```
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]

> # Load necessary libraries
> library(ggplot2)
>
> # Given data
> x10 <-
c(0.5378,0.5839,0.4827,0.7105,0.4606,0.5449,0.561,0.3585,0.4617,0.9785,0.9807,0.9604,0.9812,0.9736,0.9685,0.9501,0.9459
,0.9381,0.9671,0.9111,0.7596,0.7706,0.8616,0.7124,0.5904,0.704,0.456,0.9957,0.9858,0.9837,0.9761,0.9841,0.9801,0.9552,0
.9636,0.8925,0.5033,0.2847,0.1888,0.1935,0.2819,0.1655,0.1762,0.118,0.2639,0.8814,0.8698,0.8457,0.9405,0.8708,0.8626,0.
8765,0.8679,0.8744,0.2997,0.3844,0.3232,0.612,0.2358,0.3675,0.46,0.2021,0.2501,0.9634,0.9434,0.9703,0.9663,0.8736,0.948
3,0.9343,0.9404,0.9014,0.9927,0.9888,0.99,0.9856,0.9639,0.9853,0.9741,0.9734,0.9668,0.2371,0.126,0.1425,0.1536,0.1701,0
.93,0.93,0.87,0.2145,0.16,0.1058,0.1069,0.1253,0.1147,0.735,0.809,0.867,0.1404,0.9926,0.9452,0.9838,0.9464,0.9722,0.907
5,0.9881,0.904,0.9614,0.999,0.9976,0.9992,0.999,0.9974,0.9981,0.9961,0.9891,0.9954,0.9996,0.9914,0.9918,0.9929,0.992,0.
9853,0.9896,0.9599,0.9889,0.999,0.9982,0.9709,0.9985,0.9946,0.9929,0.9953,0.9897,0.9945,0.9969,0.9795,0.9437,0.9826,0.9
486,0.9462,0.9186,0.7667,0.9615,0.9908,0.9884,0.9543,0.9933,0.9413,0.9629,0.9757,0.4454,0.3182,0.9968,0.9871,0.9888,0.9
948,0.9598,0.9854,0.8662,0.5487,0.9935,0.9974,0.9871,0.9791,0.9908,0.9692,0.9822,0.8601,0.7598,0.9442,0.9989,0.9949,0.9
938,0.9967,0.9742,0.9916,0.9862,0.9611,0.9933,0.9971,0.9968,0.9795,0.9988,0.9822,0.9912,0.9957,0.9634,0.9772,0.9994,0.9
993,0.9963,0.9996,0.9969,0.9987,0.9987,0.9972,0.998,0.9995,0.9946,0.9946,0.9914,0.9951,0.9846,0.9928,0.9816,0.9901,0.99
84,0.9914,0.9877,0.9882,0.9919,0.9727,0.9889,0.9691,0.9825,0.9994,0.9966,0.9987,0.9962,0.9975,0.9933,0.9979,0.981,0.997
2,0.9841,0.9447,0.9318,0.9206,0.8633,0.8933,0.7906,0.7057,0.8943,0.9962,0.9898,0.9918,0.9932,0.9601,0.9836,0.986,0.7844
,0.9728,0.9978,0.989,0.9841,0.9936,0.9834,0.9842,0.7815,0.4728,0.9492,0.9996,0.9995,0.9968,0.9997,0.9974,0.9984,0.9989,
0.9757,0.9653,0.998,0.9915,0.9715,0.9938,0.9797,0.9807,0.716,0.4443,0.8443,0.999,0.9904,0.9836,0.9803,0.9909,0.964,0.93
75,0.8654,0.9303,0.9746,0.8097,0.6496,0.5979,0.8424,0.473,0.6958,0.434,0.5914,0.9999,0.9992,0.9981,0.9987,0.9986,0.9964
,0.9981,0.9905,0.9968,0.9961,0.9649,0.9346)
> x11 <-
c(0.9067,0.9426,0.8491,0.9371,0.7952,0.9302,0.9894,0.9823,0.901,0.963,0.8404,0.9142,0.9319,0.6261,0.5334,0.9991,0.9952,
0.9907,0.9958,0.9852,0.9926,0.9846,0.9549,0.9891,0.9993,0.9995,0.9948,0.9998,0.9958,0.9975,0.9986,0.9041,0.9691,0.9994,
0.9996,0.9969,0.9998,0.9957,0.9985,0.9989,0.9074,0.8563,0.9982,0.9976,0.9869,0.9989,0.9889,0.9899,0.9943,0.7869,0.7768,
0.9998,0.9996,0.9977,0.9997,0.9986,0.9983,0.9982,0.9928,0.9913,0.9998,0.9997,0.999,0.9998,0.9994,0.9996,0.9992,0.9991,0
.9991,0.9998,0.9979,0.9949,0.9967,0.9953,0.9851,0.9904,0.9752,0.9924,0.9963,0.9959,0.9755,0.9971,0.9763,0.9828,0.9884,0
.6754,0.5389,0.9996,0.9978,0.9913,0.9974,0.9944,0.9924,0.9685,0.9093,0.9542,0.9982,0.9907,0.9742,0.994,0.9766,0.9817,0.
7211,0.5263,0.9101,0.9979,0.9946,0.9985,0.9958,0.9826,0.9955,0.9936,0.9562,0.9959,0.9972,0.9923,0.9945,0.9917,0.9552,0.
9886,0.9903,0.95,0.9793,0.9991,0.9967,0.9992,0.9986,0.9883,0.9969,0.9974,0.9556,0.9982,0.9992,0.9994,0.9952,0.9996,0.99
63,0.9985,0.9983,0.9954,0.9976,0.9973,0.9983,0.979,0.9984,0.9889,0.9942,0.9952,0.9854,0.9891,0.999,0.9987,0.9882,0.9994
,0.9876,0.9965,0.9982,0.9903,0.9807,0.9997,0.9958,0.9935,0.9973,0.9947,0.9919,0.9918,0.9444,0.9981,0.9995,0.997,0.9961,
0.9963,0.9936,0.9907,0.9942,0.9572,0.9957,0.9989,0.995,0.9937,0.9949,0.9892,0.9896,0.993,0.9768,0.9951,0.9972,0.9983,0.
