FA

```
#####Importing the Dataset#########
emp_churn <- read.csv("C:/Users/Amisha Sancheti/Desktop/MITA sem2/Multivariate Analysis/Project/WA_Fn-U
```

```
# Factor Analysis
# Computing Correlation Matrix
emp_churn$Attrition <-as.integer(as.factor(emp_churn$Attrition))
emp_churn$BusinessTravel <-as.integer(as.factor(emp_churn$BusinessTravel))
emp_churn$Department <-as.integer(as.factor(emp_churn$Department))
emp_churn$EducationField <-as.integer(as.factor(emp_churn$EducationField))
emp_churn$Gender <-as.integer(as.factor(emp_churn$Gender))
emp_churn$JobRole <-as.integer(as.factor(emp_churn$JobRole))
emp_churn$MaritalStatus <-as.integer(as.factor(emp_churn$MaritalStatus))
emp_churn$Over18 <-as.integer(as.factor(emp_churn$Over18))
emp_churn$OverTime <-as.integer(as.factor(emp_churn$OverTime))
```

```
# Factor Analysis
# Computing Correlation Matrix
cor.data <- cor(emp_churn)
```

```
## Warning in cor(emp_churn): the standard deviation is zero
```

```
cor.data
```

```
##                              ï..Age      Attrition BusinessTravel
## ï..Age                   1.000000000 -1.592050e-01   2.475143e-02
## Attrition               -0.159205007  1.000000e+00   7.377695e-05
## BusinessTravel           0.024751434  7.377695e-05   1.000000e+00
## DailyRate                0.010660943 -5.665199e-02  -4.086034e-03
## Department              -0.031882283  6.399060e-02  -9.043571e-03
## DistanceFromHome        -0.001686120  7.792358e-02  -2.446944e-02
## Education                0.208033731 -3.137282e-02   7.569331e-04
## EducationField          -0.040872848  2.684555e-02   2.372383e-02
## EmployeeCount                     NA            NA             NA
## EmployeeNumber          -0.010145467 -1.057724e-02  -1.557782e-02
## EnvironmentSatisfaction  0.010146428 -1.033690e-01   4.174405e-03
## Gender                  -0.036310550  2.945325e-02  -3.298096e-02
## HourlyRate               0.024286543 -6.845550e-03   2.652819e-02
## JobInvolvement           0.029819959 -1.300160e-01   3.906150e-02
## JobLevel                 0.509604228 -1.691048e-01   1.931128e-02
## JobRole                 -0.122426677  6.715150e-02   2.724411e-03
## JobSatisfaction         -0.004891877 -1.034811e-01  -3.396215e-02
## MaritalStatus           -0.095028910  1.620702e-01   2.400051e-02
## MonthlyIncome            0.497854567 -1.598396e-01   3.431895e-02
## MonthlyRate              0.028051167  1.517021e-02  -1.410709e-02
```

```
## NumCompaniesWorked         0.299634758  4.349374e-02  2.087475e-02
## Over18                              NA            NA            NA
## OverTime                   0.028062357  2.461180e-01  1.654304e-02
## PercentSalaryHike          0.003633585 -1.347820e-02 -2.937705e-02
## PerformanceRating          0.001903896  2.888752e-03 -2.634113e-02
## RelationshipSatisfaction   0.053534720 -4.587228e-02 -3.598569e-02
## StandardHours                      NA            NA            NA
## StockOptionLevel           0.037509712 -1.371449e-01 -1.672687e-02
## TotalWorkingYears          0.680380536 -1.710632e-01  3.422562e-02
## TrainingTimesLastYear     -0.019620819 -5.947780e-02  1.524003e-02
## WorkLifeBalance           -0.021490028 -6.393905e-02 -1.125582e-02
## YearsAtCompany             0.311308770 -1.343922e-01 -1.457501e-02
## YearsInCurrentRole         0.212901056 -1.605450e-01 -1.149745e-02
## YearsSinceLastPromotion    0.216513368 -3.301878e-02 -3.259115e-02
## YearsWithCurrManager       0.202088602 -1.561993e-01 -2.263573e-02
##                              DailyRate    Department DistanceFromHome
## ï..Age                     0.0106609426 -0.031882283     -0.001686120
## Attrition                 -0.0566519919  0.063990596      0.077923583
## BusinessTravel            -0.0040860339 -0.009043571     -0.024469442
## DailyRate                  1.0000000000  0.007108714     -0.004985337
## Department                 0.0071087137  1.000000000      0.017224804
## DistanceFromHome          -0.0049853374  0.017224804      1.000000000
## Education                 -0.0168064332  0.007996422      0.021041826
## EducationField             0.0377092287  0.013719502      0.002013453
## EmployeeCount                        NA           NA               NA
## EmployeeNumber            -0.0509904337 -0.010895001      0.032916407
## EnvironmentSatisfaction    0.0183548543 -0.019395271     -0.016075327
## Gender                    -0.0117161379 -0.041583290     -0.001850528
## HourlyRate                 0.0233814215 -0.004143708      0.031130586
## JobInvolvement             0.0461348740 -0.024586062      0.008783280
## JobLevel                   0.0029663349  0.101963106      0.005302731
## JobRole                   -0.0094722010  0.662431198     -0.001014963
## JobSatisfaction            0.0305710078  0.021000879     -0.003668839
## MaritalStatus             -0.0695856414  0.056073435     -0.014437031
## MonthlyIncome              0.0077070589  0.053129698     -0.017014445
## MonthlyRate               -0.0321816015  0.023642072      0.027472864
## NumCompaniesWorked         0.0381534343 -0.035881612     -0.029250804
## Over18                               NA           NA               NA
## OverTime                   0.0091349699  0.007480968      0.025513635
## PercentSalaryHike          0.0227036775 -0.007840161      0.040235377
## PerformanceRating          0.0004732963 -0.024603543      0.027109618
## RelationshipSatisfaction   0.0078460310 -0.022414425      0.006557475
## StandardHours                        NA           NA               NA
## StockOptionLevel           0.0421427964 -0.012192914      0.044871999
## TotalWorkingYears          0.0145147387 -0.015761512      0.004628426
## TrainingTimesLastYear      0.0024525427  0.036875066     -0.036942234
## WorkLifeBalance           -0.0378480510  0.026382525     -0.026556004
## YearsAtCompany            -0.0340547676  0.022920442      0.009507720
## YearsInCurrentRole         0.0099320150  0.056315447      0.018844999
## YearsSinceLastPromotion   -0.0332289848  0.040060967      0.010028836
## YearsWithCurrManager      -0.0263631782  0.034282473      0.014406048
##                              Education EducationField EmployeeCount
## ï..Age                     0.2080337310   -0.040872848            NA
## Attrition                 -0.0313728196    0.026845546            NA
```

```
## BusinessTravel              0.0007569331    0.023723829            NA
## DailyRate                  -0.0168064332    0.037709229            NA
## Department                  0.0079964220    0.013719502            NA
## DistanceFromHome            0.0210418256    0.002013453            NA
## Education                   1.0000000000   -0.039592150            NA
## EducationField             -0.0395921504    1.000000000            NA
## EmployeeCount                         NA             NA             1
## EmployeeNumber              0.0420700930   -0.002516478            NA
## EnvironmentSatisfaction    -0.0271283133    0.043163491            NA
## Gender                     -0.0165468274   -0.002504019            NA
## HourlyRate                  0.0167748289   -0.021941219            NA
## JobInvolvement              0.0424376343   -0.002655278            NA
## JobLevel                    0.1015888862   -0.044932672            NA
## JobRole                     0.0042357606    0.015598782            NA
## JobSatisfaction            -0.0112961167   -0.034400814            NA
## MaritalStatus               0.0040526543    0.014419541            NA
## MonthlyIncome               0.0949606770   -0.041070150            NA
## MonthlyRate                -0.0260841972   -0.027181682            NA
## NumCompaniesWorked          0.1263165602   -0.008663043            NA
## Over18                                NA             NA            NA
## OverTime                   -0.0203217674    0.002258600            NA
## PercentSalaryHike          -0.0111109409   -0.011213502            NA
## PerformanceRating          -0.0245387912   -0.005614213            NA
## RelationshipSatisfaction   -0.0091183767   -0.004377711            NA
## StandardHours                         NA             NA            NA
## StockOptionLevel            0.0184222202   -0.016184713            NA
## TotalWorkingYears           0.1482796965   -0.027847626            NA
## TrainingTimesLastYear      -0.0251002411    0.049195353            NA
## WorkLifeBalance             0.0098191893    0.041191131            NA
## YearsAtCompany              0.0691136960   -0.018692101            NA
## YearsInCurrentRole          0.0602355541   -0.010506203            NA
## YearsSinceLastPromotion     0.0542543336    0.002325656            NA
## YearsWithCurrManager        0.0690653783   -0.004129695            NA
##                            EmployeeNumber EnvironmentSatisfaction        Gender
## ï..Age                        -0.010145467             0.0101464279 -0.0363105501
## Attrition                     -0.010577243            -0.1033689783  0.0294532532
## BusinessTravel                -0.015577823             0.0041744049 -0.0329809563
## DailyRate                     -0.050990434             0.0183548543 -0.0117161379
## Department                    -0.010895001            -0.0193952706 -0.0415832902
## DistanceFromHome               0.032916407            -0.0160753270 -0.0018505280
## Education                      0.042070093            -0.0271283133 -0.0165468274
## EducationField                -0.002516478             0.0431634907 -0.0025040188
## EmployeeCount                           NA                       NA            NA
## EmployeeNumber                 1.000000000             0.0176208025  0.0225560514
## EnvironmentSatisfaction        0.017620802             1.0000000000  0.0005083139
## Gender                         0.022556051             0.0005083139  1.0000000000
## HourlyRate                     0.035179212            -0.0498569562 -0.0004782971
## JobInvolvement                -0.006887923            -0.0082775982  0.0179597554
## JobLevel                      -0.018519194             0.0012116994 -0.0394031027
## JobRole                       -0.010336453            -0.0173213826 -0.0397229000
## JobSatisfaction               -0.046246735            -0.0067843526  0.0332516974
## MaritalStatus                 -0.008155090            -0.0035934733 -0.0471825924
## MonthlyIncome                 -0.014828516            -0.0062590878 -0.0318584918
## MonthlyRate                    0.012648229             0.0375996229 -0.0414822051
```

```
## NumCompaniesWorked          -0.001251032              0.0125943232 -0.0391474496
## Over18                                NA                        NA            NA
## OverTime                    -0.024037287              0.0701317268 -0.0419243480
## PercentSalaryHike           -0.012943996             -0.0317011952  0.0027326475
## PerformanceRating           -0.020358825             -0.0295479523 -0.0138590184
## RelationshipSatisfaction    -0.069861411              0.0076653835  0.0228683700
## StandardHours                        NA                        NA            NA
## StockOptionLevel             0.062226693              0.0034321578  0.0127157138
## TotalWorkingYears           -0.014365198             -0.0026930704 -0.0468809395
## TrainingTimesLastYear        0.023603170             -0.0193593083 -0.0387867355
## WorkLifeBalance              0.010308641              0.0276272955 -0.0027526788
## YearsAtCompany              -0.011240464              0.0014575492 -0.0297470859
## YearsInCurrentRole          -0.008416312              0.0180074601 -0.0414827285
## YearsSinceLastPromotion     -0.009019064              0.0161936056 -0.0269845772
## YearsWithCurrManager        -0.009196645             -0.0049987226 -0.0305989093
##                             HourlyRate JobInvolvement      JobLevel
## ï..Age                       0.0242865426   0.029819959  0.5096042284
## Attrition                   -0.0068455496  -0.130015957 -0.1691047509
## BusinessTravel               0.0265281862   0.039061501  0.0193112821
## DailyRate                    0.0233814215   0.046134874  0.0029663349
## Department                  -0.0041437079  -0.024586062  0.1019631058
## DistanceFromHome             0.0311305856   0.008783280  0.0053027306
## Education                    0.0167748289   0.042437634  0.1015888862
## EducationField              -0.0219412191  -0.002655278 -0.0449326718
## EmployeeCount                        NA            NA            NA
## EmployeeNumber               0.0351792124  -0.006887923 -0.0185191940
## EnvironmentSatisfaction     -0.0498569562  -0.008277598  0.0012116994
## Gender                      -0.0004782971   0.017959755 -0.0394031027
## HourlyRate                   1.0000000000   0.042860641 -0.0278534864
## JobInvolvement               0.0428606410   1.000000000 -0.0126298827
## JobLevel                    -0.0278534864  -0.012629883  1.0000000000
## JobRole                     -0.0188607988   0.006616347 -0.0854574339
## JobSatisfaction             -0.0713346244  -0.021475910 -0.0019437080
## MaritalStatus               -0.0178605059  -0.038497019 -0.0767694781
## MonthlyIncome               -0.0157943044  -0.015271491  0.9502999135
## MonthlyRate                 -0.0152967496  -0.016322079  0.0395629510
## NumCompaniesWorked           0.0221568834   0.015012413  0.1425011238
## Over18                               NA            NA            NA
## OverTime                    -0.0077819744  -0.003506711  0.0005440478
## PercentSalaryHike           -0.0090619863  -0.017204572 -0.0347304923
## PerformanceRating           -0.0021716974  -0.029071333 -0.0212220821
## RelationshipSatisfaction     0.0013304528   0.034296821  0.0216415105
## StandardHours                        NA            NA            NA
## StockOptionLevel             0.0502633991   0.021522640  0.0139839105
## TotalWorkingYears           -0.0023336818  -0.005533182  0.7822078045
## TrainingTimesLastYear       -0.0085476852  -0.015337826 -0.0181905502
## WorkLifeBalance             -0.0046072338  -0.014616593  0.0378177456
## YearsAtCompany              -0.0195816162  -0.021355427  0.5347386874
## YearsInCurrentRole          -0.0241062202   0.008716963  0.3894467329
## YearsSinceLastPromotion     -0.0267155861  -0.024184292  0.3538853470
## YearsWithCurrManager        -0.0201232002   0.025975808  0.3752806078
##                                  JobRole JobSatisfaction MaritalStatus
## ï..Age                      -0.1224266770  -0.0048918771   -0.095028910
## Attrition                    0.0671514950  -0.1034811261    0.162070235
```

```
## BusinessTravel            0.0027244109  -0.0339621513   0.024000511
## DailyRate                -0.0094722010   0.0305710078  -0.069585641
## Department                0.6624311978   0.0210008789   0.056073435
## DistanceFromHome         -0.0010149627  -0.0036688392  -0.014437031
## Education                 0.0042357606  -0.0112961167   0.004052654
## EducationField            0.0155987817  -0.0344008137   0.014419541
## EmployeeCount                       NA             NA             NA
## EmployeeNumber           -0.0103364528  -0.0462467349  -0.008155090
## EnvironmentSatisfaction  -0.0173213826  -0.0067843526  -0.003593473
## Gender                   -0.0397229000   0.0332516974  -0.047182592
## HourlyRate               -0.0188607988  -0.0713346244  -0.017860506
## JobInvolvement            0.0066163469  -0.0214759103  -0.038497019
## JobLevel                 -0.0854574339  -0.0019437080  -0.076769478
## JobRole                   1.0000000000   0.0175367910   0.067956618
## JobSatisfaction           0.0175367910   1.0000000000   0.024359953
## MaritalStatus             0.0679566176   0.0243599530   1.000000000
## MonthlyIncome            -0.0939511024  -0.0071567424  -0.075449582
## MonthlyRate               0.0052904311   0.0006439169   0.023937427
## NumCompaniesWorked       -0.0563675084  -0.0556994260  -0.035505389
## Over18                              NA             NA             NA
## OverTime                  0.0406623662   0.0245394811  -0.017521382
## PercentSalaryHike        -0.0008476254   0.0200020394   0.012492329
## PerformanceRating        -0.0242333242   0.0022971971   0.005206626
## RelationshipSatisfaction -0.0202176542  -0.0124535932   0.022549071
## StandardHours                       NA             NA             NA
## StockOptionLevel         -0.0191705902   0.0106902261  -0.662577292
## TotalWorkingYears        -0.1454391373  -0.0201850727  -0.077886352
## TrainingTimesLastYear     0.0013422953  -0.0057793350   0.010628607
## WorkLifeBalance           0.0277640661  -0.0194587102   0.014708294
## YearsAtCompany           -0.0836566610  -0.0038026279  -0.059986004
## YearsInCurrentRole       -0.0283539799  -0.0023047852  -0.065821900
## YearsSinceLastPromotion  -0.0463843592  -0.0182135678  -0.030915079
## YearsWithCurrManager     -0.0411496252  -0.0276562139  -0.038570074
##                          MonthlyIncome    MonthlyRate NumCompaniesWorked Over18
## ï..Age                     0.497854567   0.0280511671        0.299634758     NA
## Attrition                 -0.159839582   0.0151702125        0.043493739     NA
## BusinessTravel             0.034318946  -0.0141070884        0.020874752     NA
## DailyRate                  0.007707059  -0.0321816015        0.038153434     NA
## Department                 0.053129698   0.0236420721       -0.035881612     NA
## DistanceFromHome          -0.017014445   0.0274728635       -0.029250804     NA
## Education                  0.094960677  -0.0260841972        0.126316560     NA
## EducationField            -0.041070150  -0.0271816823       -0.008663043     NA
## EmployeeCount                       NA             NA                 NA     NA
## EmployeeNumber            -0.014828516   0.0126482292       -0.001251032     NA
## EnvironmentSatisfaction   -0.006259088   0.0375996229        0.012594323     NA
## Gender                    -0.031858492  -0.0414822051       -0.039147450     NA
## HourlyRate                -0.015794304  -0.0152967496        0.022156883     NA
## JobInvolvement            -0.015271491  -0.0163220791        0.015012413     NA
## JobLevel                   0.950299913   0.0395629510        0.142501124     NA
## JobRole                   -0.093951102   0.0052904311       -0.056367508     NA
## JobSatisfaction           -0.007156742   0.0006439169       -0.055699426     NA
## MaritalStatus             -0.075449582   0.0239374266       -0.035505389     NA
## MonthlyIncome              1.000000000   0.0348136261        0.149515216     NA
## MonthlyRate                0.034813626   1.0000000000        0.017521353     NA
```

```
## NumCompaniesWorked          0.149515216  0.0175213534       1.000000000   NA
## Over18                               NA            NA                NA    1
## OverTime                     0.006089285  0.0214311446      -0.020785821   NA
## PercentSalaryHike           -0.027268586 -0.0064293459      -0.010238309   NA
## PerformanceRating           -0.017120138 -0.0098114285      -0.014094873   NA
## RelationshipSatisfaction     0.025873436 -0.0040853293       0.052733049   NA
## StandardHours                          NA            NA                NA   NA
## StockOptionLevel             0.005407677 -0.0343228302       0.030075475   NA
## TotalWorkingYears            0.772893246  0.0264424712       0.237638590   NA
## TrainingTimesLastYear       -0.021736277  0.0014668806      -0.066054072   NA
## WorkLifeBalance              0.030683082  0.0079631575      -0.008365685   NA
## YearsAtCompany               0.514284826 -0.0236551067      -0.118421340   NA
## YearsInCurrentRole           0.363817667 -0.0128148744      -0.090753934   NA
## YearsSinceLastPromotion      0.344977638  0.0015667995      -0.036813892   NA
## YearsWithCurrManager         0.344078883 -0.0367459053      -0.110319155   NA
##                                 OverTime PercentSalaryHike PerformanceRating
## ï..Age                        0.0280623571      0.0036335849      0.0019038955
## Attrition                     0.2461179942     -0.0134782021      0.0028887517
## BusinessTravel                0.0165430420     -0.0293770543     -0.0263411345
## DailyRate                     0.0091349699      0.0227036775      0.0004732963
## Department                    0.0074809676     -0.0078401613     -0.0246035428
## DistanceFromHome              0.0255136349      0.0402353775      0.0271096185
## Education                    -0.0203217674     -0.0111109409     -0.0245387912
## EducationField                0.0022585999     -0.0112135020     -0.0056142134
## EmployeeCount                           NA                NA                NA
## EmployeeNumber               -0.0240372868     -0.0129439955     -0.0203588251
## EnvironmentSatisfaction       0.0701317268     -0.0317011952     -0.0295479523
## Gender                       -0.0419243480      0.0027326475     -0.0138590184
## HourlyRate                   -0.0077819744     -0.0090619863     -0.0021716974
## JobInvolvement               -0.0035067106     -0.0172045722     -0.0290713334
## JobLevel                      0.0005440478     -0.0347304923     -0.0212220821
## JobRole                       0.0406623662     -0.0008476254     -0.0242333242
## JobSatisfaction               0.0245394811      0.0200020394      0.0022971971
## MaritalStatus                -0.0175213816      0.0124923288      0.0052066260
## MonthlyIncome                 0.0060892854     -0.0272685864     -0.0171201382
## MonthlyRate                   0.0214311446     -0.0064293459     -0.0098114285
## NumCompaniesWorked           -0.0207858214     -0.0102383094     -0.0140948728
## Over18                                  NA                NA                NA
## OverTime                      1.0000000000     -0.0054328267      0.0043691201
## PercentSalaryHike            -0.0054328267      1.0000000000      0.7735499964
## PerformanceRating             0.0043691201      0.7735499964      1.0000000000
## RelationshipSatisfaction      0.0484928029     -0.0404900811     -0.0313514554
## StandardHours                           NA                NA                NA
## StockOptionLevel             -0.0004486707      0.0075277478      0.0035064716
## TotalWorkingYears             0.0127542663     -0.0206084876      0.0067436679
## TrainingTimesLastYear        -0.0791133716     -0.0052210124     -0.0155788817
## WorkLifeBalance              -0.0270918785     -0.0032796360      0.0025723613
## YearsAtCompany               -0.0116871205     -0.0359912624      0.0034351261
## YearsInCurrentRole           -0.0297580089     -0.0015200265      0.0349862604
## YearsSinceLastPromotion      -0.0122388226     -0.0221543126      0.0178960661
## YearsWithCurrManager         -0.0415859987     -0.0119852485      0.0228271689
##                              RelationshipSatisfaction StandardHours
## ï..Age                                     0.0535347197            NA
## Attrition                                 -0.0458722789            NA
```

