.667,12,25.333,53.333,1.333,4.667,52.66
7,0,0,6,0,0,0,0,0,5.333,2,0,74.497,13.423,0,0,28.188,4,2,0.667,6.081,0)
> x1 <- c(0.676,6.757,0,0,2.703,0,2.685,0,23.49,0,0,2.013,0.671,0,60.403,0,0,0,4.667,0,39.333,0,2
,0,0,9.333,38,0,0,0,0,0,0,0,0.667,1.333,0,0.667,0,12,2.667,0.676,0,0.671,22.819,45.638,18.792,0.671
,14.094,20.805,0,2.667,4,0,0,22,10.667,1.333,0,8,6,70,0,0.667,38,12,0,0,4,0,0,5.333,1.333,0,6,0,5
4.667,0,0,4.667,6,0,0,0,0,0,2,4.667,0,62.667,2.667,0,0,0,0.667,32,0,0.667,2.685,0,6.667,0,0,3.333
,0,0,30,11.333,0,0,18.792,0,10.738,29.53,5.369,7.383,0,21.477,0,0,2,2.027,0,5.405,10.135,0,0.676,
22.973,35.811,0,5.442,30.822,9.589,0,4.828,0.694,1.37,13.014,10.417,1.887,1.587,0,1.361,4.11,14.3
84,8.904,19.178,4.795,18.493,17.808,2.74,16.438,26.712,1.379,0.69,11.724,21.379,0,9.655,13.793,1.
379,17.123,1.37,0,0,0,31.25,0,20.139,6.25,0,13.194,13.889,0,0,0.694,0.699,0,3.497,10.49,5.594,18.
881,8.392,18.182,14.685,2.098,22.222,4.167,0,11.724,46.207,4.828,50.345,0,0,31.034,0,0,14.685,0,0
,3.497,9.091,0,2.098,65.734,1.399,0.699,0.699,41.549,0,1.408,0.704,3.521,1.408,12.676,4.225,8.392
,2.098,25.352,1.408,0.704,0.714,11.268,32.624,4.965,0,6.383,19.149,17.73,9.929,4.286,48.936,7.801
,34.043,1.439,2.174,18.841,27.536,0,3.676,0,0.73,6.569,1.46,4.38,0,0.735,3.704,6.667,0,0,0.735,2.
206,1.471,15.556,8.148,31.852,0,3.704,10.37,26.667,4.444,4.444,8.088,2.206,22.222,22.222,5.224,63
.91,1.504,22.901,3.817,11.538,37.984,10.938,3.15,23.2,12.097,2.439,0,0,0,0,10.811,3.571,0,0,22.11
5,1.98,3.226,1.163,29.762,2.381,1.22,2.985,3.636,0,0,3.571,4.545)
> x2 <- c(0,0,0,0,0,25,0,0,0,0,0,0,0,0,0,0,42.857,10.714,0,0,0,0,0,0,0,0,0,0,0,0,0,33.333,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,60,0,0,0,0,0,0,0,0,9.091,0,16.667,0,0,0,0,0,18.182,0,0,0,6.897,2.632,0,0,0
,3.488,1.02,0,0,0,0,0,0,0,0,0,26.316,0,0,24.348,1.724,0,0.855,46.552,0,0,14.655,19.828,0,3.448,0,0,
18.103,0,0,0,0,0,0,8.475,0,0,0.847,0,0,0,0,0,0,1.613,65.289,0,0,13.333,44.167,9.167,1.653,19.835,18
.182,13.223,0,48.76,0,15.702,0.826,0,0.826,0,8.197,3.279,14.754,0,0,0,0.813,0,0.813,0,0,48.78,0,1
5.447,0.813,0.813,48.78,2.439,0,27.642,0,0,0,30.709,0,12.598,0,10.156,12.5,23.438,50.781,5.469,4.
688,10.078,15.625,3.101,28.682,0,0,26.357,20.155,74.419,48.062,0,6.977,2.326,15.504,0.775,0,1.55,
9.302,0,0,0.769,0,0,0,0.769,1.538,0,0,1.538,0.781,0.775,0.8,0,0,0,0,0,1.653,2.362,0,8.397,1.527,4.8
,2.439,0.847,3.54,1.818,6,3.75,9.231,0.84,8.475,0,9.259,8.197,3.077,0.813,9.6,2.941,4.348,3.623,0
,0.68,2.721,7.483,2.721,0,0.685,2.027,2.759,1.379,9.589,0.676,0,36.486,0,0,0,0,0,0.671,60,0,1.333,1
4.765,0,2.667,30.872,1.342,1.333,0.667,4.667,0,7.333,2.667,0.667,6,8.667,2.667,3.356,27.517,37.58
4,16.667,0,3.333,6.667,33.333,15.333,0,0,38,0,0,0.667,0,0,7.333,5.333,0,6.667,0,0,10.667,1.333,0,
0,14.765,14.765,8.054,22.148,48.993,1.342,2.685,58.389,0.671)
> x3 <- c(0,7.432,0.671,0,0,0,0,9.333,3.333,0,74.667,10.667,0,0,31.333,2.667,1.333,0,9.396,0,0,10
.811,0.671,0,4.698,0,3.333,0,22.819,0,0,1.342,1.342,0,59.06,0,0,0,0,6,0,36.667,0,1.333,0,0.667,8,38
.667,0,0,0,0,0,0,0,0,0,0,0,0.667,0,11.333,3.333,0.667,0,0.671,28.859,37.584,16.107,0,16.107,27.517,0,
1.342,3.356,0,0,28.859,7.383,0.671,0,4.027,7.333,66,0,0.667,38,13.333,0,0,6.711,0,0,7.383,3.356,0
,10.067,0,56.757,0,0,3.356,4.698,0.667,0,0,0,0,2.685,6.04,0,57.718,4.698,0,0,0,1.333,24.667,0,1.3
33,0,0,12,0,1.333,3.333,0,0,30.667,15.333,0,0,16,0,15.333,26.667,4,4,0,24,0,0,2,2.013,0.671,6.711
,16.779,0,0.671,22.819,36.913,1.342,4.73,34.459,7.432,0,2.74,1.361,0,2.041,11.565,3.077,1.538,0.6
8,1.361,3.401,21.769,10.204,14.966,6.803,14.286,23.129,2.041,18.367,13.605,2.027,0.68,10.204,20.4
08,0,17.687,8.163,1.379,14.384,0,0,0,0,35.374,0,15.646,4.762,1.361,8.844,13.014,0,0,0,0.685,0.685
```

,3.448,6.164,8.904,20.548,8.904,21.918,21.233,2.055,26.027,7.534,0.685,8.219,45.89,2.055,55.479,0
.685,0.69,31.034,0,0,6.207,0,0.694,2.778,11.111,0,1.389,72.028,1.399,0.699,0,47.222,0,6.25,0,2.77
8,3.472,15.385,2.797,10.49,2.797,19.58,0.699,0.699,2.817,13.38,33.333,2.817,0,7.042,20.567,15.714
,16.312,7.092,55.714,7.194,34.559,1.471,1.471,18.382,30.147,0.735,0.735,1.471,0,8.148,0.746,1.493
,0.746,0,2.308,8.333,0,0,1.515,0.758,0.758,12.879,9.091,29.545,0,3.759,9.023,23.308,4.478,4.478,3
.731,2.239,18.797,28.03,0,70.229,1.538,26.923,4.615,8.462,32.283,7.087,0,20.968,16.529,5.983,1.70
9)
> x4 <- c(0,0,0.901,7.273,4.63,0,0.943,19.608,4.167,6.522,0,16.867,1.299,0,0,1.961,0,0,0,5.556,13
.333,0,0,0,0,10,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,25,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,66.667,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10,0,18.182,0,0,5.556,0,3.846,
6.897,9.091,5,2.273,4.082,3.774,1.695,2.778,4.301,0.935,0,0.885,0,0,0,0,0,17.699,0,0,23.894,1.77,
0,5.31,42.478,0,1.754,13.043,21.739,0,3.478,0,0,13.158,0,0,0,0,0,10.345,0,0.862,0.855,0,0,0,0,0,0
,0.826,61.667,0,0,12.5,39.167,5.785,0.82,11.475,9.836,9.016,0,50.82,0,10.656,0,0,2.459,0,4.918,9.