9841,0.9994,0.9792,0.9937,0.997,0.9481,0.9813,0.9948,0.9853,0.9894,0.9923,0.9379,0.9773,0.984,0.5914,0.9419,0.9998,0.99
93,0.9997,0.9994,0.998,0.9992,0.9987,0.9935,0.9979,0.9998,0.9991,0.9995,0.9992,0.9985,0.9987,0.9981,0.9972,0.9979,0.999
6,0.9994,0.9972,0.9995,0.9989,0.9983,0.9974,0.9978,0.9979,0.9997,0.9996,0.9986,0.9997,0.9988,0.9992,0.9989,0.9992,0.999
2,0.9997,0.9997,0.9985,0.9998,0.999,0.9996,0.9992,0.9983,0.9988,0.9994,0.9967,0.9954,0.9977,0.9942,0.9941,0.9614,0.8117
,0.9856,0.9988,0.9984,0.9935,0.9992,0.9916,0.995,0.998,0.8306,0.7876,0.9974,0.9971,0.9863,0.9987,0.9759,0.99,0.9961,0.4
418,0.359,0.9977,0.9918,0.9921,0.9932,0.9699,0.9828,0.9858,0.7984,0.9635,0.999,0.9945,0.9926,0.9931,0.9908,0.9858,0.980
2,0.8973,0.9899,0.9991,0.9992,0.9403,0.9989,0.9927,0.9967)
> x12 <-
c(0.9931,0.9955,0.9982,0.9955,0.9973,0.9083,0.9956,0.9812,0.9856,0.9817,0.976,0.9926,0.9999,0.9992,0.9991,0.9988,0.9997
,0.9951,0.9992,0.9954,0.9982,0.9999,0.9996,0.9995,0.9992,0.9997,0.9982,0.9997,0.9985,0.9958,0.9999,0.9999,0.9994,0.9999
,0.9998,0.9998,0.9995,0.9998,0.9999,0.9995,0.9977,0.9988,0.9972,0.9982,0.996,0.9914,0.9973,0.9897,0.9142,0.8617,0.8145,
0.8351,0.7297,0.768,0.7036,0.6764,0.7858,0.9678,0.9271,0.8934,0.8802,0.9349,0.7774,0.9714,0.91,0.7598,0.9737,0.9148,0.9
199,0.9001,0.9141,0.8384,0.8089,0.8501,0.8555,0.991,0.9802,0.9847,0.9799,0.9628,0.9738,0.9661,0.9781,0.9222,0.8879,0.60
91,0.3045,0.2438,0.6426,0.1423,0.2879,0.2197,0.2784,0.9714,0.8344,0.7191,0.7422,0.8823,0.6056,0.728,0.3692,0.6563,0.999
,0.9986,0.9914,0.999,0.995,0.9952,0.9953,0.958,0.8784,0.7571,0.3321,0.1351,0.1651,0.3951,0.775,0.1947,0.1618,0.2743,0.9
971,0.9937,0.9603,0.9919,0.9887,0.9691,0.9622,0.9245,0.875,0.7231,0.642,0.6095,0.5288,0.279,0.4783,0.4543,0.312,0.611,0
.978,0.8805,0.653,0.7578,0.8281,0.5332,0.4521,0.2849,0.2375,0.9986,0.9988,0.9944,0.9996,0.9895,0.997,0.9985,0.9025,0.82
56,0.9996,0.9994,0.9961,0.9997,0.9969,0.998,0.9984,0.9768,0.9782,0.9997,0.9983,0.9985,0.9976,0.9967,0.9961,0.9983,0.991
,0.9967,0.9996,0.9993,0.9966,0.9996,0.9974,0.998,0.999,0.9969,0.9978,0.9993,0.9953,0.9977,0.9952,0.9892,0.9903,0.9895,0
.9886,0.9875,0.9856,0.862,0.6869,0.7425,0.9056,0.9046,0.7929,0.6564,0.9903,0.9845,0.774,0.9807,0.96,0.9577,0.9534,0.960
```

```
3,0.9749,0.9993,0.9986,0.988,0.9984,0.996,0.9962,0.9942,0.9927,0.9931,0.9934,0.994,0.9622,0.9949,0.9853,0.9875,0.9813,0
.9788,0.9807,0.9992,0.9914,0.9899,0.9877,0.9956,0.9771,0.9879,0.9203,0.9788,0.8585,0.5573,0.5543,0.4584,0.5264,0.4717,0
.345,0.5449,0.5849,0.6827,0.595,0.3298,0.4887,0.5545,0.454,0.2943,0.3908,0.4214,0.9995,0.9995,0.9954,0.9995,0.9985,0.99
93,0.9989,0.9991,0.9992,0.8201,0.5981,0.5022,0.5235,0.451,0.4212,0.355,0.2321,0.5042,0.9954,0.9655,0.9525,0.9701,0.939,
0.9514,0.8946,0.7007,0.9564,0.9988,0.9925,0.9718,0.9908,0.9912,0.9823,0.979,0.9505,0.862,0.9999,0.9998,0.9976,0.9999,0.
9996,0.9996,0.9994,0.9986,0.9983,0.6643)
> x13 <-
c(0.2964,0.1891,0.2205,0.3812,0.1247,0.2572,0.142,0.3154,0.9999,0.9997,0.9976,0.9998,0.9996,0.9994,0.9991,0.9987,0.9981
,0.9999,0.9998,0.9984,0.9999,0.9998,0.9997,0.9994,0.9989,0.9984,0.7991,0.7358,0.4434,0.8199,0.5928,0.6683,0.617,0.3538,
0.4189,0.9999,0.9998,0.9963,0.9999,0.9996,0.9994,0.9991,0.9979,0.9985,0.9995,0.9992,0.993,0.9994,0.997,0.9981,0.9974,0.
9916,0.9862,0.7292,0.3856,0.3978,0.2705,0.3569,0.265,0.173,0.3001,0.4604,0.9999,0.9998,0.9969,0.9999,0.9993,0.9996,0.99
93,0.9976,0.998,0.9983,0.9954,0.9728,0.9953,0.9901,0.9871,0.9881,0.9464,0.8846,0.8474,0.8627,0.622,0.9042,0.7696,0.8144
,0.8242,0.6168,0.8017,0.9967,0.9953,0.9765,0.9952,0.9861,0.9905,0.9872,0.9803,0.9535,0.875,0.5565,0.3253,0.3421,0.6114,
0.2532,0.5892,0.3848,0.3437,0.4976,0.2411,0.2851,0.234,0.2601,0.1842,0.1672,0.2485,0.341,0.9914,0.9858,0.9147,0.9868,0.
9701,0.9697,0.9581,0.9376,0.9556,0.8827,0.5592,0.345,0.539,0.6613,0.3784,0.5245,0.4755,0.4457,0.7263,0.4147,0.4389,0.40
48,0.514,0.3123,0.3554,0.2603,0.5069,0.9973,0.9914,0.9837,0.9926,0.991,0.9803,0.9785,0.9373,0.8908,0.9997,0.9996,0.9981
,0.9997,0.9985,0.9986,0.9987,0.9945,0.9896,0.9999,0.9988,0.9983,0.9982,0.9992,0.9932,0.9925,0.9616,0.9959,0.9998,0.9983
,0.9988,0.9987,0.9983,0.9967,0.9769,0.9143,0.997,0.9999,0.9994,0.999,0.9992,0.999,0.9984,0.9974,0.9891,0.9942,0.9997,0.