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```
## BusinessTravel                -0.0359856926              NA
## DailyRate                       0.0078460310              NA
## Department                     -0.0224144254              NA
## DistanceFromHome                0.0065574746              NA
## Education                      -0.0091183767              NA
## EducationField                 -0.0043777110              NA
## EmployeeCount                             NA              NA
## EmployeeNumber                 -0.0698614115              NA
## EnvironmentSatisfaction         0.0076653835              NA
## Gender                          0.0228683700              NA
## HourlyRate                      0.0013304528              NA
## JobInvolvement                  0.0342968206              NA
## JobLevel                        0.0216415105              NA
## JobRole                        -0.0202176542              NA
## JobSatisfaction                -0.0124535932              NA
## MaritalStatus                   0.0225490707              NA
## MonthlyIncome                   0.0258734361              NA
## MonthlyRate                    -0.0040853293              NA
## NumCompaniesWorked              0.0527330486              NA
## Over18                                    NA              NA
## OverTime                        0.0484928029              NA
## PercentSalaryHike              -0.0404900811              NA
## PerformanceRating              -0.0313514554              NA
## RelationshipSatisfaction        1.0000000000              NA
## StandardHours                             NA               1
## StockOptionLevel               -0.0459524907              NA
## TotalWorkingYears               0.0240542918              NA
## TrainingTimesLastYear           0.0024965264              NA
## WorkLifeBalance                 0.0196044057              NA
## YearsAtCompany                  0.0193667869              NA
## YearsInCurrentRole             -0.0151229149              NA
## YearsSinceLastPromotion         0.0334925021              NA
## YearsWithCurrManager           -0.0008674968              NA
##                          StockOptionLevel TotalWorkingYears
## ï..Age                        0.0375097124       0.680380536
## Attrition                    -0.1371449189      -0.171063246
## BusinessTravel               -0.0167268706       0.034225622
## DailyRate                     0.0421427964       0.014514739
## Department                   -0.0121929144      -0.015761512
## DistanceFromHome              0.0448719989       0.004628426
## Education                     0.0184222202       0.148279697
## EducationField               -0.0161847132      -0.027847626
## EmployeeCount                           NA                NA
## EmployeeNumber                0.0622266925      -0.014365198
## EnvironmentSatisfaction       0.0034321578      -0.002693070
## Gender                        0.0127157138      -0.046880939
## HourlyRate                    0.0502633991      -0.002333682
## JobInvolvement                0.0215226404      -0.005533182
## JobLevel                      0.0139839105       0.782207805
## JobRole                      -0.0191705902      -0.145439137
## JobSatisfaction               0.0106902261      -0.020185073
## MaritalStatus                -0.6625772917      -0.077886352
## MonthlyIncome                 0.0054076767       0.772893246
## MonthlyRate                  -0.0343228302       0.026442471
```
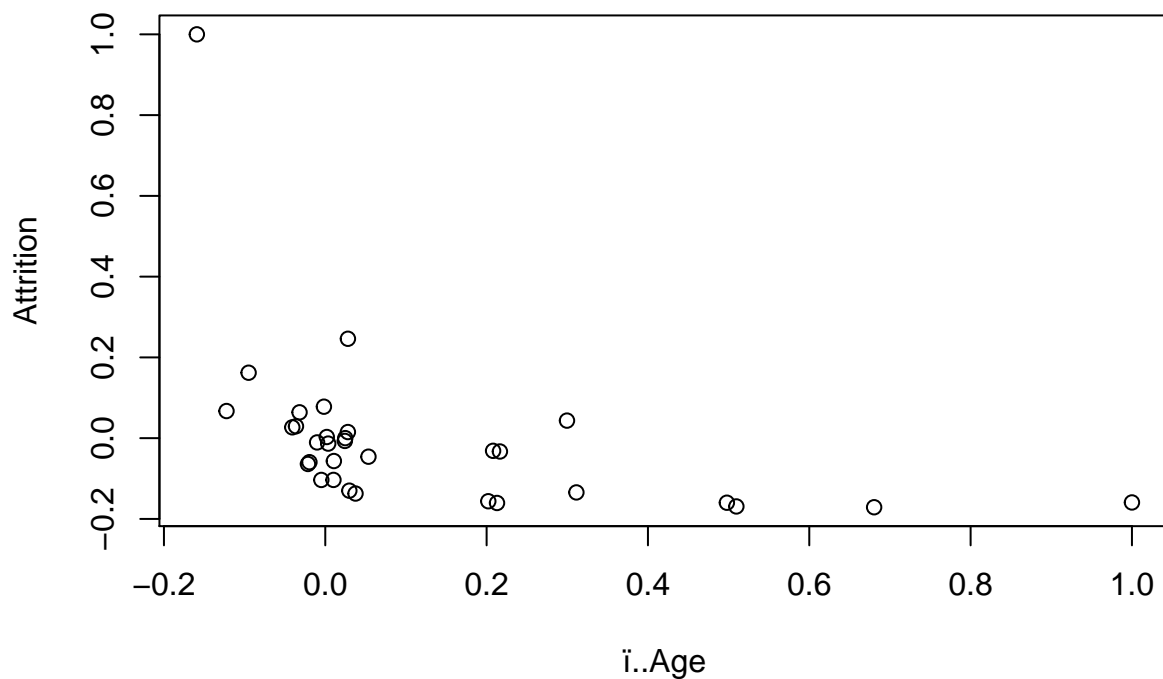
```
## NumCompaniesWorked          0.0300754751          0.237638590
## Over18                                NA                   NA
## OverTime                    -0.0004486707          0.012754266
## PercentSalaryHike            0.0075277478         -0.020608488
## PerformanceRating            0.0035064716          0.006743668
## RelationshipSatisfaction    -0.0459524907          0.024054292
## StandardHours                         NA                   NA
## StockOptionLevel             1.0000000000          0.010135969
## TotalWorkingYears            0.0101359693          1.000000000
## TrainingTimesLastYear        0.0112740696         -0.035661571
## WorkLifeBalance              0.0041287300          0.001007646
## YearsAtCompany               0.0150580080          0.628133155
## YearsInCurrentRole           0.0508178728          0.460364638
## YearsSinceLastPromotion      0.0143521849          0.404857759
## YearsWithCurrManager         0.0246982266          0.459188397
##                         TrainingTimesLastYear WorkLifeBalance YearsAtCompany
## ï..Age                           -0.019620819    -0.021490028    0.311308770
## Attrition                        -0.059477799    -0.063939047   -0.134392214
## BusinessTravel                    0.015240033    -0.011255820   -0.014575008
## DailyRate                         0.002452543    -0.037848051   -0.034054768
## Department                        0.036875066     0.026382525    0.022920442
## DistanceFromHome                 -0.036942234    -0.026556004    0.009507720
## Education                        -0.025100241     0.009819189    0.069113696
## EducationField                    0.049195353     0.041191131   -0.018692101
## EmployeeCount                              NA              NA             NA
## EmployeeNumber                    0.023603170     0.010308641   -0.011240464
## EnvironmentSatisfaction          -0.019359308     0.027627295    0.001457549
## Gender                           -0.038786735    -0.002752679   -0.029747086
## HourlyRate                       -0.008547685    -0.004607234   -0.019581616
## JobInvolvement                   -0.015337826    -0.014616593   -0.021355427
## JobLevel                         -0.018190550     0.037817746    0.534738687
## JobRole                           0.001342295     0.027764066   -0.083656661
## JobSatisfaction                  -0.005779335    -0.019458710   -0.003802628
## MaritalStatus                     0.010628607     0.014708294   -0.059986004
## MonthlyIncome                    -0.021736277     0.030683082    0.514284826
## MonthlyRate                       0.001466881     0.007963158   -0.023655107
## NumCompaniesWorked               -0.066054072    -0.008365685   -0.118421340
## Over18                                     NA              NA             NA
## OverTime                         -0.079113372    -0.027091878   -0.011687120
## PercentSalaryHike                -0.005221012    -0.003279636   -0.035991262
## PerformanceRating                -0.015578882     0.002572361    0.003435126
## RelationshipSatisfaction          0.002496526     0.019604406    0.019366787
## StandardHours                              NA              NA             NA
## StockOptionLevel                  0.011274070     0.004128730    0.015058008
## TotalWorkingYears                -0.035661571     0.001007646    0.628133155
## TrainingTimesLastYear             1.000000000     0.028072207    0.003568666
## WorkLifeBalance                   0.028072207     1.000000000    0.012089185
## YearsAtCompany                    0.003568666     0.012089185    1.000000000
## YearsInCurrentRole               -0.005737504     0.049856498    0.758753737
## YearsSinceLastPromotion          -0.002066536     0.008941249    0.618408865
## YearsWithCurrManager             -0.004095526     0.002759440    0.769212425
##                         YearsInCurrentRole YearsSinceLastPromotion
## ï..Age                          0.212901056              0.216513368
## Attrition                      -0.160545004             -0.033018775
```