016,14.754,0,0,0,0.82,0,4.098,0,0,53.279,0,13.115,0,1.695,1.639,50,0,0,23.577,0,0,0,43.548,0,8.06
5,0,10.484,8.871,22.581,47.581,4.839,4.839,12.903,11.667,1.613,24.194,0,0,30.645,16.129,70.968,40
.323,0,3.226,3.226,11.29,0,0,2.419,10.484,0.8,0,0,0,0,3.101,0,0,0,3.2,0,0,0,0.775,3.2,0.787,0,0.8
4,0.787,0,0,8.527,1.55,5.426,0.775,2,4.902,1.961,8.197,6.383,7.031,9.63,0,2.206,2.797,2.055,4.082
,0.676,1.342,1.342,8.725,0,0.667,0,2,2.013,2.685,8.054,0.671,0,28,0,0,1.333,0.667,0,56,0,0,17.333
,0,1.333,35.333,0.667,1.333,0.667,2.667,0.667,6,0,1.333,6.667,8.667,6,1.333)
> x5 <- c(27.333,43.333,15.333,1.333,4,7.333,40,12,0,0,28.667,0,0,1.333,0,0.667,4.698,0.676,0,7.4
32,0,0.671,12.081,0.671,0,0,13.514,18.919,5.405,27.703,50.676,2.027,1.351,48.993,0,0,10,0,0,0,0,0,0
,7.333,0.667,0,67.333,7.333,0,0,26.846,3.356,1.342,0,5.369,0,0.671,6.711,1.333,0,3.333,0,0,0,18.1
21,0,0,2.013,4.027,0,66.443,0,0,0,4.027,0,33.333,0.667,1.333,0,0.671,12.081,32.886,0,0,0,0,0,0,0.
671,0.676,0,0,0,12.925,4.082,0.68,0,0,26.174,43.624,15.436,0,12.081,19.463,0,0,0.671,0,0,16.667,6
,0.667,0,6,3.333,65.333,0,0,34.667,14,0,0,5.333,0,0,8,0.667,0,5.333,0,53.333,0.667,0,5.333,4.667,
0.667,0,0,0,0,0,3.356,3.356,0,54.362,6.711,0.671,0,0,3.356,24.832,0,0,3.378,0,9.459,0,0.676,1.342
,0,0,34.667,14.667,0,0,20,0,14.094,34.899,4.027,2.013,0,15.436,0,0,0.671,2.013,0,4.667,12.667,0,0
.667,26,36,0,5.369,29.53,7.383,0,3.378,1.361,0,0.725,10.135,4.959,3.008,1.504,0.676,0,3.378,14.86
5,8.108,13.514,5.405,13.514,22.148,4.698,15.541,22.297,2.027,0.676,12.838,18.243,0,14.865,13.514,
0.676,16.216,0.68,0,0,0,33.333,0,16.327,2.721,0.68,6.122,12.245,0,0.68,0,2.721,0.68,2.055,12.925,
3.401,20.408,9.524,19.728,21.088,0.68,23.973,6.849,0,8.966,50.345,2.759,43.448,1.379,0,32.414,0,0
,13.103,0,0,4.895,6.294,0.699,2.817,61.972,1.408,0.704,0.699,43.056,0,4.861,0,2.083,0,14.685,3.49
7,6.294,4.196,31.469,0,1.399,2.113,8.451,39.86,4.167,0,8.966,28.472,13.889,10.417,5.556,53.472,6.
25,37.762,1.399,1.408,15.603,25.532,2.837,0.709,0.704,0,4.255)
> x6 <- c(0,4.965,0,0,2.837,5.674,0.714,0,0.709,0.704,0.704,15.493,4.895,31.469,0,4.196,4.895,18.
182,2.797,7.746,3.571,2.878,20.144,31.655,0,71.014,3.65,22.628,2.963,14.394,29.231,10.769,1.538,2
5.385,17.323,7.438,2.479,0,0,0.84,7.692,10.435,0,0,24.074,3.846,6.061,2.083,30.435,2.273,1.19,0,9
.302,0,0,6.25,71.429,0,20,0,0,100,0,0,0,0,0,0,0,0,0,28.571,0,0,0,0,0,0,0,2,0,0,0,0,0,0,0,0,1.695,
28.814,3.39,6.78,50.847,1.695,0,30.508,0,0,0,1.667,0,0,10.169,0,1.639,1.587,4.688,4.615,1.449,0,9
5.714,58.571,0,0,1.515,3.03,0,0,33.333,0,0,0,1.562,4.688,0,1.562,0,16.667,1.786,0,5.357,0,0,0,4.4
44,2.273,2.041,0,0,2.381,2.381,0,0,0,1.515,3.03,0,38.462,7.576,0,1.695,1.562,0,0,6.25,3.175,6.349
,3.226,12.281,0,1.754,0,12.5,0,0,3.704,13.208,2.128,0,6,1.961,0,5.172,1.754,0,0,5,3.175,3.175,0,5
.333,2.703,0,2.899,8.571,4.225,0,0,4.545,1.124,0,1.124,1.124,2.247,0,0,1.064,0.99,2.83,4.425,0,0,
0.781,11.679,0,19.863,0,13.014,0,0,0,2.041,0,0,26.531,10.884,0,5.442,21.088,8.844,0,1.361,12.925,
18.367,0,1.361,11.565,27.211,0,0.68,72.789,0,0,0,60.135,0.676,7.432,4.054,32.432,0,0,28.188,69.12
8,2.667,2,14,0.667,0.667,24,23.333,0,0.667,0.667,0,0,0,0,2.667,8,0,0,25.333,0,0,0.667,9.333,0,0,4
4,0,0,0,0,10,0,3.333,0,0,4.73,0,1.351,29.054,0,0,2.013,0.676,0.676,0,0,0,0,0,0,2.667,3.333,7.333,
0,70.667,2,0.667)
> x7 <- c(0,0.667,33.557,0,4.027,0,0,2,38,0,0,0,0.667,0,0,27.333,1.333,0,0,3.333,4,0,0,1.333,0.66
7,0,0,9.333,43.333,7.333,0.667,1.333,12.667,4.667,2.667,10.667,0.671,5.369,7.383,4.667,0,2.667,3.
333,30,7.333,0,0.68,2.041,1.786,31.304,1.471,2.703,1.342,0.676,2.703,1.342,0.671,4.698,0,25.676,0
.671,0,0.671,13.605,5.405,0,0,0,93.243,11.409,40.268,6.04,1.342,2.013,0,48.322,4.027,8.054,0,0,8.