9989,0.9991,0.9984,0.998,0.9986,0.996,0.9869,0.9892,0.999,0.992,0.9611,0.966,0.9899,0.914,0.9766,0.9458,0.9233,0.9991,0
.9928,0.963,0.9787,0.9923,0.9397,0.962,0.9313,0.8618,0.996,0.9852,0.9747,0.9791,0.9623,0.9714,0.9559,0.8733,0.8714,0.98
87,0.8917,0.8625,0.6683,0.9077,0.5597,0.9031,0.7311,0.9145,0.9996,0.9975,0.9979,0.9965,0.9971,0.9925,0.9967,0.9733,0.99
55,0.9996,0.9994,0.9928,0.9996,0.9947,0.9974,0.9979,0.9081,0.8568,0.9995,0.9994,0.9942,0.9996,0.9959,0.9964,0.998,0.888
7,0.9044,0.9998,0.9987,0.9966,0.9986,0.9979,0.9946,0.9951,0.9783,0.9941,0.9961,0.9895,0.9505,0.9865,0.977,0.9622,0.9617
,0.8277,0.8105,0.9987,0.9955,0.9981,0.9952,0.9871,0.996,0.9926,0.9832,0.9826,0.9977,0.9887,0.9638,0.9913,0.9681,0.9809,
0.8833,0.8387,0.9157,0.9959,0.9421,0.9473,0.9737)
> x14 <-
c(0.9277,0.9528,0.9259,0.8887,0.9311,0.9995,0.9977,0.9935,0.9981,0.9939,0.9942,0.9177,0.7195,0.9831,0.9995,0.9994,0.993
7,0.9996,0.9977,0.9982,0.9984,0.996,0.9959,0.9978,0.9933,0.9974,0.9955,0.9727,0.9927,0.9917,0.9046,0.9933,0.9997,0.9977
,0.9988,0.9967,0.997,0.9932,0.9956,0.9664,0.9984,0.9994,0.9943,0.9937,0.9943,0.9925,0.9894,0.9856,0.9173,0.9876,0.9946,
0.9716,0.9616,0.9737,0.9265,0.9359,0.8994,0.8,0.9357,0.9995,0.9993,0.9954,0.9996,0.9975,0.998,0.9982,0.996,0.9975,0.999
8,0.9997,0.9967,0.9998,0.9982,0.999,0.9993,0.9871,0.9781,0.9996,0.9977,0.9935,0.9982,0.9892,0.9931,0.9883,0.9689,0.9917
,0.9952,0.9732,0.9665,0.9878,0.9256,0.9774,0.5752,0.3143,0.9575,0.9977,0.9904,0.9848,0.9949,0.9835,0.9875,0.786,0.4938,
0.9162,0.9979,0.9873,0.9818,0.9928,0.9813,0.9848,0.6689,0.3711,0.9484,0.987,0.982,0.966,0.9838,0.5431,0.9577,0.9776,0.7
325,0.928,0.9985,0.9978,0.9948,0.9974,0.9811,0.9955,0.9935,0.904,0.9641,0.9995,0.9994,0.9953,0.9997,0.9967,0.9983,0.998
3,0.9933,0.9971,0.9961,0.9934,0.9653,0.9957,0.9735,0.9773,0.985,0.8618,0.8372,0.8783,0.7507,0.7216,0.6149,0.5767,0.6498
,0.5437,0.5294,0.5719,0.9991,0.9968,0.997,0.9959,0.9863,0.9897,0.9915,0.9509,0.9848,0.9989,0.9936,0.9751,0.9932,0.985,0
.9806,0.806,0.5958,0.8146,0.9963,0.9933,0.977,0.9963,0.9766,0.9771,0.9901,0.5996,0.4595,0.9996,0.9975,0.9957,0.9971,0.9
933,0.9946,0.9922,0.9723,0.991,0.9902,0.9674,0.9131,0.9704,0.926,0.9394,0.3413,0.147,0.6875,0.9942,0.9477,0.8867,0.9138
,0.9549,0.8284,0.7491,0.5248,0.6904,0.975,0.877,0.6318,0.6895,0.817,0.4962,0.5205,0.2943,0.4297,0.9995,0.997,0.9975,0.9
947,0.9966,0.9922,0.9981,0.9924,0.989,0.9987,0.9882,0.9949,0.9863,0.9931,0.9672,0.9944,0.9765,0.9877,0.9025,0.8749,0.90
91,0.8858,0.7055,0.8599,0.8299,0.8014,0.7698,0.989,0.9864,0.9818,0.9707,0.9302,0.9812,0.9619,0.9607,0.9376,0.2199,0.136
4,0.936,0.1252,0.1532,0.904,0.977,0.1104,0.1284,0.3577,0.1981,0.1617,0.1748,0.2384,0.1261,0.1811,0.1579,0.2261,0.4767,0
.1716,0.1768,0.102,0.2907,0.939,0.1912,0.152,0.2727,0.9938,0.9563,0.9732,0.9324,0.9801,0.9012,0.9852,0.9311,0.9662,0.99
87,0.9964,0.9979,0.9961,0.9932,0.9958,0.9913)
> x15 <-
c(0.9809,0.9917,0.9985,0.9979,0.9975,0.992,0.9934,0.9935,0.9845,0.9916,0.5603,0.4186,0.2824,0.1799,0.1365,0.2162,0.1654
,0.1113,0.2419,0.9986,0.9905,0.9684,0.9908,0.9748,0.9774,0.9423,0.8307,0.9727,0.9968,0.9973,0.9714,0.9971,0.9717,0.9909
,0.9911,0.9095,0.9479,0.9664,0.9705,0.8796,0.9789,0.8098,0.9208,0.9483,0.1794,0.1494,0.994,0.9755,0.9796,0.9921,0.9194,
0.9833,0.6761,0.321,0.9911,0.9853,0.9373,0.8744,0.9586,0.8599,0.9359,0.496,0.3994,0.7897,0.992,0.9558,0.9345,0.9736,0.8
527,0.9483,0.8662,0.8058,0.925,0.9855,0.9855,0.9236,0.9928,0.9324,0.9667,0.9801,0.8288,0.8996,0.9987,0.9983,0.986,0.998
3,0.9926,0.9953,0.9945,0.9871,0.9902,0.9987,0.9879,0.9848,0.9804,0.9875,0.9715,0.9732,0.9525,0.9672,0.9962,0.9807,0.972
1,0.9761,0.9842,0.9571,0.9759,0.9481,0.9599,0.9986,0.9925,0.9948,0.9917,0.995,0.9842,0.9927,0.9484,0.9912,0.9807,0.9631
,0.9677,0.9665,0.7907,0.9435,0.9405,0.511,0.9101,0.9837,0.9381,0.8873,0.9588,0.9025,0.9207,0.4076,0.2367,0.791,0.9963,0
.9963,0.982,0.9976,0.9742,0.9907,0.9929,0.764,0.7373,0.969,0.9545,0.8773,0.947,0.753,0.8609,0.9074,0.3299,0.6137,0.9653
,0.8816,0.6575,0.9209,0.7891,0.8503,0.3399,0.2857,0.4547,0.9881,0.9213,0.8392,0.8837,0.9148,0.8208,0.5947,0.4575,0.6488
,0.8152,0.4534,0.2758,0.2926,0.5424,0.2211,0.3451,0.2199,0.3149,0.9994,0.9964,0.9933,0.9956,0.9949,0.9908,0.9918,0.9685
,0.9846,0.9978,0.9867,0.9752,0.988,0.9751,0.9812,0.96,0.9009,0.9619,0.9989,0.9991,0.9883,0.9994,0.9894,0.9956,0.9974,0.
7452,0.8655,0.99,0.9639,0.8988,0.9552,0.9164,0.9188,0.5794,0.409,0.7073,0.9993,0.9988,0.9922,0.999,0.9936,0.9955,0.9961
,0.9351,0.9194,0.9995,0.9994,0.9973,0.9994,0.9981,0.9989,0.9983,0.9966,0.9973,0.9985,0.9872,0.9685,0.9834,0.9794,0.9503
,0.9343,0.8849,0.9617,0.9887,0.9899,0.9535,0.992,0.9371,0.9709,0.9779,0.4623,0.4137,0.9969,0.9853,0.9462,0.985,0.9642,0
.9694,0.8066,0.6579,0.7968,0.9787,0.9607,0.9046,0.9487,0.7375,0.8768,0.9012,0.4057,0.71,0.9879,0.9751,0.9586,0.9733,0.8
631,0.9424,0.9452,0.5276,0.7793,0.9837,0.9657,0.9797,0.9638,0.9515,0.9474,0.6323,0.9628,0.9731,0.8656,0.7805,0.8698,0.7
38,0.8399,0.6534,0.4996,0.7667,0.9894,0.9756,0.9878)
> x16 <-
c(0.9817,0.8539,0.9681,0.9738,0.6212,0.9868,0.9944,0.9953,0.9634,0.9968,0.9684,0.9894,0.9906,0.9325,0.9695,0.9975,0.998
1,0.9794,0.9981,0.9866,0.9939,0.9944,0.9746,0.9842,0.9991,0.9989,0.9872,0.9994,0.9865,0.9973,0.9982,0.9895,0.9805,0.999
6,0.9948,0.9886,0.9957,0.9886,0.9862,0.9785,0.9038,0.9971,0.9989,0.9913,0.9873,0.9908,0.983,0.9803,0.9787,0.8874,0.9874
,0.9982,0.9892,0.9893,0.9897,0.9844,0.9827,0.9808,0.9242,0.9907,0.9779,0.9779,0.9484,0.9667,0.7237,0.9439,0.9497,0.6142
,0.8115,0.9966,0.9977,0.9643,0.9985,0.9681,0.987,0.9918,0.7382,0.912,0.9911,0.9669,0.947,0.9654,0.9055,0.9481,0.8112,0.