```
## BusinessTravel                -0.011497447        -0.032591153
## DailyRate                       0.009932015        -0.033228985
## Department                      0.056315447         0.040060967
## DistanceFromHome                0.018844999         0.010028836
## Education                       0.060235554         0.054254334
## EducationField                 -0.010506203         0.002325656
## EmployeeCount                            NA                  NA
## EmployeeNumber                 -0.008416312        -0.009019064
## EnvironmentSatisfaction         0.018007460         0.016193606
## Gender                         -0.041482729        -0.026984577
## HourlyRate                     -0.024106220        -0.026715586
## JobInvolvement                  0.008716963        -0.024184292
## JobLevel                        0.389446733         0.353885347
## JobRole                        -0.028353980        -0.046384359
## JobSatisfaction                -0.002304785        -0.018213568
## MaritalStatus                  -0.065821900        -0.030915079
## MonthlyIncome                   0.363817667         0.344977638
## MonthlyRate                    -0.012814874         0.001566800
## NumCompaniesWorked             -0.090753934        -0.036813892
## Over18                                   NA                  NA
## OverTime                       -0.029758009        -0.012238823
## PercentSalaryHike              -0.001520027        -0.022154313
## PerformanceRating               0.034986260         0.017896066
## RelationshipSatisfaction       -0.015122915         0.033492502
## StandardHours                            NA                  NA
## StockOptionLevel                0.050817873         0.014352185
## TotalWorkingYears               0.460364638         0.404857759
## TrainingTimesLastYear          -0.005737504        -0.002066536
## WorkLifeBalance                 0.049856498         0.008941249
## YearsAtCompany                  0.758753737         0.618408865
## YearsInCurrentRole              1.000000000         0.548056248
## YearsSinceLastPromotion         0.548056248         1.000000000
## YearsWithCurrManager            0.714364762         0.510223636
##                          YearsWithCurrManager
## ï..Age                            0.2020886024
## Attrition                        -0.1561993159
## BusinessTravel                   -0.0226357345
## DailyRate                        -0.0263631782
## Department                        0.0342824726
## DistanceFromHome                  0.0144060484
## Education                         0.0690653783
## EducationField                   -0.0041296947
## EmployeeCount                               NA
## EmployeeNumber                   -0.0091966453
## EnvironmentSatisfaction          -0.0049987226
## Gender                           -0.0305989093
## HourlyRate                       -0.0201232002
## JobInvolvement                    0.0259758079
## JobLevel                          0.3752806078
## JobRole                          -0.0411496252
## JobSatisfaction                  -0.0276562139
## MaritalStatus                    -0.0385700737
## MonthlyIncome                     0.3440788833
## MonthlyRate                      -0.0367459053
```

```
## NumCompaniesWorked              -0.1103191554
## Over18                                     NA
## OverTime                        -0.0415859987
## PercentSalaryHike               -0.0119852485
## PerformanceRating                0.0228271689
## RelationshipSatisfaction        -0.0008674968
## StandardHours                             NA
## StockOptionLevel                 0.0246982266
## TotalWorkingYears                0.4591883971
## TrainingTimesLastYear           -0.0040955260
## WorkLifeBalance                  0.0027594402
## YearsAtCompany                   0.7692124251
## YearsInCurrentRole               0.7143647616
## YearsSinceLastPromotion          0.5102236358
## YearsWithCurrManager             1.0000000000
```

```
plot(cor.data)
```



```
emp_pca <- prcomp(emp_churn[ , which(apply(emp_churn, 2, var) != 0)],scale.=TRUE)
emp_pca
```

```
## Standard deviations (1, .., p=32):
##  [1] 2.1759457 1.3818908 1.3461309 1.3158896 1.2636260 1.1412018 1.0920421
##  [8] 1.0697527 1.0611954 1.0362341 1.0267322 1.0163191 1.0029624 1.0005006
## [15] 0.9824203 0.9738426 0.9689810 0.9515259 0.9397410 0.9327753 0.9215221
```