667,0.667,35.333,0,22,2,0,0,0.667,23.333,0,60.667,0,1.333,5.333,0.667,0,8.667,0,1.333,0,0,0,0,12,
0,11.409,15.646,0,12.925,0,0.68,0.676,53.378,0,0,3.378,60.811,0,0.68,4.762,25.85,1.361,2.041,17.0
07,9.524,0,0,0,13.514,0,0,2.055,4.11,7.534,2.027,5.405,38.514,0,1.361,19.048,30.612,29.932,0,41.8
92,0,7.432,20.27,10.811,42.568,0,1.351,0,0,2.055,49.315,0.685,1.37,1.37,73.288,29.452,0,12.414,3.
448,0.69,26.027,0,6.164,0,86.301,0,2.721,13.605,0,0,0,5.479,1.37,0,34.247,0,0.685,0,3.425,0.685,0
,26.712,0,0,0.704,0,5.479,0,0,0,13.699,0,0,91.096,0,0,31.034,0,1.379,0,4.828,0,0,2.759,41.379,0,0
,28.966,25.694,0,0,0.699,52.448,4.895,0,0.699,55.944,0,0,0.699,0,0,2.098,13.287,40.559,68.531,0,3
6.364,28.169,0,39.86,9.79,0,0,0,2.797,2.098,13.986,4.895,2.113,0,0,10.924,0,0.926,1.887,0,0,0,13.
402,9.677,47.674,21.687,0,0,0,0,0,12.281,0,3.509,0,1.852,0,0,2,0,0,20.513,0,0,0,0,2.381,14.286,0,
0,0,0,0,0,0,0,0,0,9.091,0,0,5,0,0,0,0,6.061)
> x8 <- c(7.692,0,0,13.333,1.587,0,1.471,0,0,0,0,0,2.899,28.986,2.899,2.899,61.765,0,0,27.941,0,0
,0,4.412,0,0,4.286,0,0,0,1.408,8.333,1.351,0,93.333,75.325,1.282,0,2.597,3.896,2.597,0,29.333,0,0
,0,1.351,0,1.37,2.74,1.37,12.5,2.778,2.778,3.448,0,2.564,2,1.887,0,1.429,1.429,1.408,0,0,0,5.172,
0,0,43.75,1.562,0,0,3.125,1.37,0,4.11,4.054,7.692,5.195,10.256,0,5.128,2.632,0,1.471,3.846,2.381,
0,1.852,1.852,0,1.493,6.25,1.538,1.587,0,3.125,1.471,0,3.896,4.706,2.353,2.326,2.326,1.136,5.495,
4.211,0,0,1.031,0,0.926,3.604,2.586,5.983,4.237,0,0.714,0,14.384,0,19.728,0,14.286,0,1.361,0,0,0,
0,31.293,12.245,0,5.442,20.408,6.122,0,0,15.646,22.449,0,1.361,10.884,28.571,0,0,68.966,0,0,0,59.
31,1.379,7.586,4.828,29.932,0,0.685,20.548,69.863,5.479,4.795,10.959,0,2.027,29.53,24.832,0,0.671

```
,3.356,0,0,0,0,2.685,4.027,0.671,2.013,24.832,0,0,0.671,10.067,0,0,35.57,0,0,0.671,0,5.369,0,2.02
7,0,0,8.784,0,1.351,29.73,0,0,2.027,0,0,0,0,0,0,0,0,4.698,2.013,11.409,0,76.667,2.667,1.333,0,0,3
3.557,0,0.671,0,1.342,2.685,34.228,0,0,0.667,0.667,0,0,20.667,0.667,0,0,2,0.667,0,0,0,2.667,0,0,8
,45.333,6,0,1.333,15.333,4,1.333,12.667,1.342,3.356,6.04,5.479,0.69,3.448,4.861,25.694,9.028,0,1.
429,4.286,2.804,21.127,1.408,4.167,0,0.671,6.04,0.671,0.671,4.698,0,24,3.356,1.342,0,12,8.725,0.6
71,0,0,94.631,9.396,45.946,4.027,0.671,2.013,0.676,51.351,4.762,10.811,0.676,0,17.45,0,39.597)
> x9 <- c(0,14.865,2.703,0,0,0,27.517,0,54.362,0,2.013,7.383,0,0.671,10.067,0,0,0,0,0,0,10,0,9.45
9,9.459,0,8.108,0,0.671,0,51.007,0,0,6.04,57.047,0,0.676,4.73,31.544,0,1.351,13.423,6.711,0,0,0,1
4.094,0,0,2.685,4.027,2.685,1.351,2.703,38.514,0,1.361,19.048,34.694,36.054,0,40.816,0,10.204,20.
408,8.844,34.694,0,2.721,0.685,0.685,0.685,46.575,0.685,2.055,0.69,67.586,27.083,0,11.268,0.704,4
.225,28.169,0,2.797,0,85.517,0,4.11,14.384,0,0.694,0,5.556,0.694,0,34.028,0,0,0,6.25,0,0,27.778,0
,0,1.389,0,1.389,0,0,0,13.889,0,0,90.278,0,0.694,36.111,0,0.694,0,6.944,0,0,3.448,33.793,0,0,26.3
89,20.139,0,0,1.418,59.574,3.546,0,0.709,57.447,0,0,0,0,0.709,0.709,10.638,43.972,68.085,0,33.333
,35,0,46.429,9.286,0,0,0,2.143,1.439,12.95,2.899,2.19,0,0,2.02,0,1.02,0,0,0,1.087,11.957,4.762,53
.165,32.051,7.143,1.389,1.429,0,0,1.613,14.754,0,0,0,3.509,3.571,0,0,0,0,21.622,0,0,2.5,0,18.919,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,7.692,7.143,0,11.765,10,0,0,0,10.417,0,0,1.639,
0,1.587,0,0,0,5.97,31.343,1.493,5.97,76.119,0,0,47.761,0,1.493,0,0,0,0,0,0,0,0,0,36.232,0,0,98.55
1,79.71,0,1.429,0,15.714,0,0,36.765,0,0,0,0,1.429,1.408,1.408,1.493,4.545,1.562,0,3.922,3.922,0,0
,0,0,25,2.941,0,0,0,3.509,4.255,0,0,2.564,4.545,1.786,3.448)
> x10 <- c(0,3.077,0,0,5.455,3.333,4.286,1.429,1.408,7.042,1.389,0,3.191,3.191,1.031,3.061,7.292,
2.02,4.04,1.961,4.808,0,0.87,3.053,0,0,0,14,0,26.667,0,17.333,0,0,0,1.333,0,0,36.667,8.725,0,2.68
5,19.463,10.067,0,0,10,24,0,2,12.667,36,0,0,73.826,0,0,0,72.297,1.342,2.685,2.685,36.913,0,0,21.6
22,79.054,3.378,2.027,7.383,0,0.667,32,30.201,0,0,2,0,0,0,0,0.667,5.333,0,0.667,18,0,0,0,4,0,0,37