5765,0.8608,0.998,0.9954,0.9945,0.9928,0.9771,0.991,0.9877,0.9505,0.9763,0.9986,0.9965,0.9952,0.9922,0.9827,0.9914,0.98
81,0.9833,0.9878,0.9971,0.9862,0.9961,0.9913,0.9942,0.9908,0.9829,0.9825,0.9979,0.998,0.9852,0.9967,0.9917,0.9953,0.992
7,0.9886,0.9906,0.9994,0.9994,0.996,0.9995,0.9973,0.999,0.9981,0.9942,0.9963,0.9868,0.9792,0.9659,0.9742,0.8587,0.9495,
0.9533,0.5366,0.8604,0.9973,0.9873,0.9569,0.9911,0.9747,0.9838,0.6725,0.5154,0.8396,0.9977,0.9824,0.9744,0.9852,0.9715,
0.9713,0.9485,0.8069,0.9674,0.945,0.9469,0.7062,0.9125,0.7863,0.8669,0.833,0.6555,0.6849,0.9982,0.9981,0.9127,0.9973,0.
9838,0.9933,0.9896,0.9893,0.9964,0.9968,0.9789,0.8057,0.9418,0.973,0.8483,0.9628,0.9604,0.5339,0.9997,0.9983,0.9976,0.9
97,0.9986,0.9932,0.9983,0.9916,0.9946,0.9968,0.9867,0.983,0.9765,0.9424,0.9767,0.9617,0.9442,0.97,0.9999,0.9994,0.9983,
0.9986,0.9995,0.9967,0.9993,0.9912,0.9998,0.9998,0.9986,0.9998,0.9993,0.9997,0.9991,0.9993,0.9997,0.998,0.9937,0.994,0.
9896,0.9902,0.9895,0.9759,0.9912,0.9644,0.9542,0.9693,0.9497,0.9819,0.938,0.9739,0.9626,0.9612,0.9517,0.9759,0.9353,0.8
```

955,0.9159,0.9126,0.8823,0.813,0.8198,0.7817,0.9933,0.9849,0.9921,0.9887,0.971,0.9884,0.9832,0.9884,0.9544,0.8062,0.489
1,0.3068,0.2965,0.4877,0.2439,0.2736,0.198,0.273,0.9327,0.8988,0.7551,0.9117,0.6626,0.7712,0.8508,0.2242,0.2304,0.497,0
.4023,0.3764,0.3633,0.1585,0.3317,0.3012,0.1293,0.3599,0.9291,0.9093,0.7719,0.9066,0.7441,0.7934,0.822,0.2272,0.2169,0.
6424,0.27,0.1621,0.1333,0.2967,0.926,0.1666,0.1633)
> x17 <-
c(0.2288,0.9096,0.7122,0.5037,0.5743,0.5937,0.4396,0.2563,0.1939,0.3164,0.8382,0.7617,0.4766,0.4101,0.3787,0.4396,0.335
,0.2989,0.3021,0.9984,0.9876,0.9795,0.989,0.9809,0.9828,0.9535,0.8404,0.9727,0.9902,0.992,0.9673,0.9962,0.9365,0.9831,0
.991,0.6422,0.6173,0.9819,0.9735,0.9115,0.9784,0.8861,0.9148,0.9525,0.6445,0.539,0.9987,0.992,0.9908,0.9908,0.9851,0.98
57,0.9881,0.9525,0.9839,0.9986,0.9978,0.9895,0.9984,0.9893,0.995,0.9969,0.9818,0.9887,0.9945,0.9775,0.9816,0.9477,0.919
4,0.9503,0.9197,0.9393,0.9447,0.7858,0.737,0.4427,0.663,0.5981,0.569,0.5249,0.4787,0.5259,0.9526,0.9475,0.5743,0.9478,0
.8456,0.9029,0.858,0.8002,0.8758,0.1571,0.2181,0.1146,0.1909,0.1468,0.2006,0.1391,0.885,0.1092,0.9846,0.9603,0.903,0.91
02,0.8748,0.911,0.8433,0.8883,0.6678,0.9558,0.9565,0.836,0.9562,0.9145,0.9327,0.9094,0.8567,0.8616,0.7821,0.4754,0.4021
,0.2123,0.3717,0.3446,0.1785,0.4435,0.4472,0.9915,0.9603,0.8144,0.9484,0.9518,0.902,0.9423,0.8797,0.4295,0.9993,0.999,0
.9923,0.9989,0.9976,0.9983,0.9974,0.998,0.9982,0.9985,0.9978,0.9879,0.9977,0.9934,0.9916,0.9934,0.9805,0.9822,0.431,0.1
615,0.1138,0.1158,0.2217,0.943,0.1236,0.749,0.2199,0.9997,0.9995,0.9928,0.9996,0.999,0.9988,0.9985,0.9972,0.9977,0.3509
,0.3098,0.1715,0.2761,0.2271,0.256,0.1975,0.1183,0.1199,0.9996,0.9992,0.993,0.9993,0.9988,0.9981,0.9972,0.994,0.9929,0.
9998,0.9996,0.9974,0.9997,0.9995,0.9994,0.9988,0.9981,0.9981,0.9999,0.9997,0.9974,0.9997,0.9996,0.9994,0.9988,0.9986,0.
9989,0.9985,0.9951,0.9888,0.9922,0.986,0.9888,0.9819,0.9638,0.8846,0.4915,0.3739,0.2844,0.229,0.1805,0.2781,0.1612,0.18
76,0.2697,0.9996,0.9994,0.9913,0.9993,0.9978,0.9985,0.9974,0.994,0.995,0.9976,0.9929,0.9687,0.9914,0.9879,0.9819,0.9868
,0.947,0.8763,0.9968,0.9966,0.9828,0.9959,0.9885,0.9951,0.9912,0.9919,0.9911,0.3729,0.1975,0.2564,0.1348,0.1779,0.1657,
0.114,0.2115,0.3429,0.8841,0.8046,0.6026,0.7074,0.7324,0.6825,0.6344,0.6804,0.6146,0.3772,0.1967,0.1824,0.119,0.1433,0.
1428,0.878,0.1651,0.2761,0.8986,0.882,0.7039,0.8822,0.775,0.8387,0.8137,0.6757,0.7469,0.4638,0.1807,0.1123,0.1553,0.274
3,0.1194,0.1414,0.142,0.1944,0.3657,0.2088)
> x18 <-
c(0.1385,0.1688,0.2234,0.1274,0.1631,0.1385,0.1928,0.8208,0.8652,0.7443,0.8829,0.7196,0.8615,0.8201,0.5691,0.549,0.9235
,0.7637,0.5509,0.6245,0.7908,0.4706,0.6408,0.5609,0.6423,0.8382,0.7858,0.7726,0.7093,0.4533,0.7077,0.634,0.5314,0.7139,
0.9824,0.8465,0.7159,0.6751,0.9087,0.5683,0.6879,0.4999,0.6656,0.9989,0.9986,0.992,0.9988,0.994,0.9961,0.9961,0.9672,0.