```
## [22] 0.8784389 0.7797522 0.7204740 0.7000265 0.5703871 0.5637817 0.5278234
## [29] 0.4736000 0.4473075 0.3749341 0.2151410
##
## Rotation (n x k) = (32 x 32):
##                                 PC1          PC2          PC3          PC4
## ï..Age                  -0.2770835197  0.28772859 -0.066409841  0.207061847
## Attrition                0.1136550999 -0.14403631 -0.118905631  0.212008954
## BusinessTravel          -0.0035052736  0.04655590 -0.073709829  0.044213515
## DailyRate                0.0009288049  0.08793151  0.043851312 -0.041835991
## Department              -0.0107687126 -0.34525178 -0.196335630  0.061287585
## DistanceFromHome        -0.0019088131 -0.02583387  0.058454831  0.004900222
## Education               -0.0768008863  0.11338338 -0.062455898  0.088757850
## EducationField           0.0198131006 -0.05361893 -0.015323844 -0.029654125
## EmployeeNumber           0.0073996296  0.03236600  0.008820132 -0.072348196
## EnvironmentSatisfaction -0.0055815999  0.02896701 -0.027925502 -0.053261509
## Gender                   0.0265875658  0.03833218  0.040903781 -0.074988585
## HourlyRate               0.0087825077  0.07823356  0.010843543 -0.027918669
## JobInvolvement          -0.0034493545  0.08164235  0.002271699 -0.086314491
## JobLevel                -0.3793882155  0.11811398 -0.104013181  0.161859039
## JobRole                  0.0629459820 -0.35455723 -0.181978649  0.036564769
## JobSatisfaction          0.0063335636 -0.02578727  0.031124601 -0.019235575
## MaritalStatus            0.0597723550 -0.30720135 -0.219653232  0.426864671
## MonthlyIncome           -0.3712110884  0.13779508 -0.100270795  0.172974561
## MonthlyRate             -0.0047312655  0.01027027 -0.061421088  0.091327652
## NumCompaniesWorked      -0.0480513180  0.35650130 -0.117228321  0.262473227
## OverTime                 0.0120943643 -0.01654755 -0.061509397  0.104286626
## PercentSalaryHike        0.0150336175 -0.07716826  0.594989308  0.339297006
## PerformanceRating       -0.0002238331 -0.09023957  0.601252308  0.332127572
## RelationshipSatisfaction -0.0160215694  0.04745802 -0.072798540  0.039892019
## StockOptionLevel        -0.0304765158  0.26576622  0.229954227 -0.439641835
## TotalWorkingYears       -0.3999927618  0.15020663 -0.058671662  0.158759709
## TrainingTimesLastYear    0.0091535670 -0.05150389  0.003082895 -0.079229528
## WorkLifeBalance         -0.0134308045 -0.03988636 -0.010969978 -0.023318338
## YearsAtCompany          -0.3856623757 -0.22155889  0.053420664 -0.130771605
## YearsInCurrentRole      -0.3318982990 -0.26386848  0.101139681 -0.182806894
## YearsSinceLastPromotion -0.2905036466 -0.22046259  0.044515900 -0.101603691
## YearsWithCurrManager    -0.3259780930 -0.26937290  0.092224859 -0.180796337
##                                 PC5          PC6          PC7          PC8
## ï..Age                  -0.0949872076  0.019460202 -0.021170816 -0.029395233
## Attrition                0.0398252327 -0.562644140 -0.056986335  0.041906049
## BusinessTravel          -0.0008369589  0.048109040 -0.107046510 -0.049439133
## DailyRate               -0.0926389243  0.093919786  0.234345939 -0.331681437
## Department              -0.5702997579  0.066545839 -0.009562634 -0.021237433
## DistanceFromHome        -0.0473072483 -0.295157581 -0.126756879 -0.061546135
## Education               -0.0832699425  0.010154387 -0.338411482 -0.158517819
## EducationField           0.0174605940  0.048175780  0.068076843  0.117244693
## EmployeeNumber          -0.0166440153 -0.051357696 -0.399925510  0.333722017
## EnvironmentSatisfaction  0.0353437338  0.067564729  0.327433137  0.216826540
## Gender                   0.0660038200 -0.030838305  0.028199945 -0.098532582
## HourlyRate              -0.0409587064 -0.070007154 -0.387438203 -0.231433720
## JobInvolvement          -0.0287700246  0.181012227 -0.108821681 -0.479926771
## JobLevel                -0.1139178351  0.041212181  0.074257668  0.100182859
## JobRole                 -0.5523060979  0.061392430 -0.010787925 -0.068212811
## JobSatisfaction         -0.0305186113  0.173804009  0.393740217 -0.075911489
```

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```
## MaritalStatus             0.3092362441  0.174419279 -0.086487867 -0.061673797
## MonthlyIncome            -0.0956631652  0.038643066  0.074249401  0.098984203
## MonthlyRate              -0.0249604492 -0.040654462  0.106264512  0.330874181
## NumCompaniesWorked       -0.1326809959 -0.032205012 -0.082597602 -0.030579702
## OverTime                 -0.0490415572 -0.515701519  0.326797352 -0.048766671
## PercentSalaryHike        -0.1246460690  0.050321166 -0.001410505 -0.001058593
## PerformanceRating        -0.0966936243  0.022018769 -0.001705063  0.009164059
## RelationshipSatisfaction  0.0646155109  0.042008819  0.222845139 -0.288532746
## StockOptionLevel         -0.3476466680 -0.173717446  0.013509570  0.092705126
## TotalWorkingYears        -0.0337829316 -0.007033426  0.011671275  0.022878943
## TrainingTimesLastYear    -0.0040561137  0.305531990 -0.100172910  0.239698716
## WorkLifeBalance          -0.0312430115  0.214026237 -0.023171104  0.281934612
## YearsAtCompany            0.1133817685 -0.065715209 -0.012376206 -0.031511252
## YearsInCurrentRole        0.0761967400 -0.033222281 -0.028032331 -0.058667194
## YearsSinceLastPromotion   0.0968131493 -0.123125769 -0.016026205 -0.015874801
## YearsWithCurrManager      0.1151213032 -0.033914403 -0.066303968 -0.094327650
##                                    PC9         PC10         PC11          PC12
## ï..Age                    0.011386034  0.033244482  0.0023861825  0.0282189762
## Attrition                -0.058171560 -0.139132738 -0.1754665266  0.0311424677
## BusinessTravel           -0.379722242 -0.309928799  0.2888682871  0.1687621623
## DailyRate                -0.235791159 -0.148809808  0.0668352918  0.0424838968
## Department                0.023566211  0.011904492 -0.0353475590 -0.0007595333
## DistanceFromHome          0.084297097  0.210882314  0.1529079574 -0.2014371920
## Education                 0.145937447  0.220334584  0.0383766952  0.2960086741
## EducationField           -0.511442816  0.018958785 -0.2722466931  0.2328414184
## EmployeeNumber            0.087360703  0.212689505  0.1530012761  0.2203063128
## EnvironmentSatisfaction  -0.247560137  0.456441647  0.2687161399  0.2932670942
## Gender                    0.312027241  0.114236044 -0.3816451670  0.2858798931
## HourlyRate               -0.152186238  0.021352056  0.0454294911 -0.2895386903
## JobInvolvement           -0.140552067  0.271579693  0.2724818463  0.0079303370
## JobLevel                  0.040204157 -0.084924045 -0.0296981366 -0.0421416919
## JobRole                   0.011732615  0.060427936 -0.0089933597  0.0465244909
## JobSatisfaction           0.435501461 -0.132420669  0.1871971502  0.1370598427
## MaritalStatus             0.022110985  0.052422048  0.0759396696  0.0432182520
## MonthlyIncome             0.029954096 -0.101703791 -0.0372251116 -0.0386330030
## MonthlyRate               0.068183132  0.198349865  0.3963006909 -0.4367749546
## NumCompaniesWorked       -0.074364176  0.082092859 -0.1282737130  0.0827139681
## OverTime                 -0.185324318  0.084956579  0.1081523750  0.0505483622
## PercentSalaryHike        -0.030383879  0.034672127  0.0026192936  0.0152712038
## PerformanceRating        -0.054812638  0.032796600 -0.0115493961  0.0035168769
## RelationshipSatisfaction -0.055612111  0.372990474 -0.3497504063 -0.4123992900
## StockOptionLevel         -0.007520281 -0.034153010 -0.0421672899 -0.0307175421
## TotalWorkingYears        -0.007693625 -0.044644231 -0.0113338164  0.0099773121
## TrainingTimesLastYear    -0.175949444 -0.244139703 -0.1068493800 -0.2902774103
## WorkLifeBalance          -0.132214896  0.349199161 -0.3063154751 -0.0402246676
## YearsAtCompany           -0.008835292 -0.008263972  0.0008497405  0.0018549084
## YearsInCurrentRole       -0.045620424  0.048656714  0.0437367105  0.0307152128
## YearsSinceLastPromotion  -0.031961934  0.047847665 -0.0518801674 -0.0041542856
## YearsWithCurrManager     -0.029849743  0.036891422  0.0300814131  0.0301815490
##                                   PC13         PC14         PC15          PC16
## ï..Age                    0.046042528  0.050348387 -0.049688834 -0.0532602212
## Attrition                 0.023932388  0.026043592 -0.015682372 -0.0292474689
## BusinessTravel           -0.389896766 -0.228210168 -0.355942727 -0.0434886132
## DailyRate                 0.459687502 -0.042505161  0.334959667  0.2378903569
```