.333,0,0,0,0,0.667,0,2.667,0,0,12.752,0,1.342,39.597,0,0,2.667,0,0,0,0,0,0,0,0,3.333,0,8,0,84,0,1
.333,0,0,39.597,0,1.342,0,1.342,0,29.333,0,0,0,0,0,0,22.667,2,0,0,2,1.333,0,0,0,2.667,0,0,14,54.6
67,2,0,2,10,0.667,2.667,12,0,0,8,4.667,1.333,0.667,4.667,26,10,0,0,6.04,0,0,13.158,0,0,19.333,2,1
.333,0,0.671,4.027,0.671,1.342,4.027,0,38,2.667,0,0,12.162,6.757,0,0,0,95.946,11.409,38,0,0.667,0
.667,0,42,2.667,2.667,0,0,18.667,0,38.667,0,10.667,1.333,0,0,0.667,35.333,0,58,0,2,4.667,0,1.333,
2.667,0,0.667,0,0,0,0,14,0,10.667,17.333,0,2.667,0,1.333,0,46,0,0,2,56,0,1.333,9.333,28.667,0.671
,0,11.409,3.356,0,0,0.671,15.436,0,0,0,0,0,4.082,3.401,0,0.68,44.218,0,3.401,16.327,31.293,37.415
,0,36.735,0,10.959,17.808,15.541,35.135,0,0.676,0,0,0.68,55.782,1.361,0.68,0.68,71.429,29.252,0,1
6.327,0.676,2.027,29.054,0,2.703,0,91.946)
> x11 <- c(0,0.671,18.792,0,0,0,3.356,0.671,0,34.899,0,0,0,2.685,0,0,22.819,0,0,0,0,3.356,0,0,0,2
0.134,0,0,97.987,0,0,40.94,0,0,0,6.081,0,0,2.027,39.865,0,0,30.822,26.712,0,0.69,0,61.379,2.759,0
,1.379,57.931,0,0,0.69,0,0,0.69,11.724,38.621,74.483,0,32.414,29.655,0,37.241,6.207,0.69,0,0,6.20
7,1.379,11.034,1.379,0,0,0,21.739,0,1.493,1.695,1.724,0,0,0,0,0,0,49.02,8,0,0,0,0,0,0,0,0,0,0,0,0
,36.364,0,0,0,0,0,0,7.407,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,4.167,0,0,0,0,2.439,0,0,0,0,0,0,0,0,1.37,0,0.962,0,0.781,0.758,0,23.188,2.143,8.451,5.59
4,48.951,4.196,20.833,0.69,19.31,13.014,0,0.685,2.055,0.685,0,50,0.685,0.685,0,60.274,7.483,0,0,0
,0,0,2.703,0.671,0,0.667,0.667,0,0,0.667,0,0.667,0,13.333,29.333,0,6.667,59.333,0,0,18,0,0,2.667,
6,5.333,1.333,28.667,13.333,0,0,43.333,2.667,0,0,6.667,35.333,0.667,1.333,74.667,0,2.667,0,1.333,
3.333,2,21.333,0.667,0,28.667,1.333,9.396,0.671,0,12.081,0.671,0.671,78,8,0,0,2.667,0.667,0,0,14.
667,0,0,0,3.333,20,0,70.667,16,0,0,4,24,38.667,0,32,20,0,0,22.667,0,0,0,0,0.667,24,0.667,0,0,0,0.
667,66.667,27.333,2,0,15.333,0,0,0,0,0)
> x12 <- c(32,0.667,2,6,2,0,16.667,1.333,0,37.333,0,1.333,0,4,0,0,41.333,4.667,0,0,0,28,0,0,3.333
,0,0,0,11.333,0,0,0,1.333,6,0,0,29.333,5.333,6,0,7.333,23.333,6,7.333,14.667,8,8.667,12,12.667,2,
28.667,6,41.333,2.667,0.667,0,15.333,0,0,5.594,0.68,0.667,0,0,0,14.667,5.333,0,1.333,14.667,2.667
,31.333,2,0.667,37.333,19.333,21.333,28.667,0,5.333,8.667,76.667,24,9.333,5.333,0,4.667,2.667,26,
0,2.667,4.667,0,0,4.698,2.013,0,4.027,0,4.698,27.848,0,0.667,0,0,2.013,0,0.671,6.711,7.333,19.333
,0,4.667,28.667,0.667,6,21.333,2.667,0,0.667,4.667,0,0,36.667,0,0,0,17.333,10,0,2.667,20,2,0,0.66
7,8.108,6.04,2.013,6.04,0,2.817,6.757,8.108,10.135,18.919,19.595,0,0,17.45,18.667,10,3.333,20.667
,0.667,1.333,2.667,3.333,14.667,0,0,5.333,0,21.333,20.667,0,55.034,0,0,5.405,4.054,0,4.762,7.483,
41.497,10.884,6.803,0.68,10.204,23.81,21.088,0,19.728,0.676,20.946,0,1.361,0.676,12.838,49.324,0.
676,4.73,2.703,0.676,2.703,33.784,19.595,1.351,2.027,0.676,22.973,0,0.676,0,1.351,0,0.676,0,13.51
4,0,0.676,0,0,4.73,22.297,0,0,6.757,0.676,0,0,2.703,0,0,4.73,0,0,0.68,34.247,0,0,9.589,15.068,0,0
,12.329,15.753,0.685,0,0.685,30.137,0,0,0,2.74,0,0,2.055,32.639,18.182,4.895,5.594,8.451,0.709,5.
674,15.108,1.493,3.125,22.222,12,7.2,4,19.355,0,8.197,25,6.306,0,2,2.128,1.087,0,2.439,0,4.615,5.
769,1.961,0,4.255,28.846,7.547,0,3.704,0,0,0,0,0,0,4.255,4.444,0,0,0,0)
> x <- c(x0,x1,x2,x3,x4,x5,x6,x7,x8,x9,x10,x11,x12)
> y0 <- c(0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,33.333,0,0,0,0,0,0,0,11.111,0,11.111,0,0,20,0,0,0
,8.333,0,6.667,6.25,6.25,6.25,0,14.286,0,11.538,7.407,6.061,7.692,0,1.923,8.197,7.895,4.717,3.419
,0.813,0,28,0,11.905,3.968,0,8.73,0,0,1.587,0,4.724,2.362,0,0,1.575,0.787,0.781,0,0,0,1.55,0,0,0,
0,0,0,8.661,1.575,0,2.362,0,0,0,0,1.575,0,0,0,0,0,11.024,3.937,5.512,0.787,0.787,13.386,4.724,0,1
.575,0,0,0,0,0,0,18.11,3.15,0,0,0,0,32.283,3.15,3.15,0.787,0,2.344,29.688,1.575,0,1.575,2.362,0,0
,0,0,3.125,0,2.273,0,0,5.303,9.091,5.303,0.758,2.273,9.848,7.576,0.758,3.101,3.788,22.727,1.515,0
,2.273,8.333,0,0,7.576,0.758,21.97,3.03,0,0,0,0,3.03,0,0,32.576,6.818,11.278,0,0.758,0,20.455,27.