9681,0.9994,0.9954,0.9897,0.994,0.9963,0.9828,0.9576,0.8855,0.9731,0.9991,0.9934,0.9911,0.9951,0.9909,0.988,0.8891,0.80
63,0.9767,0.9995,0.9974,0.9933,0.997,0.9957,0.9946,0.9848,0.9516,0.9546,0.9989,0.9972,0.9942,0.9936,0.9857,0.9928,0.987
4,0.9433,0.9439,0.9968,0.9941,0.9831,0.9893,0.9595,0.9816,0.9776,0.7885,0.8965,0.9929,0.9475,0.7648,0.8216,0.9282,0.673
7,0.8283,0.7319,0.6584,0.9919,0.9517,0.7807,0.8875,0.9397,0.7797,0.7202,0.6408,0.5712,0.958,0.9077,0.8114,0.8188,0.7476
,0.7965,0.7127,0.4947,0.5957,0.9419,0.7059,0.6208,0.427,0.6772,0.3636,0.6715,0.4405,0.7307,0.9972,0.9906,0.9954,0.9913,
0.9629,0.9852,0.9835,0.8829,0.9831,0.9886,0.9466,0.9045,0.959,0.8822,0.9292,0.5701,0.3735,0.761,0.9892,0.9821,0.9632,0.
9788,0.8477,0.9516,0.9638,0.4456,0.859,0.9915,0.9943,0.9698,0.9965,0.9495,0.9863,0.9894,0.5559,0.5633,0.9861,0.9897,0.9
451,0.9927,0.9295,0.9643,0.9765,0.4374,0.5946,0.9982,0.9931,0.9697,0.9934,0.9807,0.9779,0.9612,0.9121,0.9661,0.9665,0.9
749,0.8662,0.9826,0.8485,0.9387,0.9538,0.4475,0.6464,0.9558,0.9418,0.8004,0.941,0.8723,0.8485,0.8516,0.3288,0.4062,0.99
54,0.9831,0.9905,0.9718,0.9606,0.9797,0.9536,0.9195,0.9441,0.9986,0.9926,0.9798,0.9933,0.9852,0.9823,0.8256,0.6759,0.94
41,0.9991,0.9992,0.987,0.9994,0.9947,0.9974,0.9975,0.9908,0.995,0.9769,0.9513,0.9573,0.9545,0.7761,0.9198,0.9212,0.5372
,0.933,0.9988,0.9881,0.9917,0.9881,0.9832,0.9788,0.9686,0.8363,0.9917,0.9949,0.9861,0.9839,0.9789,0.9394,0.9723,0.9705,
0.8981,0.9532,0.9715,0.8547,0.7772,0.8168,0.7312,0.7161,0.6176,0.4669,0.7788,0.9979,0.9972,0.9778,0.9979,0.9825,0.9926,
0.9934,0.9614,0.9806,0.9973,0.9942,0.9802,0.9889,0.9488,0.9836,0.9829,0.8848,0.8065,0.9977,0.9851,0.9733,0.989,0.9536,0
.9745,0.9315,0.8412,0.9656,0.9875,0.9539,0.8957,0.9637,0.8696)
> x19 <-
c(0.9404,0.5089,0.3177,0.7391,0.9802,0.9821,0.9668,0.9913,0.9254,0.9696,0.9803,0.3437,0.2241,0.9966,0.9947,0.9894,0.991
6,0.9492,0.9862,0.9858,0.8936,0.9457,0.9922,0.9546,0.9115,0.9636,0.933,0.9237,0.4227,0.2179,0.8192,0.9962,0.9934,0.9864
,0.9911,0.9458,0.9868,0.9816,0.7917,0.923,0.9988,0.9988,0.9899,0.9992,0.992,0.9973,0.9968,0.9794,0.9902,0.9911,0.9849,0
.9301,0.9874,0.9379,0.9593,0.9677,0.7058,0.7183,0.7328,0.5935,0.5682,0.4136,0.3493,0.4907,0.3738,0.3537,0.4664,0.991,0.
9819,0.9831,0.9826,0.8677,0.9621,0.9674,0.7242,0.9675,0.9927,0.9625,0.9143,0.9795,0.9328,0.9537,0.5348,0.3933,0.7854,0.
9958,0.9769,0.953,0.9846,0.9689,0.971,0.6073,0.4021,0.8726,0.9961,0.9771,0.9585,0.9851,0.9529,0.9697,0.9189,0.8234,0.95
36,0.9861,0.9331,0.8077,0.9006,0.8569,0.8381,0.4744,0.357,0.542,0.9792,0.9569,0.9066,0.9354,0.8085,0.8742,0.896,0.39,0.
707,0.9496,0.7883,0.566,0.6066,0.7035,0.4464,0.4607,0.3065,0.4671,0.999,0.9942,0.989,0.987,0.9928,0.9822,0.9918,0.9764,
0.973,0.9961,0.9775,0.9804,0.9613,0.9791,0.9358,0.985,0.9457,0.9623,0.9724,0.9176,0.758,0.805,0.9386,0.6756,0.8813,0.78
91,0.5881,0.989,0.9712,0.9472,0.9203,0.9508,0.9431,0.8716,0.8862,0.7288,0.8866,0.887,0.7495,0.9167,0.8159,0.8348,0.8431
,0.8035,0.8696,0.9294,0.9068,0.9091,0.9138,0.684,0.8739,0.863,0.8024,0.7791,0.9295,0.9054,0.8399,0.8025,0.6344,0.8292,0
.7621,0.7624,0.7426,0.2367,0.1979,0.186,0.1404,0.1102,0.1557,0.1038,0.1082,0.2334,0.3822,0.1703,0.1682,0.1392,0.2535,0.
1039,0.1784,0.1346,0.2246,0.9876,0.9205,0.9295,0.8751,0.9531,0.8004,0.9567,0.853,0.9144,0.5808,0.3199,0.2418,0.2813,0.2
823,0.2009,0.2859,0.1914,0.3296,0.9987,0.9967,0.9967,0.9967,0.9908,0.9946,0.9905,0.9814,0.9891,0.998,0.9876,0.9765,0.97
74,0.9545,0.9382,0.9656,0.929,0.9377,0.9987,0.9981,0.9703,0.9982,0.9914,0.9936,0.9949,0.9747,0.9889,0.9979,0.9815,0.952
8,0.9874,0.956,0.9711,0.8674,0.7032,0.961,0.9984,0.9986,0.9801,0.9988,0.9815,0.9949,0.996,0.9463,0.9707,0.9881,0.9853,0
.9307,0.9912,0.9072,0.9512,0.9721,0.3181,0.2646,0.9958,0.9788,0.9821,0.9936,0.9318,0.9862,0.7072,0.3826,0.992,0.9971,0.