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```
## Department                  0.012626622 -0.060585561  0.054879501 -0.0572759890
## DistanceFromHome            0.472110409 -0.224591184 -0.426369384  0.1582871802
## Education                   0.095129646  0.446530184 -0.227283994  0.0440416541
## EducationField              0.401029384 -0.123006372 -0.190040547 -0.0175774019
## EmployeeNumber              0.191748019 -0.172894283  0.053527296 -0.1271919499
## EnvironmentSatisfaction     0.001329338 -0.028177832  0.213613143 -0.0923547755
## Gender                     -0.040327063 -0.602233696  0.026514457 -0.2294605813
## HourlyRate                 -0.052318231 -0.285506972  0.268837770  0.3703085651
## JobInvolvement             -0.098335530 -0.153344777 -0.192316003 -0.2102168301
## JobLevel                   -0.004906955 -0.186536564 -0.019012700  0.0304093001
## JobRole                    -0.048231789 -0.005064548  0.037262302 -0.0643617405
## JobSatisfaction             0.138859429 -0.013367214 -0.330781739  0.2724372595
## MaritalStatus               0.082546528 -0.036574120  0.020359130  0.0622303920
## MonthlyIncome              -0.019485362 -0.198209607 -0.010759238  0.0290013680
## MonthlyRate                 0.040089762 -0.103927718  0.099750989 -0.1235679599
## NumCompaniesWorked          0.062400317  0.212716009  0.141047871 -0.0650108641
## OverTime                   -0.148945656  0.028121772 -0.189661820  0.0557740678
## PercentSalaryHike          -0.021382642 -0.022254354 -0.008805833 -0.0449000831
## PerformanceRating          -0.052677407 -0.005596156  0.002921961 -0.0418947061
## RelationshipSatisfaction   -0.067566641  0.067048963 -0.145951501 -0.2518170448
## StockOptionLevel           -0.058114543  0.075081663 -0.060976600 -0.0141079547
## TotalWorkingYears           0.027388010 -0.056992171 -0.004494832 -0.0004876817
## TrainingTimesLastYear       0.235591614  0.083137173 -0.282034260 -0.2993324075
## WorkLifeBalance            -0.256613262 -0.018935573 -0.201157207  0.6157086648
## YearsAtCompany             -0.012365447  0.020368542  0.008021149 -0.0062796972
## YearsInCurrentRole         -0.004901715  0.076741425  0.037336388  0.0347626124
## YearsSinceLastPromotion     0.015198321  0.099757561  0.047840343 -0.0626768022
## YearsWithCurrManager       -0.007261608  0.077262782  0.031046529 -0.0264053087
##                                     PC17          PC18        PC19         PC20
## ï..Age                     -0.061520458 -0.0012482070 -0.07707899  0.050299317
## Attrition                   0.014118431  0.1612279880 -0.04274683 -0.128057129
## BusinessTravel              0.063597666 -0.2414656821 -0.20488229 -0.237817641
## DailyRate                  -0.062074497  0.1770607441  0.04530541 -0.487345296
## Department                 -0.007396933 -0.0538256233 -0.01269543  0.003207010
## DistanceFromHome            0.212550788 -0.4037222068  0.13980002 -0.157956284
## Education                  -0.034521472  0.0988650668 -0.37423925 -0.199585926
## EducationField              0.211645964  0.1411067996 -0.18560067  0.489591978
## EmployeeNumber             -0.413040066  0.1256979308  0.29306030  0.043315824
## EnvironmentSatisfaction    -0.170896553 -0.3692161078 -0.13508967 -0.088963136
## Gender                      0.023270017  0.1166135747 -0.31487669 -0.262575468
## HourlyRate                 -0.351558857 -0.0796312138 -0.37763415  0.280627057
## JobInvolvement              0.117895187  0.4340104459  0.28360233  0.104382137
## JobLevel                   -0.014940230  0.0001213582  0.15224527  0.008285653
## JobRole                     0.004997254 -0.0380169872 -0.00880268  0.024079354
## JobSatisfaction            -0.232218821  0.0621010126 -0.23353056  0.270677162
## MaritalStatus              -0.066259478 -0.0229097159  0.01719825  0.001662669
## MonthlyIncome              -0.026262690  0.0093343022  0.15101765  0.012681653
## MonthlyRate                 0.310794699  0.3628567046 -0.40541012 -0.063367547
## NumCompaniesWorked          0.137970955 -0.0473091191 -0.09045145  0.028066989
## OverTime                   -0.403540587  0.2891388668  0.04972583  0.001730961
## PercentSalaryHike          -0.027651889  0.0071484694 -0.01252173 -0.010509643
## PerformanceRating          -0.024294533  0.0018958798 -0.01374997  0.011622309
## RelationshipSatisfaction   -0.218355762 -0.2148010428 -0.02715567  0.007985655
## StockOptionLevel            0.015981326 -0.0139232629 -0.04713257  0.022131471
```
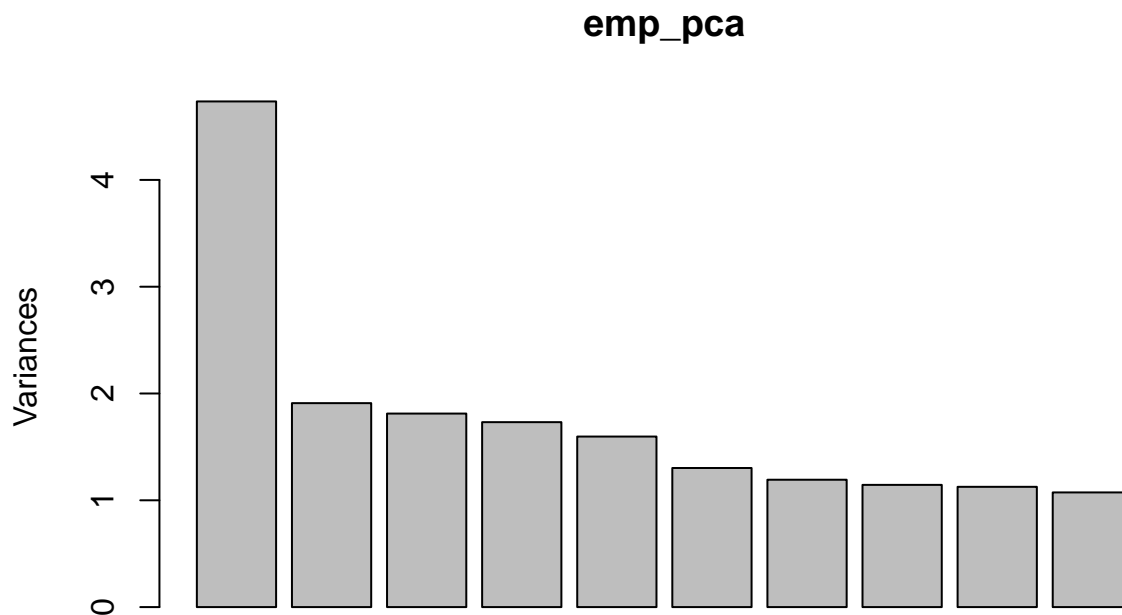
```
## TotalWorkingYears        -0.010516775  0.0022359306   0.02727865   0.027610436
## TrainingTimesLastYear     -0.405888548  0.1163806168  -0.13031494  -0.263666506
## WorkLifeBalance            0.062985220  0.2098812174   0.09337942  -0.247947572
## YearsAtCompany            -0.022108465  0.0077801529  -0.03889449  -0.006450595
## YearsInCurrentRole         0.035052168  0.0229192743  -0.06838993  -0.049428225
## YearsSinceLastPromotion    0.017715733  0.0154796871  -0.11619346  -0.014084205
## YearsWithCurrManager       0.034429536  0.0108079009  -0.04824859  -0.001625552
##                                    PC21          PC22         PC23          PC24
## ï..Age                     0.0537969186  0.0437720623 -0.340459637   0.602941808
## Attrition                  0.0319656905  0.2099574728  0.480551613   0.035754519
## BusinessTravel            -0.3544885453  0.0315789283  0.019887629   0.017306882
## DailyRate                 -0.2337813082 -0.0651573879  0.029020180   0.047518192
## Department                 0.0050356887  0.0141581881  0.024430430   0.015001097
## DistanceFromHome           0.1223545889  0.0805698235 -0.099337169  -0.008331012
## Education                  0.0670657290 -0.4011323997  0.161363024  -0.112126555
## EducationField            -0.0815867376 -0.1599147397 -0.006988212  -0.018615276
## EmployeeNumber            -0.4799057702  0.0267238673  0.016759602   0.013326337
## EnvironmentSatisfaction    0.2951042053  0.0866218017  0.220723088  -0.008915086
## Gender                     0.0893876692  0.0385149396 -0.144347568  -0.027451380
## HourlyRate                 0.1406894468  0.0284640844  0.065886519  -0.031722561
## JobInvolvement             0.2082190801  0.2024249450  0.211043672   0.021145463
## JobLevel                   0.0800586564 -0.1614387797  0.236649545  -0.188241526
## JobRole                   -0.0239084676  0.0119205179 -0.118045593   0.046037044
## JobSatisfaction           -0.1725261289  0.2869827680  0.178068723  -0.024898742
## MaritalStatus             -0.0008727769  0.0382139762 -0.054566119  -0.025835452
## MonthlyIncome              0.0680425501 -0.1713585454  0.257554534  -0.190044068
## MonthlyRate               -0.1760024946 -0.0705750683 -0.024181296  -0.032648348
## NumCompaniesWorked        -0.1318238858  0.6347703038 -0.136128194  -0.349406352
## OverTime                   0.1059946720 -0.0927927555 -0.366673534  -0.101733396
## PercentSalaryHike         -0.0094861301 -0.0154268223  0.020974620  -0.010175635
## PerformanceRating         -0.0164106483 -0.0027439750  0.040517511  -0.010375051
## RelationshipSatisfaction  -0.4279018761 -0.1270242354  0.130346338  -0.043542326
## StockOptionLevel          -0.0359274214  0.0321140583  0.113437513  -0.024407202
## TotalWorkingYears          0.0263654998 -0.0009871573 -0.075014140   0.064408156
## TrainingTimesLastYear      0.3175583569  0.1999239815 -0.018462638  -0.061633811
## WorkLifeBalance           -0.0228625921  0.1416348661 -0.001194357   0.070184242
## YearsAtCompany            -0.0249066413  0.0233495047 -0.030967188  -0.063599848
## YearsInCurrentRole        -0.0713322516  0.1282931818 -0.139258071  -0.190763910
## YearsSinceLastPromotion   -0.0770110699  0.2207959131  0.281670824   0.527986618
## YearsWithCurrManager      -0.0408223662  0.0706379597 -0.185820442  -0.271491314
##                                    PC25         PC26          PC27         PC28
## ï..Age                    -0.3771954985 -0.060460030  0.0419731776   0.039326263
## Attrition                 -0.4459008967  0.037359620 -0.0421282163   0.019603495
## BusinessTravel             0.0120808398  0.007614621  0.0185421073  -0.017602703
## DailyRate                 -0.0161919075 -0.016870941 -0.0289247015  -0.036585944
## Department                -0.0135919675 -0.183840648  0.6636483039  -0.071879653
## DistanceFromHome           0.0724395113  0.031481256 -0.0082064852  -0.006893946
## Education                  0.0725511525  0.029715486  0.0170369635   0.005302011
## EducationField             0.0070047292 -0.004651991 -0.0009736878   0.012833791
## EmployeeNumber            -0.0233256264  0.048377727  0.0154581965  -0.003344161
## EnvironmentSatisfaction   -0.1296927799  0.016811318 -0.0128751364  -0.014918510
## Gender                     0.0632131129 -0.037768449 -0.0116741462   0.007928205
## HourlyRate                 0.0093298834  0.040903028 -0.0109444516   0.002792229
## JobInvolvement            -0.0603760213 -0.012866643  0.0110614873   0.009413617
```

```
## JobLevel                      0.0985817428 -0.027258352 -0.0051875850  0.015520703
## JobRole                      -0.0032136187  0.225962367 -0.6582684572  0.046230026
## JobSatisfaction              -0.0882657004  0.055425577 -0.0009585135 -0.023317674
## MaritalStatus                 0.0427369788 -0.673383104 -0.2026682158  0.035561455
## MonthlyIncome                 0.1279291118  0.014157813 -0.0997889437  0.039878139
## MonthlyRate                  -0.0124976367 -0.006654447 -0.0161238550 -0.019587224
## NumCompaniesWorked            0.2144637151  0.030063362  0.0162062207 -0.026619977
## OverTime                      0.2686228392 -0.040639952  0.0433513016 -0.014740090
## PercentSalaryHike            -0.0002103328 -0.021855178 -0.0194528188 -0.008652317
## PerformanceRating             0.0000410718  0.037400959  0.0213004223 -0.004746915
## RelationshipSatisfaction     -0.0975015934 -0.007518596 -0.0020744265  0.019597567
## StockOptionLevel             -0.0527966393 -0.658894504 -0.2159350458  0.009485927
## TotalWorkingYears            -0.1282030050  0.016373350 -0.0925595392 -0.053574139
## TrainingTimesLastYear         0.0141578796  0.031428985 -0.0325388641  0.004569058
## WorkLifeBalance              -0.0570100099  0.016223815  0.0054898183 -0.051860227
## YearsAtCompany               -0.1184022773  0.058791102 -0.0322642083 -0.068691201
## YearsInCurrentRole           -0.1154082056 -0.003584704  0.0881614608  0.760387060
## YearsSinceLastPromotion       0.5983059702 -0.003565705 -0.0207086904 -0.081969984
## YearsWithCurrManager         -0.2261427444 -0.028811102 -0.0238754237 -0.622700915
##                                       PC29          PC30          PC31          PC32
## ï..Age                         0.052217885 -0.2615582304  0.2310758920 -0.0120977830
## Attrition                      0.025747284 -0.0421965911 -0.0256497756  0.0048347288
## BusinessTravel                 0.005791215 -0.0070978465  0.0093264776  0.0095107389
## DailyRate                     -0.018796127 -0.0008178897  0.0220086073  0.0040412746
## Department                    -0.016091406  0.0851678195 -0.0272120112 -0.0640107694
## DistanceFromHome              -0.012562471 -0.0021741659  0.0122194407 -0.0154314006
## Education                     -0.014608356  0.0153241082 -0.0040241375 -0.0019836227
## EducationField                 0.006579047 -0.0052743899  0.0129279175  0.0036727642
## EmployeeNumber                -0.002796943 -0.0063853921 -0.0009168551  0.0039490321
## EnvironmentSatisfaction        0.002003020  0.0025894535 -0.0082471156 -0.0055094819
## Gender                        -0.017810710 -0.0018923829 -0.0018760241  0.0039033078
## HourlyRate                     0.011438791 -0.0100413489 -0.0048715500  0.0101050482
## JobInvolvement                -0.011761366  0.0286160736  0.0053266741 -0.0025145793
## JobLevel                       0.033192297 -0.1983608870  0.1070590309  0.7192062823
## JobRole                       -0.014544997 -0.0328899317  0.0148910142  0.0379668074
## JobSatisfaction               -0.006782743 -0.0141370072 -0.0142456796 -0.0022431852
## MaritalStatus                 -0.040003802  0.0240291729  0.0287060247 -0.0043116247
## MonthlyIncome                  0.048838427 -0.1985779361  0.1306049382 -0.6894657821
## MonthlyRate                   -0.004042623  0.0061714160  0.0110695305 -0.0026288647
## NumCompaniesWorked             0.007073183  0.0249510530  0.1140737575  0.0033791410
## OverTime                       0.003554601 -0.0007879052  0.0055559710  0.0017713734
## PercentSalaryHike              0.692213074  0.1332898805 -0.0358850913  0.0101309667
## PerformanceRating             -0.692404142 -0.1198771769  0.0519513129 -0.0038017679
## RelationshipSatisfaction       0.007294064 -0.0021780096 -0.0245477790  0.0028701930
## StockOptionLevel              -0.037110124  0.0375955590  0.0119643564 -0.0076816916
## TotalWorkingYears             -0.138742785  0.5093506210 -0.6794315422 -0.0098628810
## TrainingTimesLastYear         -0.008949345 -0.0062798627 -0.0137765538 -0.0003836094
## WorkLifeBalance                0.003633652  0.0108601541 -0.0007265140 -0.0053738876
## YearsAtCompany                -0.056230088  0.5896424085  0.6170111109  0.0053180444
## YearsInCurrentRole             0.041361626 -0.1999692542 -0.1495894024 -0.0061315187
## YearsSinceLastPromotion        0.028094913 -0.0853934665 -0.0830551251  0.0092241429
## YearsWithCurrManager           0.067160160 -0.3896860742 -0.1572100596 -0.0251400627
```