344,0,2.273,0.763,15.625,0,0.746,59.091,1.695,6.87,0.752,13.534,5.263,10.526,11.278,1.786,6.034,5
.882,4.202,12,8.108,8,16.364,13.235,11.392,11.111,35.385,6.061,14.706,15.942,7.914,9.286,31.915,2
1.233,0.676,8.108,4.027,0,0,0,5.369,0.671,0.671,2.685,0,0,0.667,7.143,0,18,6,2,0,0.667,1.333,10,0
,17.333,0,0,0.667,1.333,0,9.396,0.671,7.383,0.671,0,1.342,5.369,0,6.711,2.013,2.013,0.671,0.671,2
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.013,3.333,0,0,0,0.667,0,14.667,34,0,0,0.667,2,0,0,84.564,0,58.389,0,0,0,0.671,0,0,10,1.333,0,0,0
,0.667,2,0,87.333,0,0.667,0,0,3.333,6.667,0,0,1.342,0,0,0,28,0.667,1.333,0.676,6.757)
> y1 <- c(2.027,0,7.383,4.027,4.054,4.027,0.671,0,1.342,0,0,0.671,55.705,0,2.685,1.342,0,2,2,1.33
3,2.667,2,4,0,9.333,0.667,19.333,26,0.667,0,0,0,0,2,0,8,2.667,0,2.667,0,1.351,0,14.765,2.685,2.01
3,12.752,20.134,16.107,7.383,0,12,2,96,0,0,0.667,0,0,2,9.333,2.667,0,4.667,10,0,0,0,0.667,0.667,2
.667,5.333,14,0,14,6,0,3.333,3.333,0,2,12.667,0.667,0,5.333,0.667,0,2.667,0,0.667,6,0,0.667,1.333
,1.333,0.667,26,12,0,3.333,0,1.333,10.667,0,0,1.333,1.333,0,0.667,0,4.027,2.685,0,0,34.899,0,0,0.
671,0,16.779,6.667,2.703,3.378,12.838,5.405,1.351,25,1.351,10.135,82.432,2.721,0.685,9.589,0,2.06
9,0,5.479,6.164,2.083,2.83,0.794,0,5.442,8.904,1.37,3.425,27.397,3.425,2.74,5.479,3.425,11.644,5.
479,4.138,0,0.69,0.69,0.69,2.759,4.138,6.897,10.959,76.027,0.69,0,0,1.389,0,0.694,0,20.139,0,0.69
4,0,9.091,0,4.196,6.294,9.091,7.692,12.587,0,0.699,4.895,0,3.497,4.861,5.556,2.069,6.897,3.448,2.
759,0.69,3.448,0,0,0,0,0,0.699,0.699,0,1.399,0,0,0.699,1.399,2.797,0,11.972,0,3.521,3.521,8.451,2
.817,1.408,0,0,2.098,2.113,3.521,0,4.286,0.704,2.128,51.064,0,3.546,5.674,2.837,5.674,4.286,14.18
4,2.128,3.546,1.439,9.42,0,7.971,14.599,0.735,22.628,0,0,35.766,0,0,5.882,0.741,11.111,0,0,8.824,
0,0.735,4.444,2.222,0,0,0,3.704,2.222,6.667,5.926,1.471,5.147,1.481,0.741,0.746,0.752,0,3.817,4.5
8,1.538,0.775,0,8.661,0,3.226,11.382,30.252,1.681,0,38.462,0.901,3.571,2.778,0.943,0,1.98,6.452,3
.488,17.857,39.286,0,10.448,3.636,0,6.061,0,13.636)
> y2 <- c(0,14.286,7.692,7.692,8.333,0,12.5,0,0,12.5,0,0,0,12.5,12.5,0,0,3.571,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,25,25,0,0,0,0,0,0,0,0,0,0,0,0,9.091,0,0,9.091,0,0,66.667,0,20,66.667,0,18
.182,15.385,4.348,3.704,3.448,10.526,11.111,5.769,1.37,9.302,6.122,3.67,0,0.877,28.07,0,14.035,2.
632,0,2.632,0.877,0,2.609,0,7.692,2.564,0.862,0,1.724,0,0,0,0,0,0.862,0,0,0,0,0,0.855,9.322,0.847
,0,1.695,0,0,0,0,0.82,0,0,0,2.479,0,10,1.667,7.5,1.653,0,9.917,3.306,0,0.826,0,1.653,0,0,0,0,18.0
33,3.279,0,0,0,0,32.52,1.626,1.626,0,3.252,0.813,31.707,2.439,0,2.439,0,0,0,0,0,0.806,0,4.724,0.7
87,0,6.25,16.406,1.562,3.906,3.906,10.156,16.406,1.55,6.25,5.426,20.93,0,0,0.775,7.752,0,0,3.101,
0,17.829,0.775,0,0,1.55,1.55,2.326,1.55,0,33.333,8.527,11.538,0,0,0,16.154,17.969,0,0.8,0,23.2,0,
0.769,62.791,4.132,6.299,0,15.267,6.107,8.8,5.691,5.932,8.85,7.273,9,11.25,10.769,2.521,3.39,54.3
1,2.778,6.557,12.308,21.951,17.6,6.618,13.768,38.406,27.66,0.68,6.122,8.163,0,0,0,6.081,0.69,2.06
9,1.37,0.676,0.676,0,7.692,0,12.838,4.73,0.671,0,0.667,2,10.067,0.671,6,0,0.671,0,0,0,12.667,0.66
7,6,0.667,1.333,0.667,8,0,9.396,2.013,2.667,0.667,0,0.667,1.333,0,0,0,2,0.667,16,30,0,0,0,0,0,0,8
7.333,0,60,0.667,0,0,0,0.671,0,14.094,2.013,0,0,0,0.671)
> y3 <- c(2.013,0.676,83.893,0,0,0,0,3.333,4.667,0,0,2,0,0,0,26,0.667,1.333,0.671,16.107,1.342,0,
10.067,2,5.369,4.698,3.333,0,1.342,0,0,0.671,55.705,0,5.369,1.342,0,2,1.333,2,3.333,1.333,4.667,0
,8.667,0,20.667,24.667,0,1.333,0,0.667,0,3.333,0,4.667,0,2.667,0.667,0.667,1.333,0.667,14.094,2.6
85,1.342,16.107,20.805,8.054,10.738,0,14.765,1.342,96.644,0.671,0.671,0,0,0,0.671,8.667,3.333,0,5
.333,6,0,0,0,0,2.013,4.698,2.013,14.765,0,10.738,2.013,0,1.351,3.356,0,2.685,8,1.333,0,4,0.671,0,
2.013,0,0,9.396,0,0.667,0,2,0.667,21.333,14,0.667,1.333,0,0,8,0,0,2.667,2.667,1.333,0.667,0,1.333
,1.333,0,0,36,0,0.667,0,0,16,8,0.671,2.685,12.752,4.698,1.342,22.148,2.013,6.711,84.564,8.108,0,7
.432,0,1.37,0,0.68,5.442,4.762,3.077,1.538,1.361,0.68,4.762,1.361,2.041,27.891,1.361,3.401,7.483,
1.361,6.803,4.762,3.378,0.68,1.361,1.361,0.68,0.68,4.762,6.207,10.959,81.507,0.685,1.361,0,0,0,0,
0,17.007,0,0,0,10.274,0,4.795,5.479,8.276,10.274,12.329,1.37,0,3.425,0.685,0,5.479,1.37,0.685,10.