9803,0.9718,0.9906,0.9203,0.9802,0.9254,0.8506)
> x110 <-
c(0.9715,0.9941,0.9931,0.9659,0.9974,0.9632,0.9837,0.9913,0.9044,0.9476,0.9986,0.9987,0.9911,0.9989,0.9921,0.9973,0.996
8,0.9896,0.9932,0.9978,0.9737,0.9554,0.9428,0.9772,0.9147,0.9465,0.9102,0.9436,0.9843,0.9211,0.8242,0.8624,0.9042,0.804
5,0.8816,0.7821,0.7954,0.8843,0.8348,0.7694,0.7244,0.5356,0.7091,0.6343,0.5641,0.684,0.9973,0.9832,0.986,0.9762,0.9895,
0.9647,0.9844,0.9217,0.9804,0.9764,0.9517,0.9407,0.9451,0.7646,0.9096,0.9004,0.4232,0.8496,0.9855,0.9399,0.8921,0.9628,
0.904,0.9246,0.3872,0.2227,0.7799,0.9984,0.9981,0.9886,0.999,0.9857,0.995,0.996,0.8505,0.8277,0.995,0.9933,0.9576,0.995
2,0.9616,0.9774,0.9849,0.5254,0.5028,0.9936,0.9337,0.8397,0.8567,0.9311,0.7835,0.7122,0.5562,0.7214,0.9995,0.9965,0.987
5,0.9964,0.9925,0.9914,0.9832,0.9398,0.9802,0.9819,0.8612,0.6822,0.7169,0.7969,0.5955,0.6835,0.5011,0.7269,0.9666,0.956
6,0.8012,0.8921,0.6571,0.8565,0.8244,0.4484,0.4893,0.9891,0.991,0.9676,0.995,0.9287,0.9804,0.9877,0.3634,0.2966,0.9974,
0.9982,0.9732,0.9992,0.977,0.9898,0.9944,0.5302,0.7719,0.9987,0.999,0.9946,0.9996,0.9889,0.9968,0.9984,0.7247,0.7517,0.
996,0.9713,0.9235,0.982,0.9491,0.9461,0.5797,0.5024,0.8846,0.9995,0.9991,0.9952,0.9993,0.9959,0.9967,0.9968,0.9674,0.96
95,0.8042,0.8334,0.6717,0.8568,0.5355,0.7418,0.8109,0.1564,0.1437,0.9991,0.9991,0.9926,0.9991,0.9965,0.9969,0.9962,0.98
94,0.9917,0.9974,0.9776,0.9361,0.97,0.9652,0.9129,0.8833,0.8085,0.9204,0.9594,0.9635,0.8699,0.971,0.8137,0.9135,0.9367,
0.2281,0.2131,0.9908,0.9557,0.8515,0.9628,0.9038,0.9242,0.5059,0.3953,0.6562,0.9734,0.928,0.8105,0.9517,0.8138,0.8981,0
.322,0.2492,0.5501,0.9979,0.997,0.9903,0.9985,0.986,0.9927,0.995,0.7562,0.6656,0.9927,0.9843,0.9912,0.9875,0.9042,0.981
3,0.9806,0.7695,0.9819,0.9786,0.9556,0.9562,0.9642,0.738,0.9225,0.9581,0.6527,0.903,0.9987,0.999,0.9889,0.9994,0.9896,0
.9973,0.9979,0.9821,0.9917,0.9982,0.9984,0.9759,0.9988,0.9876,0.9949,0.9965,0.9656,0.9779,0.9994,0.9901,0.9877,0.9952,0

```
.9838,0.9874,0.9698,0.8396,0.9965,0.9994,0.9953,0.9929,0.9953,0.9898,0.9894,0.9875,0.916,0.9938,0.9993,0.9963,0.9945,0.
9971,0.9905,0.9946,0.9905,0.9723,0.9945,0.9977,0.9987)
> x111 <-
c(0.9859,0.9995,0.979,0.9954,0.9979,0.9056,0.9713,0.9923,0.9807,0.9818,0.9889,0.9064,0.967,0.9766,0.5037,0.9192,0.9985,
0.996,0.9965,0.9964,0.9715,0.9937,0.9946,0.9424,0.9805,0.9992,0.9979,0.9988,0.9978,0.9907,0.9971,0.9962,0.973,0.9922,0.
9992,0.9979,0.9981,0.9965,0.9914,0.9962,0.9944,0.9893,0.9931,0.9993,0.9991,0.9956,0.9991,0.9978,0.9979,0.9966,0.995,0.9
946,0.9996,0.9993,0.9974,0.9993,0.9978,0.9987,0.9984,0.9978,0.9977,0.9995,0.9995,0.9968,0.9996,0.9977,0.9992,0.9987,0.9
944,0.9962,0.9962,0.9928,0.991,0.9933,0.9516,0.9847,0.9879,0.7737,0.9501,0.9989,0.9938,0.9762,0.9961,0.9874,0.991,0.792
8,0.6551,0.8992,0.9989,0.9922,0.9856,0.9943,0.9816,0.9875,0.9518,0.8256,0.9764,0.9861,0.9803,0.8569,0.9659,0.9081,0.925
9,0.907,0.645,0.7079,0.9971,0.9971,0.8196,0.9959,0.9738,0.9892,0.986,0.9802,0.9939,0.9925,0.9609,0.644,0.9067,0.9367,0.
764,0.9216,0.9364,0.28,0.9998,0.9982,0.9975,0.9976,0.9988,0.9939,0.9979,0.9903,0.9955,0.9897,0.9647,0.9452,0.9359,0.811
,0.919,0.8963,0.8137,0.9233,0.9999,0.9994,0.998,0.999,0.9994,0.9973,0.999,0.9959,0.9898,0.4929,0.1763,0.841,0.973,0.153
4,0.828,0.1491,0.1177,0.1693,0.9998,0.9986,0.9973,0.9976,0.9938,0.9937,0.9947,0.9881,0.9845,0.9998,0.9998,0.9984,0.9998
,0.9994,0.9997,0.999,0.9994,0.9996,0.9972,0.9915,0.9935,0.9874,0.9798,0.9869,0.98,0.9903,0.9465,0.5078,0.3725,0.4548,0.