```r
summary(emp_pca)
```

```
## Importance of components:
##                          PC1     PC2     PC3     PC4    PC5    PC6     PC7
## Standard deviation     2.176 1.38189 1.34613 1.31589 1.2636 1.1412 1.09204
## Proportion of Variance 0.148 0.05968 0.05663 0.05411 0.0499 0.0407 0.03727
## Cumulative Proportion  0.148 0.20764 0.26426 0.31837 0.3683 0.4090 0.44624
##                          PC8     PC9    PC10    PC11    PC12    PC13    PC14
## Standard deviation     1.06975 1.06120 1.03623 1.02673 1.01632 1.00296 1.00050
## Proportion of Variance 0.03576 0.03519 0.03356 0.03294 0.03228 0.03144 0.03128
## Cumulative Proportion  0.48200 0.51719 0.55075 0.58369 0.61597 0.64740 0.67869
##                          PC15    PC16    PC17    PC18    PC19    PC20    PC21
## Standard deviation     0.98242 0.97384 0.96898 0.95153 0.9397 0.93278 0.92152
## Proportion of Variance 0.03016 0.02964 0.02934 0.02829 0.0276 0.02719 0.02654
## Cumulative Proportion  0.70885 0.73848 0.76782 0.79612 0.8237 0.85091 0.87744
##                          PC22   PC23    PC24    PC25    PC26    PC27    PC28
## Standard deviation     0.87844 0.7798 0.72047 0.70003 0.57039 0.56378 0.52782
## Proportion of Variance 0.02411 0.0190 0.01622 0.01531 0.01017 0.00993 0.00871
## Cumulative Proportion  0.90156 0.9206 0.93678 0.95209 0.96226 0.97219 0.98090
##                          PC29    PC30    PC31    PC32
## Standard deviation     0.47360 0.44731 0.37493 0.21514
## Proportion of Variance 0.00701 0.00625 0.00439 0.00145
## Cumulative Proportion  0.98791 0.99416 0.99855 1.00000
```

```r
plot(emp_pca)
```


emp_pca

```r
(eigen_data <- round(emp_pca$sdev^2,2))
```

```
## [1] 4.73 1.91 1.81 1.73 1.60 1.30 1.19 1.14 1.13 1.07 1.05 1.03 1.01 1.00 0.97
## [16] 0.95 0.94 0.91 0.88 0.87 0.85 0.77 0.61 0.52 0.49 0.33 0.32 0.28 0.22 0.20
## [31] 0.14 0.05
```

```r
names(eigen_data) <- paste("PC",1:12,sep="")
eigen_data
```

```
##  PC1  PC2  PC3  PC4  PC5  PC6  PC7  PC8  PC9 PC10 PC11 PC12 <NA> <NA> <NA> <NA>
## 4.73 1.91 1.81 1.73 1.60 1.30 1.19 1.14 1.13 1.07 1.05 1.03 1.01 1.00 0.97 0.95
## <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA>
## 0.94 0.91 0.88 0.87 0.85 0.77 0.61 0.52 0.49 0.33 0.32 0.28 0.22 0.20 0.14 0.05
```

```r
sumlambdas <- sum(eigen_data)
sumlambdas
```

```
## [1] 32
```

```r
propvar <- round(eigen_data/sumlambdas,2)
propvar
```

```
##  PC1  PC2  PC3  PC4  PC5  PC6  PC7  PC8  PC9 PC10 PC11 PC12 <NA> <NA> <NA> <NA>
## 0.15 0.06 0.06 0.05 0.05 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.03 0.03 0.03 0.03
## <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA>
## 0.03 0.03 0.03 0.03 0.03 0.02 0.02 0.02 0.02 0.01 0.01 0.01 0.01 0.01 0.00 0.00
```

```r
cumvar_data <- cumsum(propvar)
cumvar_data
```

```
##  PC1  PC2  PC3  PC4  PC5  PC6  PC7  PC8  PC9 PC10 PC11 PC12 <NA> <NA> <NA> <NA>
## 0.15 0.21 0.27 0.32 0.37 0.41 0.45 0.49 0.53 0.56 0.59 0.62 0.65 0.68 0.71 0.74
## <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA>
## 0.77 0.80 0.83 0.86 0.89 0.91 0.93 0.95 0.97 0.98 0.99 1.00 1.01 1.02 1.02 1.02
```

```r
matlambdas <- rbind(eigen_data,propvar,cumvar_data)
matlambdas
```

```
##               PC1  PC2  PC3  PC4  PC5  PC6  PC7  PC8  PC9 PC10 PC11 PC12 <NA>
## eigen_data   4.73 1.91 1.81 1.73 1.60 1.30 1.19 1.14 1.13 1.07 1.05 1.03 1.01
## propvar      0.15 0.06 0.06 0.05 0.05 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.03
## cumvar_data  0.15 0.21 0.27 0.32 0.37 0.41 0.45 0.49 0.53 0.56 0.59 0.62 0.65
##             <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA> <NA>
## eigen_data   1.00 0.97 0.95 0.94 0.91 0.88 0.87 0.85 0.77 0.61 0.52 0.49 0.33
## propvar      0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.02 0.02 0.02 0.02 0.01
## cumvar_data  0.68 0.71 0.74 0.77 0.80 0.83 0.86 0.89 0.91 0.93 0.95 0.97 0.98
##             <NA> <NA> <NA> <NA> <NA> <NA>
## eigen_data   0.32 0.28 0.22 0.20 0.14 0.05
## propvar      0.01 0.01 0.01 0.01 0.00 0.00
## cumvar_data  0.99 1.00 1.01 1.02 1.02 1.02
```

```r
rownames(matlambdas) <- c("Eigenvalues","Prop. variance","Cum. prop. variance")
rownames(matlambdas)
```

```
## [1] "Eigenvalues"          "Prop. variance"       "Cum. prop. variance"
```

```r
eigvec.data <- emp_pca$rotation
print(emp_pca)
```

```
## Standard deviations (1, .., p=32):
##  [1] 2.1759457 1.3818908 1.3461309 1.3158896 1.2636260 1.1412018 1.0920421
##  [8] 1.0697527 1.0611954 1.0362341 1.0267322 1.0163191 1.0029624 1.0005006
## [15] 0.9824203 0.9738426 0.9689810 0.9515259 0.9397410 0.9327753 0.9215221
## [22] 0.8784389 0.7797522 0.7204740 0.7000265 0.5703871 0.5637817 0.5278234
## [29] 0.4736000 0.4473075 0.3749341 0.2151410
##
## Rotation (n x k) = (32 x 32):
##                                  PC1         PC2          PC3          PC4
## ï..Age                   -0.2770835197  0.28772859 -0.066409841  0.207061847
## Attrition                 0.1136550999 -0.14403631 -0.118905631  0.212008954
## BusinessTravel           -0.0035052736  0.04655590 -0.073709829  0.044213515
## DailyRate                 0.0009288049  0.08793151  0.043851312 -0.041835991
## Department               -0.0107687126 -0.34525178 -0.196335630  0.061287585
## DistanceFromHome         -0.0019088131 -0.02583387  0.058454831  0.004900222
## Education                -0.0768008863  0.11338338 -0.062455898  0.088757850
## EducationField            0.0198131006 -0.05361893 -0.015323844 -0.029654125
## EmployeeNumber            0.0073996296  0.03236600  0.008820132 -0.072348196
## EnvironmentSatisfaction  -0.0055815999  0.02896701 -0.027925502 -0.053261509
## Gender                    0.0265875658  0.03833218  0.040903781 -0.074988585
## HourlyRate                0.0087825077  0.07823356  0.010843543 -0.027918669
## JobInvolvement           -0.0034493545  0.08164235  0.002271699 -0.086314491
## JobLevel                 -0.3793882155  0.11811398 -0.104013181  0.161859039
## JobRole                   0.0629459820 -0.35455723 -0.181978649  0.036564769
## JobSatisfaction           0.0063335636 -0.02578727  0.031124601 -0.019235575
## MaritalStatus             0.0597723550 -0.30720135 -0.219653232  0.426864671
## MonthlyIncome            -0.3712110884  0.13779508 -0.100270795  0.172974561
## MonthlyRate              -0.0047312655  0.01027027 -0.061421088  0.091327652
## NumCompaniesWorked       -0.0480513180  0.35650130 -0.117228321  0.262473227
## OverTime                  0.0120943643 -0.01654755 -0.061509397  0.104286626
## PercentSalaryHike         0.0150336175 -0.07716826  0.594989308  0.339297006
## PerformanceRating        -0.0002238331 -0.09023957  0.601252308  0.332127572
## RelationshipSatisfaction -0.0160215694  0.04745802 -0.072798540  0.039892019
## StockOptionLevel         -0.0304765158  0.26576622  0.229954227 -0.439641835
## TotalWorkingYears        -0.3999927618  0.15020663 -0.058671662  0.158759709
## TrainingTimesLastYear     0.0091535670 -0.05150389  0.003082895 -0.079229528
## WorkLifeBalance          -0.0134308045 -0.03988636 -0.010969978 -0.023318338
## YearsAtCompany           -0.3856623757 -0.22155889  0.053420664 -0.130771605
## YearsInCurrentRole       -0.3318982990 -0.26386848  0.101139681 -0.182806894
## YearsSinceLastPromotion  -0.2905036466 -0.22046259  0.044515900 -0.101603691
## YearsWithCurrManager     -0.3259780930 -0.26937290  0.092224859 -0.180796337
##                                  PC5         PC6          PC7          PC8
## ï..Age                   -0.0949872076  0.019460202 -0.021170816 -0.029395233
## Attrition                 0.0398252327 -0.562644140 -0.056986335  0.041906049
## BusinessTravel           -0.0008369589  0.048109040 -0.107046510 -0.049439133
```