274,3.425,4.795,0,3.425,0,0.69,0,0,6.207,0.694,0,0,1.389,2.083,0,2.098,2.797,3.497,0,11.806,0,2.0
83,2.083,4.861,0.694,1.399,0,0.699,2.098,2.098,2.797,0,4.225,0,2.128,53.521,0,2.817,6.383,4.286,1
2.057,6.383,12.143,0.719,4.412,0.735,12.5,1.471,0.735,15.441,1.471,14.706,1.471,0.741,39.552,0.74
6,0,7.634,1.538,10.606,0,0,7.576,0,2.273,7.576,3.03,0,0,0,2.256,0.752,14.925,5.97,4.478,2.985,3.0
08,0,1.527,0.763,0,3.077,4.615,1.538,2.362,0,7.143,0,1.653,17.094,32.479)
> y4 <- c(3.448,1.739,47.748,0.909,3.704,0.917,2.83,0.98,4.167,5.435,1.124,14.458,28.571,1.316,13
.043,5.882,0,10.714,0,5.556,0,0,0,0,0,0,16.667,0,0,50,0,0,0,0,0,0,10,0,0,100,66.667,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,25,0,0,0,0,0,0,0,0,33.333,0,0,0,0,12.5,0,7.143,0,37.5,
18.75,0,23.529,5.882,0,12.5,0,62.5,0,10,45.455,0,7.692,7.143,16.667,30.435,19.231,10.345,12.121,2
.5,18.182,8.163,13.208,3.39,5.556,5.376,2.804,0,0,29.204,0,11.504,1.77,0,7.08,0,0,2.655,0,1.77,3.
54,0,0,7.018,2.609,0,0,0,0,0.87,0,0,0,0,0,0.87,7.759,0,0,1.709,0,0,0.84,0,0.833,0,0,0,2.5,0,5,4.1
67,4.959,0.82,0.82,13.934,5.738,0,0.82,0,0.82,0,0,0.82,0,26.23,4.098,0,0,0,0,40.984,0.82,2.459,0.
82,0,0,40.984,3.279,0,3.39,4.098,0,1.639,0,0,0,2.419,0,3.226,0,0,4.839,14.516,3.226,2.419,4.032,8
.871,12.097,0,8.333,8.065,19.355,1.613,0,3.226,12.097,0,0,6.452,0,20.968,1.613,0,0,0.806,0,2.4,3.
937,0,27.559,8.661,9.302,0,0.775,0,17.6,20.93,0,4.651,0.775,20.8,0,0,71.429,2.362,4.615,0.775,10.
078,9.302,9.302,10.853,3,8.824,4.902,11.475,8.511,21.875,7.407,17.037,15.441,11.189,8.904,39.456,
26.351,1.342,4.698,10.738,0.667,0,0,8.667,0,2.685,0.671,0,0,0.667,11.429,0,14.667,3.333,0,0,2.055
,0.667,6.667,1.333,10.667,0,0,0.667,0.667,0,11.333,0.667,5.333,0.667,2.667,0,4.667,0)
> y5 <- c(7.333,2.667,2,0.667,0,2,2,0,0,0,0,0.667,16,36.667,0,0,0,0,0,0,87.248,0.671,63.758,0,0,0
,0,1.351,0,12.162,4.054,0,0,0,0.667,2,0,75.333,0,0.667,0,0,5.333,6.667,0,0,6.667,0,0,0,26.174,0,2
.013,0,14.094,0.671,0,10.667,2,8,3.333,1.333,0.671,0.671,0,0,0.671,45.638,0,2.685,0,0,2.013,0.671
,1.333,3.333,1.333,6,0,6.711,0,24.161,26.846,0,0,0,0,0.671,2.685,0,6.757,1.361,0,2.041,0.68,0.68,
0,15.436,0.671,3.356,16.107,18.792,11.409,10.067,0,14.765,0.671,93.289,0,0,0.667,0,0,1.333,8,4,0,
7.333,5.333,0,0,0,0,0,1.333,1.333,9.333,0,8,2.667,0,2.667,7.333,0,0,13.333,4,0,0,6.711,0.671,0,0,
0,1.342,9.396,0,0.671,1.342,0.671,2.685,23.49,18.243,0.676,3.378,0,0,10.811,0,0,2,1.333,0.667,0,0
,0.667,1.333,0,0.671,34.228,0,0,0,0,20.805,6.711,0,2.013,15.333,4,1.333,21.333,0,12,83.893,4.698,
0,11.409,0,0.676,0,2.041,5.072,2.703,0.826,0,3.008,1.351,1.351,8.784,0.676,4.054,29.054,0.676,1.3
51,6.711,0.671,4.73,8.784,3.378,0,0.676,2.027,0,1.351,2.703,7.432,12.838,87.075,0.685,0,0,0,0,0.6
8,0,14.966,0,0,0,7.483,0,6.122,9.524,8.219,10.204,10.884,0,2.041,5.442,3.401,2.041,0,4.11,1.37,11
.034,2.069,4.828,0,2.759,0,1.379,0.69,0,4.828,2.778,0,0,0.699,2.098,0,0.704,2.113,2.113,0.699,9.7
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22,0,2.083,2.083,5.556,1.399,0.699,0,0,1.399,2.098,7.692,0,4.225,0.704,3.497,52.083,0,4.828,5.556
,2.083,9.028,4.861,13.194,2.083,4.895,2.098,11.972,1.418,4.255,13.475,2.837,23.944,2.113,2.128)
> y6 <- c(31.915,0.709,0,4.965,1.418,19.149,0,0.709,10.638,0,2.817,7.042,2.098,0.699,0,0,4.895,1.
399,9.091,4.93,7.857,2.878,2.878,0.719,0,0.725,0,3.65,3.704,0,3.846,0,5.385,0.769,2.362,15.702,28
.099,4.098,0,45.378,0.855,2.609,0.87,0.917,0.926,1.923,5.051,2.083,8.696,32.955,0,9.231,11.628,13
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1.695,0,0,3.39,0,0,0,0,0,0,3.39,0,0,0,0,0,0,0,0,0,0,90.476,17.188,1.538,0,0,0,1.429,0,40,0,0,1.51
5,25.758,28.788,0,0,1.515,1.562,12.5,20.635,28.125,7.937,11.111,7.143,30.909,5.357,11.667,18.644,
7.692,24.444,31.818,2.041,10.204,4.651,7.143,26.19,2,5.263,24.561,9.091,7.576,9.231,1.538,4.545,2
.985,0,0,1.562,3.125,50,58.73,0,22.581,17.544,1.786,3.509,12.5,6.25,22.222,12.727,16.667,11.321,4
.255,0,8,0,11.321,55.172,3.509,6.897,21.429,23.333,36.508,11.111,7.692,5.333,18.919,27.027,23.188
,18.571,14.085,17.073,12.048,9.091,4.494,3.371,7.865,3.371,3.371,2.247,8.989,1.064,11.881,1.887,8
.85,0,0,11.719,8.759,0.69,6.849,0,0,0,0,0,0.685,0.68,0,0,10.884,0,0,0.68,0,18.367,0.68,0,0.68,6.122
,0,13.605,0,65.306,2.041,1.361,1.361,0,0,6.081,2.027,0,0,0.676,13.514,0,5.405,12.081,3.356,0,0.66
7,0,0.667,82.667,4.667,3.333,0,0,0,0.667,4.667,30.667,0,20.667,13.333,0,0,0.667,0,0,4.667,0,0,0,2
,0,0,0,0,8,3.333,27.333,0.671,0,0.676,0,0.676,0,0,4.027,1.342,0,52.703,0,0,3.401,0.676,0,2.685,2,
0,0,0,2.667,0,0.667)
> y7 <- c(2,0.667,0,0,0.671,0,0,0,2,0,0,2,0,0,0,0.667,4,0,0.667,0,2,0,0,20,5.333,0,0,0,1.333,0,0.