3187,0.2558,0.3493,0.2395,0.2743,0.4281,0.9614,0.902,0.7479,0.8354,0.8979,0.7156,0.9305,0.8203,0.4844,0.9634,0.8902,0.8
724,0.8254,0.8353,0.8226,0.6997,0.7451,0.7994,0.9769,0.9476,0.9738,0.9448,0.9167,0.9519,0.9253,0.9343,0.8759,0.6855,0.6
741,0.4223,0.5908,0.4635,0.5272,0.4488,0.1609,0.1778,0.9482,0.9048,0.8027,0.8662,0.6308,0.7837,0.7806,0.3668,0.4735,0.9
542,0.8525,0.6809,0.839,0.7255,0.7285,0.3137,0.191,0.3854,0.9824,0.9725,0.9509,0.9562,0.8233,0.9484,0.9303,0.8003,0.829
9,0.3157,0.1498,0.1226,0.1062,0.1543,0.1025,0.1157,0.1126,0.207,0.9937,0.9908,0.9595,0.9918,0.9551,0.9748,0.976,0.6646,
0.654,0.9741,0.965,0.8039,0.9432,0.887,0.8931,0.8651,0.664,0.7263,0.7518,0.5413,0.3918,0.263,0.3081,0.321,0.1924,0.2089
,0.2526,0.9983,0.9897,0.9865,0.9917,0.9746)
> x112 <-
c(0.9884,0.9775,0.9318,0.9742,0.9237,0.8934,0.8298,0.8474,0.5757,0.8024,0.7719,0.1721,0.5939,0.976,0.9807,0.9329,0.9891
,0.8449,0.9571,0.9784,0.3408,0.2821,0.9974,0.9849,0.973,0.9876,0.9596,0.9775,0.9302,0.8315,0.9703,0.9977,0.9973,0.9865,
0.9982,0.9864,0.9928,0.9931,0.8781,0.8841,0.9979,0.9876,0.9775,0.9824,0.9798,0.9659,0.9746,0.929,0.9674,0.9978,0.9972,0
.9878,0.9977,0.9882,0.9935,0.9953,0.9822,0.9895,0.9943,0.9742,0.985,0.9542,0.9408,0.9497,0.923,0.925,0.958,0.9143,0.652
9,0.5,0.4465,0.754,0.3641,0.6202,0.5507,0.5476,0.1983,0.1084,0.834,0.731,0.1063,0.637,0.633,0.809,0.1406,0.2423,0.1066,
0.679,0.567,0.1154,0.464,0.996,0.1068,0.1504,0.6976,0.7283,0.5571,0.7285,0.5642,0.6844,0.6371,0.3793,0.3433,0.6665,0.53
14,0.476,0.3542,0.3058,0.416,0.2642,0.2995,0.3211,0.5963,0.6337,0.4585,0.6246,0.5089,0.6125,0.532,0.3154,0.3717,0.4575,
0.2706,0.2551,0.1627,0.145,0.2045,0.1187,0.2123,0.2949,0.9965,0.9955,0.9632,0.9952,0.9864,0.9922,0.9892,0.9712,0.9768,0
.2258,0.1512,0.1267,0.1014,0.1077,0.114,0.73,0.833,0.1769,0.9871,0.9816,0.9386,0.984,0.9432,0.9574,0.9685,0.8816,0.8784
,0.9988,0.9981,0.9772,0.9981,0.9931,0.9958,0.9945,0.9765,0.9804,0.9991,0.9982,0.987,0.9983,0.9956,0.9963,0.995,0.9854,0
.9868,0.9988,0.9981,0.9882,0.9982,0.9957,0.997,0.995,0.976,0.9724,0.9992,0.9988,0.9835,0.9984,0.9966,0.9966,0.9942,0.98
25,0.9872,0.9969,0.996,0.9742,0.9962,0.9856,0.9927,0.9897,0.9591,0.9533,0.2845,0.1826,0.1892,0.1382,0.1241,0.1601,0.895
,0.1091,0.2299,0.9984,0.9978,0.9816,0.9975,0.9939,0.9953,0.9924,0.9678,0.9642,0.9784,0.9802,0.9496,0.985,0.9528,0.9741,
0.9711,0.8643,0.7648,0.9789,0.979,0.8853,0.9763,0.9171,0.9629,0.9526,0.911,0.9075,0.3276,0.1971,0.2323,0.1152,0.1484,0.
1567,0.851,0.1257,0.3061,0.7979,0.6702,0.5377,0.599,0.5833,0.5398,0.5219,0.4939,0.4629,0.7779,0.8193,0.5934,0.836,0.609
8,0.768,0.6992,0.4322,0.5134,0.1356,0.1645,0.1074,0.1455,0.933,0.1406,0.1116,0.538,0.704,0.7228,0.6349,0.6145,0.5252,0.
34,0.5335,0.4384,0.4811,0.4425,0.7533,0.8094,0.7149,0.8753,0.666,0.8211,0.7739,0.4041,0.5133,0.8882,0.8074,0.8248,0.679
7,0.4617,0.745,0.6461,0.6217)
> x113 <-
c(0.7344,0.9879,0.9683,0.9318,0.9629,0.9551,0.9318,0.9205,0.7252,0.6993,0.9994,0.9994,0.9967,0.9996,0.9975,0.9983,0.998
4,0.9895,0.984,0.9993,0.992,0.9842,0.9893,0.9938,0.9736,0.9185,0.8088,0.9714,0.9996,0.9958,0.996,0.9967,0.9957,0.9919,0
.9466,0.8676,0.9935,0.9999,0.9995,0.9991,0.9994,0.9993,0.9986,0.9977,0.991,0.996,0.9994,0.9985,0.9978,0.9971,0.9948,0.9
971,0.993,0.9712,0.9846,0.9987,0.9898,0.9407,0.9565,0.9857,0.8958,0.9608,0.9227,0.8931,0.9985,0.989,0.9429,0.9694,0.988
3,0.9138,0.9302,0.8712,0.8671,0.989,0.967,0.916,0.9038,0.8912,0.9078,0.8323,0.6826,0.7587,0.9685,0.8397,0.6866,0.4907,0
.7687,0.391,0.8025,0.5986,0.8245,0.9991,0.994,0.992,0.9917,0.9923,0.9811,0.9863,0.9224,0.9877,0.9965,0.9855,0.9648,0.98
78,0.9679,0.9716,0.6747,0.5479,0.9265,0.991,0.9854,0.9771,0.9844,0.8879,0.9714,0.9748,0.6009,0.8786,0.9909,0.9922,0.950
1,0.994,0.9329,0.9772,0.9803,0.5027,0.5551,0.9879,0.9896,0.9418,0.9923,0.9324,0.964,0.9755,0.4608,0.5693,0.997,0.9834,0
.9503,0.9833,0.9764,0.9495,0.9339,0.8789,0.9583,0.8802,0.8574,0.6702,0.8229,0.6717,0.7337,0.7283,0.2915,0.355,0.9895,0.
97,0.9777,0.958,0.9131,0.9561,0.9345,0.8183,0.9021,0.9744,0.7974,0.7759,0.8543,0.806,0.7569,0.7445,0.6818,0.7977,0.9958
,0.9808,0.94,0.9836,0.96,0.9578,0.6904,0.502,0.9004,0.9977,0.9881,0.9741,0.9893,0.9749,0.9766,0.9167,0.7785,0.9628,0.99
79,0.9959,0.9978,0.9965,0.9724,0.9949,0.9932,0.9416,0.9921,0.9996,0.996,0.9963,0.9949,0.9939,0.989,0.9874,0.9182,0.9971
,0.9647,0.8407,0.7389,0.8466,0.6548,0.7356,0.415,0.3187,0.7699,0.9975,0.9968,0.9762,0.9975,0.9807,0.9916,0.993,0.9768,0
.986,0.9993,0.9988,0.9895,0.999,0.9924,0.9968,0.9971,0.9451,0.9414,0.9948,0.9688,0.9156,0.9802,0.8823,0.9457,0.7587,0.6
525,0.9445,0.9726,0.8549,0.7699,0.9015,0.7361,0.8441,0.2726,0.1959,0.7495,0.9608,0.8386,0.7716,0.8788,0.8008,0.8155,0.2
33,0.1676,0.6787,0.9145,0.6702,0.4947,0.558,0.6025,0.4567,0.3898,0.2683,0.4749,0.9673,0.9501,0.8788,0.9235,0.6734,0.879
7,0.8586,0.3948,0.7575,0.9956,0.9961,0.981,0.9972,0.9832,0.9919,0.9884,0.9254,0.9578,0.9047,0.6796,0.4225,0.6521,0.6459
,0.4984,0.3165,0.2295,0.3909,0.6732,0.5655)
> x114 <-
c(0.4821,0.4053,0.2924,0.4489,0.3184,0.2646,0.3786,0.9359,0.9081,0.856,0.8411,0.6694,0.8436,0.7918,0.4865,0.5836,0.9926
,0.9854,0.9807,0.978,0.8994,0.9614,0.9568,0.8106,0.955,0.9909,0.952,0.8648,0.9493,0.9279,0.8844,0.6545,0.5075,0.7351,0.