```
## DailyRate                  -0.0926389243  0.093919786  0.234345939 -0.331681437
## Department                 -0.5702997579  0.066545839 -0.009562634 -0.021237433
## DistanceFromHome           -0.0473072483 -0.295157581 -0.126756879 -0.061546135
## Education                  -0.0832699425  0.010154387 -0.338411482 -0.158517819
## EducationField              0.0174605940  0.048175780  0.068076843  0.117244693
## EmployeeNumber             -0.0166440153 -0.051357696 -0.399925510  0.333722017
## EnvironmentSatisfaction     0.0353437338  0.067564729  0.327433137  0.216826540
## Gender                      0.0660038200 -0.030838305  0.028199945 -0.098532582
## HourlyRate                 -0.0409587064 -0.070007154 -0.387438203 -0.231433720
## JobInvolvement             -0.0287700246  0.181012227 -0.108821681 -0.479926771
## JobLevel                   -0.1139178351  0.041212181  0.074257668  0.100182859
## JobRole                    -0.5523060979  0.061392430 -0.010787925 -0.068212811
## JobSatisfaction            -0.0305186113  0.173804009  0.393740217 -0.075911489
## MaritalStatus               0.3092362441  0.174419279 -0.086487867 -0.061673797
## MonthlyIncome              -0.0956631652  0.038643066  0.074249401  0.098984203
## MonthlyRate                -0.0249604492 -0.040654462  0.106264512  0.330874181
## NumCompaniesWorked         -0.1326809959 -0.032205012 -0.082597602 -0.030579702
## OverTime                   -0.0490415572 -0.515701519  0.326797352 -0.048766671
## PercentSalaryHike          -0.1246460690  0.050321166 -0.001410505 -0.001058593
## PerformanceRating          -0.0966936243  0.022018769 -0.001705063  0.009164059
## RelationshipSatisfaction    0.0646155109  0.042008819  0.222845139 -0.288532746
## StockOptionLevel           -0.3476466680 -0.173717446  0.013509570  0.092705126
## TotalWorkingYears          -0.0337829316 -0.007033426  0.011671275  0.022878943
## TrainingTimesLastYear      -0.0040561137  0.305531990 -0.100172910  0.239698716
## WorkLifeBalance            -0.0312430115  0.214026237 -0.023171104  0.281934612
## YearsAtCompany              0.1133817685 -0.065715209 -0.012376206 -0.031511252
## YearsInCurrentRole          0.0761967400 -0.033222281 -0.028032331 -0.058667194
## YearsSinceLastPromotion     0.0968131493 -0.123125769 -0.016026205 -0.015874801
## YearsWithCurrManager        0.1151213032 -0.033914403 -0.066303968 -0.094327650
##                                      PC9         PC10         PC11          PC12
## ï..Age                       0.011386034  0.033244482  0.0023861825  0.0282189762
## Attrition                   -0.058171560 -0.139132738 -0.1754665266  0.0311424677
## BusinessTravel              -0.379722242 -0.309928799  0.2888682871  0.1687621623
## DailyRate                   -0.235791159 -0.148809808  0.0668352918  0.0424838968
## Department                   0.023566211  0.011904492 -0.0353475590 -0.0007595333
## DistanceFromHome             0.084297097  0.210882314  0.1529079574 -0.2014371920
## Education                    0.145937447  0.220334584  0.0383766952  0.2960086741
## EducationField              -0.511442816  0.018958785 -0.2722466931  0.2328414184
## EmployeeNumber               0.087360703  0.212689505  0.1530012761  0.2203063128
## EnvironmentSatisfaction     -0.247560137  0.456441647  0.2687161399  0.2932670942
## Gender                       0.312027241  0.114236044 -0.3816451670  0.2858798931
## HourlyRate                  -0.152186238  0.021352056  0.0454294911 -0.2895386903
## JobInvolvement              -0.140552067  0.271579693  0.2724818463  0.0079303370
## JobLevel                     0.040204157 -0.084924045 -0.0296981366 -0.0421416919
## JobRole                      0.011732615  0.060427936 -0.0089933597  0.0465244909
## JobSatisfaction              0.435501461 -0.132420669  0.1871971502  0.1370598427
## MaritalStatus                0.022110985  0.052422048  0.0759396696  0.0432182520
## MonthlyIncome                0.029954096 -0.101703791 -0.0372251116 -0.0386330030
## MonthlyRate                  0.068183132  0.198349865  0.3963006909 -0.4367749546
## NumCompaniesWorked          -0.074364176  0.082092859 -0.1282737130  0.0827139681
## OverTime                    -0.185324318  0.084956579  0.1081523750  0.0505483622
## PercentSalaryHike           -0.030383879  0.034672127  0.0026192936  0.0152712038
## PerformanceRating           -0.054812638  0.032796600 -0.0115493961  0.0035168769
## RelationshipSatisfaction    -0.055612111  0.372990474 -0.3497504063 -0.4123992900
```

```
## StockOptionLevel          -0.007520281 -0.034153010 -0.0421672899 -0.0307175421
## TotalWorkingYears          -0.007693625 -0.044644231 -0.0113338164  0.0099773121
## TrainingTimesLastYear      -0.175949444 -0.244139703 -0.1068493800 -0.2902774103
## WorkLifeBalance            -0.132214896  0.349199161 -0.3063154751 -0.0402246676
## YearsAtCompany             -0.008835292 -0.008263972  0.0008497405  0.0018549084
## YearsInCurrentRole         -0.045620424  0.048656714  0.0437367105  0.0307152128
## YearsSinceLastPromotion    -0.031961934  0.047847665 -0.0518801674 -0.0041542856
## YearsWithCurrManager       -0.029849743  0.036891422  0.0300814131  0.0301815490
##                                     PC13         PC14         PC15         PC16
## ï..Age                      0.046042528  0.050348387 -0.049688834 -0.0532602212
## Attrition                   0.023932388  0.026043592 -0.015682372 -0.0292474689
## BusinessTravel             -0.389896766 -0.228210168 -0.355942727 -0.0434886132
## DailyRate                   0.459687502 -0.042505161  0.334959667  0.2378903569
## Department                  0.012626622 -0.060585561  0.054879501 -0.0572759890
## DistanceFromHome            0.472110409 -0.224591184 -0.426369384  0.1582871802
## Education                   0.095129646  0.446530184 -0.227283994  0.0440416541
## EducationField              0.401029384 -0.123006372 -0.190040547 -0.0175774019
## EmployeeNumber              0.191748019 -0.172894283  0.053527296 -0.1271919499
## EnvironmentSatisfaction     0.001329338 -0.028177832  0.213613143 -0.0923547755
## Gender                     -0.040327063 -0.602233696  0.026514457 -0.2294605813
## HourlyRate                 -0.052318231 -0.285506972  0.268837770  0.3703085651
## JobInvolvement             -0.098335530 -0.153344777 -0.192316003 -0.2102168301
## JobLevel                   -0.004906955 -0.186536564 -0.019012700  0.0304093001
## JobRole                    -0.048231789 -0.005064548  0.037262302 -0.0643617405
## JobSatisfaction             0.138859429 -0.013367214 -0.330781739  0.2724372595
## MaritalStatus               0.082546528 -0.036574120  0.020359130  0.0622303920
## MonthlyIncome              -0.019485362 -0.198209607 -0.010759238  0.0290013680
## MonthlyRate                 0.040089762 -0.103927718  0.099750989 -0.1235679599
## NumCompaniesWorked          0.062400317  0.212716009  0.141047871 -0.0650108641
## OverTime                   -0.148945656  0.028121772 -0.189661820  0.0557740678
## PercentSalaryHike          -0.021382642 -0.022254354 -0.008805833 -0.0449000831
## PerformanceRating          -0.052677407 -0.005596156  0.002921961 -0.0418947061
## RelationshipSatisfaction   -0.067566641  0.067048963 -0.145951501 -0.2518170448
## StockOptionLevel           -0.058114543  0.075081663 -0.060976600 -0.0141079547
## TotalWorkingYears           0.027388010 -0.056992171 -0.004494832 -0.0004876817
## TrainingTimesLastYear       0.235591614  0.083137173 -0.282034260 -0.2993324075
## WorkLifeBalance            -0.256613262 -0.018935573 -0.201157207  0.6157086648
## YearsAtCompany             -0.012365447  0.020368542  0.008021149 -0.0062796972
## YearsInCurrentRole         -0.004901715  0.076741425  0.037336388  0.0347626124
## YearsSinceLastPromotion     0.015198321  0.099757561  0.047840343 -0.0626768022
## YearsWithCurrManager       -0.007261608  0.077262782  0.031046529 -0.0264053087
##                                     PC17         PC18        PC19         PC20
## ï..Age                     -0.061520458 -0.0012482070 -0.07707899  0.050299317
## Attrition                   0.014118431  0.1612279880 -0.04274683 -0.128057129
## BusinessTravel              0.063597666 -0.2414656821 -0.20488229 -0.237817641
## DailyRate                  -0.062074497  0.1770607441  0.04530541 -0.487345296
## Department                 -0.007396933 -0.0538256233 -0.01269543  0.003207010
## DistanceFromHome            0.212550788 -0.4037222068  0.13980002 -0.157956284
## Education                  -0.034521472  0.0988650668 -0.37423925 -0.199585926
## EducationField              0.211645964  0.1411067996 -0.18560067  0.489591978
## EmployeeNumber             -0.413040066  0.1256979308  0.29306030  0.043315824
## EnvironmentSatisfaction    -0.170896553 -0.3692161078 -0.13508967 -0.088963136
## Gender                      0.023270017  0.1166135747 -0.31487669 -0.262575468
## HourlyRate                 -0.351558857 -0.0796312138 -0.37763415  0.280627057
```

```
## JobInvolvement             0.117895187  0.4340104459  0.28360233  0.104382137
## JobLevel                  -0.014940230  0.0001213582  0.15224527  0.008285653
## JobRole                    0.004997254 -0.0380169872 -0.00880268  0.024079354
## JobSatisfaction           -0.232218821  0.0621010126 -0.23353056  0.270677162
## MaritalStatus             -0.066259478 -0.0229097159  0.01719825  0.001662669
## MonthlyIncome             -0.026262690  0.0093343022  0.15101765  0.012681653
## MonthlyRate                0.310794699  0.3628567046 -0.40541012 -0.063367547
## NumCompaniesWorked         0.137970955 -0.0473091191 -0.09045145  0.028066989
## OverTime                  -0.403540587  0.2891388668  0.04972583  0.001730961
## PercentSalaryHike         -0.027651889  0.0071484694 -0.01252173 -0.010509643
## PerformanceRating         -0.024294533  0.0018958798 -0.01374997  0.011622309
## RelationshipSatisfaction  -0.218355762 -0.2148010428 -0.02715567  0.007985655
## StockOptionLevel           0.015981326 -0.0139232629 -0.04713257  0.022131471
## TotalWorkingYears         -0.010516775  0.0022359306  0.02727865  0.027610436
## TrainingTimesLastYear     -0.405888548  0.1163806168 -0.13031494 -0.263666506
## WorkLifeBalance            0.062985220  0.2098812174  0.09337942 -0.247947572
## YearsAtCompany            -0.022108465  0.0077801529 -0.03889449 -0.006450595
## YearsInCurrentRole         0.035052168  0.0229192743 -0.06838993 -0.049428225
## YearsSinceLastPromotion    0.017715733  0.0154796871 -0.11619346 -0.014084205
## YearsWithCurrManager       0.034429536  0.0108079009 -0.04824859 -0.001625552
##                                   PC21          PC22        PC23        PC24
## ï..Age                     0.0537969186  0.0437720623 -0.340459637  0.602941808
## Attrition                  0.0319656905  0.2099574728  0.480551613  0.035754519
## BusinessTravel            -0.3544885453  0.0315789283  0.019887629  0.017306882
## DailyRate                 -0.2337813082 -0.0651573879  0.029020180  0.047518192
## Department                 0.0050356887  0.0141581881  0.024430430  0.015001097
## DistanceFromHome           0.1223545889  0.0805698235 -0.099337169 -0.008331012
## Education                  0.0670657290 -0.4011323997  0.161363024 -0.112126555
## EducationField            -0.0815867376 -0.1599147397 -0.006988212 -0.018615276
## EmployeeNumber            -0.4799057702  0.0267238673  0.016759602  0.013326337
## EnvironmentSatisfaction    0.2951042053  0.0866218017  0.220723088 -0.008915086
## Gender                     0.0893876692  0.0385149396 -0.144347568 -0.027451380
## HourlyRate                 0.1406894468  0.0284640844  0.065886519 -0.031722561
## JobInvolvement             0.2082190801  0.2024249450  0.211043672  0.021145463
## JobLevel                   0.0800586564 -0.1614387797  0.236649545 -0.188241526
## JobRole                   -0.0239084676  0.0119205179 -0.118045593  0.046037044
## JobSatisfaction           -0.1725261289  0.2869827680  0.178068723 -0.024898742
## MaritalStatus             -0.0008727769  0.0382139762 -0.054566119 -0.025835452
## MonthlyIncome              0.0680425501 -0.1713585454  0.257554534 -0.190044068
## MonthlyRate               -0.1760024946 -0.0705750683 -0.024181296 -0.032648348
## NumCompaniesWorked        -0.1318238858  0.6347703038 -0.136128194 -0.349406352
## OverTime                   0.1059946720 -0.0927927555 -0.366673534 -0.101733396
## PercentSalaryHike         -0.0094861301 -0.0154268223  0.020974620 -0.010175635
## PerformanceRating         -0.0164106483 -0.0027439750  0.040517511 -0.010375051
## RelationshipSatisfaction  -0.4279018761 -0.1270242354  0.130346338 -0.043542326
## StockOptionLevel          -0.0359274214  0.0321140583  0.113437513 -0.024407202
## TotalWorkingYears          0.0263654998 -0.0009871573 -0.075014140  0.064408156
## TrainingTimesLastYear      0.3175583569  0.1999239815 -0.018462638 -0.061633811
## WorkLifeBalance           -0.0228625921  0.1416348661 -0.001194357  0.070184242
## YearsAtCompany            -0.0249066413  0.0233495047 -0.030967188 -0.063599848
## YearsInCurrentRole        -0.0713322516  0.1282931818 -0.139258071 -0.190763910
## YearsSinceLastPromotion   -0.0770110699  0.2207959131  0.281670824  0.527986618
## YearsWithCurrManager      -0.0408223662  0.0706379597 -0.185820442 -0.271491314
##                                   PC25          PC26        PC27        PC28
```