667,2,0,4,0,0.667,2.013,0,1.342,0.667,0.667,0,4.667,8,2.667,1.342,1.361,6.803,2.679,4.348,7.353,2
.027,8.725,4.73,10.811,0.671,2.013,61.074,4.698,0,6.04,34.228,0,0,8.784,0,0.671,0,1.351,0,0.671,4
.027,0.671,0,1.342,0,28.188,5.369,4.027,11.333,4,4.667,0,0,2,0,0,4.667,60.667,0.667,4.667,4.667,0
,0,1.333,4.667,68,0,8,8,4,1.333,0,1.333,2,0,10.067,9.524,0.68,0,0.68,1.361,0.676,0.676,0.676,0,0,
0.676,2.041,64.626,0,2.041,26.531,0,1.361,0,0.68,0.685,2.74,0,0,0,0,0,2.055,2.027,0.676,2.703,0,0
.68,1.361,2.041,0.68,1.351,5.405,2.027,3.378,0.676,4.73,0,0.676,1.351,2.027,31.757,16.438,1.37,5.
479,0,0,0,0,0,3.448,0.69,3.448,0,0.685,0.685,0,1.37,0,2.041,0.68,0,28.276,1.37,0,0,0.685,20.548,0
,0,3.425,0,0,0,8.904,1.37,0,25.352,1.37,0,0,0,8.219,0,0,0.685,0,2.069,0.69,7.586,0.69,0,0,0,0,0,0
,0,0,0,0.69,18.75,0,0,11.888,0,0.699,1.399,17.483,0,0.699,0,13.986,4.196,0,0.699,11.888,4.196,3.4
97,0,1.399,9.155,2.797,0,0,0,2.098,0,2.797,2.098,2.098,1.399,0,2.878,0,1.681,0.909,15.741,1.887,0
.943,0.952,0.971,4.124,3.226,0,1.205,2.817,4.286,1.515,3.279,6.78,1.754,3.509,45.614,14.815,14.81
5,3.704,40.385,38,4.444,6.977,15.385,14.286,0,5.128,0,2.381,2.381,11.905,0,4.762,0,0,2.703,0,12.9
03,11.111,0,0,0,0,0,0,0,0,0,6.061,0)
> y8 <- c(0,5.882,0,0,0,3.077,0,0,1.471,0,0,1.449,0,1.449,0,0,1.471,1.471,2.941,0,2.941,0,0,0,0,0
,1.429,0,0,90.141,11.268,2.778,0,0,0,0,0,28.205,0,1.299,0,15.584,18.667,0,2.667,0,12.162,8.108,12
.329,20.548,5.479,13.889,5.556,22.222,12.069,5.66,10.256,20,11.321,25.49,5.714,20,12.676,8.451,2.
778,15.094,8.621,12.903,19.355,1.562,3.125,1.562,0,4.688,1.37,2.74,35.616,54.054,1.282,15.584,29.
487,7.692,2.564,10.526,27.027,16.176,13.462,21.429,7.547,3.704,27.778,7.692,25.373,26.562,36.923,
12.698,9.375,3.125,16.176,25.974,14.286,16.471,9.412,15.116,13.953,2.273,3.297,4.211,6.25,4.211,3
.093,1.942,11.111,1.802,3.448,1.709,1.695,0,0,7.639,6.164,0.68,6.803,0,0.68,0,0,0.68,0.68,0,0,13.
605,0.68,0,0.68,0,23.81,0.68,0,0,4.082,0,12.925,0,63.265,1.361,1.37,0.69,0,0,6.897,2.069,1.379,0,
0.69,8.163,0,5.479,14.384,0.685,0.685,1.37,0.685,1.37,84.459,3.356,6.04,0,0.671,0,0,5.369,22.819,
0,16.779,14.765,0.671,0,1.342,0.671,0,6.04,0,0,0,0,0,0.671,0,0,12.081,2.703,31.081,0.671,0,0,0,0,
0,0.676,1.351,2.703,0,57.432,0.676,0,2.027,1.351,0,2.013,2.013,0,0,0,2.667,0,0,1.333,0.671,0.671,
0,0,0,0.671,0.671,1.342,0,0,2,0,0,0,2.667,2,0,1.333,0,1.333,0,0,16.667,3.333,0,0,0,4.667,0,1.333,
3.333,0,4,0,0,0.671,0.671,2.013,2.74,0,0,6.25,4.167,1.389,0.699,0,7.143,1.869,2.817,6.338,0,3.472
,1.342,8.725,1.342,4.698,60.403,5.405,0.667,8.054,38.255,0.667,0,7.383,0,0.671,0,0,0.671,0.676,4.
027,0.671,0.671,0.676,0,34.014,8.108,2.703,8.054,2.013,1.342,0)
> y9 <- c(0,4.054,0,0,2.685,58.389,0,3.356,7.383,0,0,1.342,5.369,69.128,0,8,8.667,8.725,1.342,0,0
.671,1.333,0,8.108,12.162,0,0,1.351,2.685,0.671,0.671,2.013,0,0,1.342,1.351,66.216,0.676,2.685,27
.027,0,2.685,0,1.342,2.013,0,0,0,0,0,0,4.027,2.703,1.351,0.676,0,0.68,4.082,1.361,3.401,1.361,2.7
21,1.361,3.401,0,7.483,0,0,1.361,2.055,32.877,12.329,0,6.849,0.685,0,1.379,0.694,0,2.817,2.113,4.