9858,0.9203,0.8432,0.9366,0.915,0.8936,0.4377,0.2866,0.7649,0.9981,0.9908,0.9794,0.9916,0.9792,0.982,0.967,0.9284,0.977
8,0.9832,0.9119,0.7456,0.804,0.8514,0.6964,0.4469,0.3381,0.4956,0.9756,0.8982,0.6191,0.6696,0.7863,0.4774,0.6953,0.5099
,0.4983,0.9984,0.9905,0.9826,0.9743,0.9885,0.9545,0.9841,0.9581,0.965,0.9934,0.9655,0.9658,0.9452,0.9656,0.8983,0.9738,
0.9107,0.9375)
> x1 <- c(x10,x11,x12,x13,x14,x15,x16,x17,x18,x19,x110,x111,x112,x113,x114)
> x20 <-
c(0.1146,0.5212,0.7415,0.8922,0.1298,0.3216,0.722,0.9431,0.992,0.754,0.706,0.9383,0.9922,0.9508,0.5097,0.876,0.5875,0.9
669,0.9284,0.9856,0.6177,0.7473,0.9803,0.9631,0.9964,0.7994,0.373,0.9551,0.8447,0.9517,0.9266,0.4101,0.996,0.7859,0.560
4,0.9763,0.9313,0.8665,0.7874,0.9509,0.9544,0.9823,0.6913,0.9832,0.9373,0.8187,0.9452,0.815,0.6737,0.1818,0.738,0.9764,
0.989,0.9827,0.7853,0.1918,0.9821,0.9977,0.9081,0.8032,0.8784,0.9852,0.8474,0.7121,0.5031,0.9774,0.1821,0.1075,0.9973,0
.9991,0.9592,0.998,0.7486,0.8545,0.5481,0.989,0.1814,0.5378,0.7428,0.662,0.6972,0.1142,0.5205,0.8045,0.8205,0.9952,0.92
17,0.9864,0.5159,0.5095,0.7303,0.6391,0.9711,0.4165,0.1529,0.753,0.1123,0.8404,0.9438,0.8997,0.1429,0.9253,0.9356,0.135
5,0.8827,0.8118,0.2312,0.8699,0.9795,0.1978,0.4321,0.2405,0.2192,0.4704,0.2662,0.2334,0.6528,0.9322,0.9935,0.9931,0.998
1,0.959,0.9268,0.9269,0.4624,0.5964,0.9923,0.6667,0.8838,0.9936,0.5201,0.9042,0.9187,0.7367,0.9853,0.7185,0.8597,0.9933
,0.979,0.8889,0.877,0.8057,0.9826,0.8594,0.9629,0.9397,0.8342,0.8055,0.8575,0.6669,0.487,0.9557,0.9604,0.728,0.9903,0.8
676,0.6859,0.4376,0.9921,0.9816,0.8066,0.9796,0.754,0.1165,0.774,0.9144,0.9721,0.4575,0.802,0.9434,0.2406,0.4188,0.9397
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,0.7372,0.8427,0.3907,0.5608,0.9503,0.9341,0.9879,0.1544,0.8018,0.5034,0.2221,0.5923,0.6887,0.1761,0.9861,0.9454,0.806,
0.8489,0.7885,0.8874,0.9092,0.5295,0.9173,0.2792,0.2303,0.2747,0.6127,0.2656,0.3826,0.2745,0.6824,0.9607,0.9652,0.9672,
0.631,0.6954,0.9034,0.8744,0.9858,0.6644,0.309,0.7186,0.2294,0.9418,0.9256,0.1718,0.1963,0.825,0.9955,0.8484,0.9976,0.8
666,0.993,0.4062,0.5427,0.9912,0.1924,0.2427,0.651,0.2631,0.831,0.3857,0.2717,0.9432,0.4914,0.5026,0.9738,0.756,0.9241,
0.113,0.2188,0.755,0.854,0.3377,0.3026,0.8786,0.6424,0.7377,0.886,0.7991,0.865,0.8628,0.917,0.891,0.8692,0.1276,0.7595,
0.9754,0.4472,0.1489,0.1978,0.128,0.277,0.1064,0.1203,0.1863,0.4104,0.3261,0.4928,0.752,0.9795,0.9664,0.9874,0.91,0.623
5,0.6645,0.6713,0.1965,0.3631,0.5282,0.8114,0.2852,0.501,0.5852,0.9599,0.2194,0.3152,0.6245,0.9496,0.5516,0.4353,0.9642
,0.7695,0.5537,0.5551,0.8648,0.9275)
> x21 <-
c(0.8323,0.5434,0.8984,0.7948,0.6261,0.735,0.5379,0.2665,0.7357,0.8707,0.8955,0.9091,0.7165,0.1612,0.347,0.972,0.9602,0
.7464,0.7106,0.2174,0.8015,0.8128,0.8,0.943,0.8323,0.1369,0.9744,0.9037,0.4436,0.8934,0.2556,0.5313,0.9413,0.9334,0.545
9,0.6141,0.8573,0.6971,0.6358,0.9652,0.1683,0.8147,0.5704,0.5374,0.6681,0.9787,0.4658,0.369,0.5784,0.7887,0.8312,0.8151
,0.9039,0.2035,0.8515,0.8479,0.3769,0.783,0.7518,0.7107,0.3946,0.5436,0.49,0.245,0.9545,0.9802,0.9867,0.7441,0.1582,0.8
855,0.9318,0.9899,0.878,0.6823,0.7455,0.4507,0.9644,0.963,0.3595,0.1492,0.7173,0.9954,0.6326,0.9982,0.434,0.9749,0.9012
,0.9924,0.1464,0.7735,0.3231,0.8582,0.1205,0.3051,0.6071,0.789,0.761,0.4577,0.2674,0.136,0.9608,0.791,0.4268,0.9329,0.6
788,0.9467,0.7994,0.8871,0.3428,0.647,0.489,0.1733,0.2559,0.1429,0.1635,0.4036,0.589,0.3491,0.5107,0.7049,0.7217,0.6854
,0.5781,0.633,0.6748,0.4171,0.1682,0.67,0.1335,0.1769,0.721,0.4883,0.1803,0.504,0.4393,0.869,0.9512,0.982,0.9983,0.9162
,0.9063,0.8911,0.2773,0.4765,0.9766,0.9241,0.5134,0.4313,0.5606,0.9153,0.189,0.393,0.4736,0.8907,0.9427,0.9478,0.9859,0
.5263,0.583,0.5285,0.7951,0.5406,0.5811,0.3213,0.2482,0.7323,0.3326,0.2433,0.4084,0.8379,0.7985,0.7177,0.9653,0.6453,0.
4876,0.9554,0.9311)
> x2 <- c(x20,x21)
> ks.test(x1, x2, alternative = "two.sided", exact=FALSE)

    Asymptotic two-sample Kolmogorov-Smirnov test

data:  x1 and x2
D = 0.39972, p-value < 2.2e-16
alternative hypothesis: two-sided

Warning message:
In ks.test.default(x1, x2, alternative = "two.sided", exact = FALSE) :
  p-value will be approximate in the presence of ties
> # Create data frames for plotting
> df_qty <- data.frame(AlphaMissenseScore = x1, Group = " Other Polar")
> df_other <- data.frame(AlphaMissenseScore = x2, Group = " QTY-code")
> df <- rbind(df_other, df_qty)
>
> # Density Plot
> ggplot(df, aes(x = AlphaMissenseScore, color = Group)) +
+   geom_density() +
+   labs(title = "Density Plot of AlphaMissense Scores",
+        x = "AlphaMissense Score",
+        y = "Density",
+        color = "Group") +
+   theme_minimal()
>
>
```