225,0,0,0.699,0,0,0,1.37,1.37,0,29.167,2.083,0.694,0,0,25,0,0,3.472,0,0.694,0,7.639,0.704,0,18.05
6,0,0.694,0,0,4.861,0,0,2.778,0,1.389,0,3.472,1.389,0,0,0.694,0,0,0.69,0.69,0,0,1.389,16.667,0,0,
11.348,0.709,0.709,1.418,12.766,1.418,0,0,12.057,4.965,2.128,0.709,14.184,1.418,4.255,0,3.546,4.2
86,2.857,0,1.429,0,2.143,0,0.714,1.439,1.439,2.174,0,0,0,1.01,2.041,12.245,2.105,0,1.053,0,3.261,
2.381,2.532,1.282,7.143,1.389,5.714,1.471,1.587,4.839,6.557,0,45.763,3.39,33.333,0,59.574,8.511,8
.511,6.818,18.919,0,2.439,0,0,5.405,7.895,0,2.778,0,0,0,0,13.043,0,0,0,0,0,0,14.286,0,0,0,0,0,0,0,
0,50,0,0,14.286,0,11.765,0,4.762,3.704,2.941,0,1.887,1.786,0,6.349,1.587,0,1.515,4.545,2.985,5.9
7,0,0,2.985,0,0,0,1.493,0,0,0,0,0,0,2.899,0,0,66.667,11.594,0,1.429,0,0,0,0,12.857,0,1.429,0,24.286
,11.765,0,1.449,0,8.571,10,8.451,11.268,8.955,4.545,7.812,35.556,15.686,5.882,14.286,42.857,12.5,
75,16.667,14.706,0,15.909,42.222,15.789,19.149,2.174,0,5.128,0,3.571,12.069)
> y10 <- c(3.39,4.615,24.638,48.276,9.091,13.333,12.857,28.571,22.535,16.901,16.667,17.582,7.447,
6.383,3.093,3.061,9.375,0,0,12.745,1.923,4.673,7.826,5.344,1.379,0,7.333,5.333,0,9.333,0,0.667,0,
0,0.667,0.667,0,0,14,0.671,0,1.342,0,18.121,0,0,0,0,4,0,16.667,0,59.333,0.667,0,0,0,0,5.405,0,0,0,2
.013,14.094,0,0.671,12.838,0,0,1.351,3.356,1.342,92,3.333,5.369,0,0,0,0,2.667,26.667,0,28,15.333,
0,0,1.333,0,0,6.667,0,0,0,0,0,0,0,0,0,4,2,39.333,0,0,0,0,0,0.671,0,2,3.333,0,64,0,0,2.667,0,0,0,6,0,0
.667,0,0,2,0,0,0,0,0,0,0,0,0,0,0,0,1.333,0,0,2,0,0,0,3.333,0.667,0,0.667,0,2.667,0,0,17.333,2.667,0,0
,0,2.667,0,0,0,0.667,0,2.667,0,0,0,0,2.667,0,0,0,0.667,10,3.333,0,0.667,0,0.671,8.054,0.847,7.273,2.632
,5.128,3.704,10.667,0.667,1.333,6.04,2.685,9.396,1.342,4.698,63.758,3.333,0.667,2.667,40,0,0.676,
8.784,0,0,0,0,0,1.333,2.667,0,0,1.333,0,34.667,10,0.667,2.667,4,0.667,0,0,1.333,0,0,0,64.667,0,4,
6.667,0,0,1.333,3.333,74.667,0,9.333,9.333,5.333,0.667,0,0,2,0,2.667,14,0,0,0,0.667,2,0,0.667,0,0
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,0,1.333,60.667,0,2.667,36.242,0,5.369,0,0.671,0.671,1.342,0,0.676,0,1.754,3.509,0,0,0.68,6.081,1
.361,0.68,0,0,4.082,0.68,0.68,0.68,4.082,0,0.685,0,9.459,0,0,0.676,2.721,31.973,7.483,1.361,2.721
,0.68,0,1.361,0,0.68,1.361,0,3.378,0,0,0.676,0,0.671)
> y11 <- c(0,0.671,2.013,0,37.162,1.342,0,0.671,0,32.886,0,0,0,0,0,0,7.383,0,0,16.107,0,0,0,0,5.3
69,0,0,0,0,1.342,0,0.671,0,0,0,0.676,0,0,0.676,0,0,0,0.685,17.123,0,0,13.793,0,0,2.759,10.345,0,0
,0,16.552,3.448,0,0.69,15.172,2.069,2.069,0,0,8.276,2.069,0,1.379,0,2.069,0,0.69,0.69,1.379,0.69,
0,0.69,0.699,0,2.703,1.493,0,6.897,1.724,0,1.818,1.961,0,2.083,3.922,1.961,0,0,4.082,0,2.128,0,13
.043,0,0,0,2.222,80,0,14.286,0,0,0,0,5.556,0,0,0,9.091,0,0,6.667,0,11.111,0,14.286,0,0,0,0,0,0,0,
0,0,0,0,16.667,0,0,0,80,0,0,10,0,0,9.091,0,0,0,0,11.765,0,0,0,12.5,3.571,3.125,0,0,9.756,4.545,0,
5.769,13.793,20.968,3.125,27.692,2.817,8.219,2.299,0,42.975,2.344,3.788,0,5.797,0.714,71.831,0,2.
098,4.196,11.111,0.69,2.759,0.685,0,0,2.055,0,5.479,3.425,0.685,0,0.685,0,0,0.68,0,0,0,0,4.054,0,
0,3.333,0,0,0,0,18.667,1.333,85.333,4,4.667,0,0,0,0,0,1.333,0,0,0,6.667,2,0,0.667,17.333,0,0,1.33
3,0,0,2,0,0,9.333,2.667,2,0,3.333,0,0,6,0,6,14,0,1.333,2,23.49,25.503,0.671,16.107,4.027,49.664,0
,0.667,0,0,5.333,0,0,0.667,0.667,0.685,0.671,4.667,24.667,12.667,0,8.667,19.333,0.667,0,0,2,3.333
,0,4,3.333,0,0,0,0,0.667,1.333,0.667,1.333,2.667,97.333,0,5.333,2.667,6.667,1.333,11.333,3.333,1.
333,8.667,0,0,2.667,1.333)
> y12 <- c(0,0.667,76.667,16,1.333,0,8.667,0,0,44,0,32.667,0,0,0,0,6,1.333,0,0,18.667,0,0,0,1.333
,0,0,3.333,5.333,0,0,0,14,9.333,0.667,0,0,12.667,0.667,0,2,2,2.667,0.667,0,13.333,3.333,0.667,2,1
8,1.333,0.667,0.667,0,2,7.333,3.333,2,1.333,8.392,6.122,6,11.333,3.333,3.333,0,2.667,9.333,0,1.33
3,24.667,1.333,0,2,1.333,3.333,0,15.333,4,0.667,13.333,3.333,4.667,22,20.667,2,2,8,0.667,0,0,0,0.
671,1.342,90.604,0,0.671,0.671,0,0.671,7.595,1.342,11.333,0,0.667,0.671,11.409,10.738,4.698,0.667
,0,0,0,0,0,0.667,0,0,0.667,0.667,16,0,8.667,0,22.667,0.667,0.667,0,0,0,0,0,19.333,0.667,2.667,2.7
03,1.342,2.013,16.779,0.676,0,2.703,0.676,16.892,4.73,9.459,0,4.73,2.685,4,48,8.667,4.667,1.333,1
.333,1.333,0.667,0,0,0,1.333,0.667,0,0,1.333,2.013,1.351,19.595,9.459,0.676,2.041,2.041,12.925,0.
68,2.721,0,0,2.041,0,2.721,0,1.361,1.351,3.378,0,1.361,26.351,0.676,2.027,0,54.054,0.676,14.189,2
.027,0,0.676,19.595,18.919,2.027,0.676,0.676,0,0,0,0.676,0,3.378,2.027,2.027,91.216,0,0,0,0,0,0,0
,1.351,25,0.676,21.622,0.676,0,4.054,0,3.401,0,0.685,0,0,45.89,0,0,0,2.74,1.37,20.548,0,2.74,0,1.
37,0,0,2.055,10.274,17.123,29.452,2.083,3.497,0,1.399,2.817,8.511,0.709,9.353,2.985,1.562,2.381,3
.2,12.8,5.6,7.258,0,0.82,7.759,5.405,0.935,2,7.447,2.174,5.814,2.439,0,1.538,0,1.961,3.846,2.128,
15.385,9.434,3.509,74.074,0,1.818,0,5.357,57.407,11.765,0,0,0,0,0,100)
> y <- c(y0,y1,y2,y3,y4,y5,y6,y7,y8,y9,y10,y11,y12)
> cor.test(x, y,alternative = "two.sided", method = "spearman", exact=FALSE )

        Spearman's rank correlation rho

data:  x and y
S = 7956111295, p-value < 2.2e-16
alternative hypothesis: true rho is not equal to 0
sample estimates:
      rho
0.1915293

> # ---- Confidence interval ----
> if(!"RVAideMemoire" %in% installed.packages()){install.packages("RVAideMemoire")}
> library(RVAideMemoire)
*** Package RVAideMemoire v 0.9-83-3 ***
> spearman.ci(x,y)

        Spearman's rank correlation

data:  x and y
1000 replicates

95 percent confidence interval:
 0.1565231 0.2207940
sample estimates:
      rho
0.1915293

>
```