```
## ï..Age                    -0.3771954985 -0.060460030  0.0419731776  0.039326263
## Attrition                 -0.4459008967  0.037359620 -0.0421282163  0.019603495
## BusinessTravel             0.0120808398  0.007614621  0.0185421073 -0.017602703
## DailyRate                 -0.0161919075 -0.016870941 -0.0289247015 -0.036585944
## Department                -0.0135919675 -0.183840648  0.6636483039 -0.071879653
## DistanceFromHome           0.0724395113  0.031481256 -0.0082064852 -0.006893946
## Education                  0.0725511525  0.029715486  0.0170369635  0.005302011
## EducationField             0.0070047292 -0.004651991 -0.0009736878  0.012833791
## EmployeeNumber            -0.0233256264  0.048377727  0.0154581965 -0.003344161
## EnvironmentSatisfaction   -0.1296927799  0.016811318 -0.0128751364 -0.014918510
## Gender                     0.0632131129 -0.037768449 -0.0116741462  0.007928205
## HourlyRate                 0.0093298834  0.040903028 -0.0109444516  0.002792229
## JobInvolvement            -0.0603760213 -0.012866643  0.0110614873  0.009413617
## JobLevel                   0.0985817428 -0.027258352 -0.0051875850  0.015520703
## JobRole                   -0.0032136187  0.225962367 -0.6582684572  0.046230026
## JobSatisfaction           -0.0882657004  0.055425577 -0.0009585135 -0.023317674
## MaritalStatus              0.0427369788 -0.673383104 -0.2026682158  0.035561455
## MonthlyIncome              0.1279291118  0.014157813 -0.0997889437  0.039878139
## MonthlyRate               -0.0124976367 -0.006654447 -0.0161238550 -0.019587224
## NumCompaniesWorked         0.2144637151  0.030063362  0.0162062207 -0.026619977
## OverTime                   0.2686228392 -0.040639952  0.0433513016 -0.014740090
## PercentSalaryHike         -0.0002103328 -0.021855178 -0.0194528188 -0.008652317
## PerformanceRating          0.0000410718  0.037400959  0.0213004223 -0.004746915
## RelationshipSatisfaction -0.0975015934 -0.007518596 -0.0020744265  0.019597567
## StockOptionLevel          -0.0527966393 -0.658894504 -0.2159350458  0.009485927
## TotalWorkingYears         -0.1282030050  0.016373350 -0.0925595392 -0.053574139
## TrainingTimesLastYear      0.0141578796  0.031428985 -0.0325388641  0.004569058
## WorkLifeBalance           -0.0570100099  0.016223815  0.0054898183 -0.051860227
## YearsAtCompany            -0.1184022773  0.058791102 -0.0322642083 -0.068691201
## YearsInCurrentRole        -0.1154082056 -0.003584704  0.0881614608  0.760387060
## YearsSinceLastPromotion    0.5983059702 -0.003565705 -0.0207086904 -0.081969984
## YearsWithCurrManager      -0.2261427444 -0.028811102 -0.0238754237 -0.622700915
##                                     PC29         PC30         PC31         PC32
## ï..Age                     0.052217885 -0.2615582304  0.2310758920 -0.0120977830
## Attrition                  0.025747284 -0.0421965911 -0.0256497756  0.0048347288
## BusinessTravel             0.005791215 -0.0070978465  0.0093264776  0.0095107389
## DailyRate                 -0.018796127 -0.0008178897  0.0220086073  0.0040412746
## Department                -0.016091406  0.0851678195 -0.0272120112 -0.0640107694
## DistanceFromHome          -0.012562471 -0.0021741659  0.0122194407 -0.0154314006
## Education                 -0.014608356  0.0153241082 -0.0040241375 -0.0019836227
## EducationField             0.006579047 -0.0052743899  0.0129279175  0.0036727642
## EmployeeNumber            -0.002796943 -0.0063853921 -0.0009168551  0.0039490321
## EnvironmentSatisfaction    0.002003020  0.0025894535 -0.0082471156 -0.0055094819
## Gender                    -0.017810710 -0.0018923829 -0.0018760241  0.0039033078
## HourlyRate                 0.011438791 -0.0100413489 -0.0048715500  0.0101050482
## JobInvolvement            -0.011761366  0.0286160736  0.0053266741 -0.0025145793
## JobLevel                   0.033192297 -0.1983608870  0.1070590309  0.7192062823
## JobRole                   -0.014544997 -0.0328899317  0.0148910142  0.0379668074
## JobSatisfaction           -0.006782743 -0.0141370072 -0.0142456796 -0.0022431852
## MaritalStatus             -0.040003802  0.0240291729  0.0287060247 -0.0043116247
## MonthlyIncome              0.048838427 -0.1985779361  0.1306049382 -0.6894657821
## MonthlyRate               -0.004042623  0.0061714160  0.0110695305 -0.0026288647
## NumCompaniesWorked         0.007073183  0.0249510530  0.1140737575  0.0033791410
## OverTime                   0.003554601 -0.0007879052  0.0055559710  0.0017713734
```

```
## PercentSalaryHike           0.692213074  0.1332898805 -0.0358850913  0.0101309667
## PerformanceRating          -0.692404142 -0.1198771769  0.0519513129 -0.0038017679
## RelationshipSatisfaction    0.007294064 -0.0021780096 -0.0245477790  0.0028701930
## StockOptionLevel           -0.037110124  0.0375955590  0.0119643564 -0.0076816916
## TotalWorkingYears          -0.138742785  0.5093506210 -0.6794315422 -0.0098628810
## TrainingTimesLastYear      -0.008949345 -0.0062798627 -0.0137765538 -0.0003836094
## WorkLifeBalance             0.003633652  0.0108601541 -0.0007265140 -0.0053738876
## YearsAtCompany             -0.056230088  0.5896424085  0.6170111109  0.0053180444
## YearsInCurrentRole          0.041361626 -0.1999692542 -0.1495894024 -0.0061315187
## YearsSinceLastPromotion     0.028094913 -0.0853934665 -0.0830551251  0.0092241429
## YearsWithCurrManager        0.067160160 -0.3896860742 -0.1572100596 -0.0251400627
```

```
pcafactors.data <- eigvec.data[,1:5]
pcafactors.data
```

```
##                                    PC1         PC2          PC3          PC4
## ï..Age                     -0.2770835197  0.28772859 -0.066409841  0.207061847
## Attrition                   0.1136550999 -0.14403631 -0.118905631  0.212008954
## BusinessTravel             -0.0035052736  0.04655590 -0.073709829  0.044213515
## DailyRate                   0.0009288049  0.08793151  0.043851312 -0.041835991
## Department                 -0.0107687126 -0.34525178 -0.196335630  0.061287585
## DistanceFromHome           -0.0019088131 -0.02583387  0.058454831  0.004900222
## Education                  -0.0768008863  0.11338338 -0.062455898  0.088757850
## EducationField              0.0198131006 -0.05361893 -0.015323844 -0.029654125
## EmployeeNumber              0.0073996296  0.03236600  0.008820132 -0.072348196
## EnvironmentSatisfaction    -0.0055815999  0.02896701 -0.027925502 -0.053261509
## Gender                      0.0265875658  0.03833218  0.040903781 -0.074988585
## HourlyRate                  0.0087825077  0.07823356  0.010843543 -0.027918669
## JobInvolvement             -0.0034493545  0.08164235  0.002271699 -0.086314491
## JobLevel                   -0.3793882155  0.11811398 -0.104013181  0.161859039
## JobRole                     0.0629459820 -0.35455723 -0.181978649  0.036564769
## JobSatisfaction             0.0063335636 -0.02578727  0.031124601 -0.019235575
## MaritalStatus               0.0597723550 -0.30720135 -0.219653232  0.426864671
## MonthlyIncome              -0.3712110884  0.13779508 -0.100270795  0.172974561
## MonthlyRate                -0.0047312655  0.01027027 -0.061421088  0.091327652
## NumCompaniesWorked         -0.0480513180  0.35650130 -0.117228321  0.262473227
## OverTime                    0.0120943643 -0.01654755 -0.061509397  0.104286626
## PercentSalaryHike           0.0150336175 -0.07716826  0.594989308  0.339297006
## PerformanceRating          -0.0002238331 -0.09023957  0.601252308  0.332127572
## RelationshipSatisfaction   -0.0160215694  0.04745802 -0.072798540  0.039892019
## StockOptionLevel           -0.0304765158  0.26576622  0.229954227 -0.439641835
## TotalWorkingYears          -0.3999927618  0.15020663 -0.058671662  0.158759709
## TrainingTimesLastYear       0.0091535670 -0.05150389  0.003082895 -0.079229528
## WorkLifeBalance            -0.0134308045 -0.03988636 -0.010969978 -0.023318338
## YearsAtCompany             -0.3856623757 -0.22155889  0.053420664 -0.130771605
## YearsInCurrentRole         -0.3318982990 -0.26386848  0.101139681 -0.182806894
## YearsSinceLastPromotion    -0.2905036466 -0.22046259  0.044515900 -0.101603691
## YearsWithCurrManager       -0.3259780930 -0.26937290  0.092224859 -0.180796337
##                                    PC5
## ï..Age                     -0.0949872076
## Attrition                   0.0398252327
## BusinessTravel             -0.0008369589
## DailyRate                  -0.0926389243
## Department                 -0.5702997579
```

```
## DistanceFromHome         -0.0473072483
## Education                -0.0832699425
## EducationField            0.0174605940
## EmployeeNumber           -0.0166440153
## EnvironmentSatisfaction   0.0353437338
## Gender                    0.0660038200
## HourlyRate               -0.0409587064
## JobInvolvement           -0.0287700246
## JobLevel                 -0.1139178351
## JobRole                  -0.5523060979
## JobSatisfaction          -0.0305186113
## MaritalStatus             0.3092362441
## MonthlyIncome            -0.0956631652
## MonthlyRate              -0.0249604492
## NumCompaniesWorked       -0.1326809959
## OverTime                 -0.0490415572
## PercentSalaryHike        -0.1246460690
## PerformanceRating        -0.0966936243
## RelationshipSatisfaction  0.0646155109
## StockOptionLevel         -0.3476466680
## TotalWorkingYears        -0.0337829316
## TrainingTimesLastYear    -0.0040561137
## WorkLifeBalance          -0.0312430115
## YearsAtCompany            0.1133817685
## YearsInCurrentRole        0.0761967400
## YearsSinceLastPromotion   0.0968131493
## YearsWithCurrManager      0.1151213032
```

```
unrot.fact.data <- sweep(pcafactors.data,MARGIN=2,emp_pca$sdev[1:4],`*`)
```

```
## Warning in sweep(pcafactors.data, MARGIN = 2, emp_pca$sdev[1:4], `*`): STATS
## does not recycle exactly across MARGIN
```

```
unrot.fact.data
```

```
##                                    PC1          PC2          PC3          PC4
## ï..Age                     -0.6029186957   0.39760949  -0.089396341   0.27247053
## Attrition                   0.1570589370  -0.19389173  -0.156466684   0.46131997
## BusinessTravel             -0.0047185572   0.06126243  -0.160388587   0.06109825
## DailyRate                   0.0012222048   0.19133419   0.060597725  -0.05631672
## Department                 -0.0234321339  -0.47710026  -0.264293465   0.08064770
## DistanceFromHome           -0.0026377712  -0.03477578   0.076920105   0.01066262
## Education                  -0.1033840485   0.14920001  -0.135900644   0.12265366
## EducationField              0.0260718532  -0.11667188  -0.021175880  -0.03991833
## EmployeeNumber              0.0161011922   0.04472627   0.011873052  -0.09520224
## EnvironmentSatisfaction    -0.0077131616   0.03899339  -0.036746878  -0.11589415
## Gender                      0.0357903446   0.05044092   0.089004406  -0.10362604
## HourlyRate                  0.0115568107   0.17023199   0.014984592  -0.03758218
## JobInvolvement             -0.0075056082   0.11282082   0.003058004  -0.11358034
## JobLevel                   -0.5242730847   0.15899688  -0.136869864   0.35219648
## JobRole                     0.0847335333  -0.46655818  -0.395975660   0.05052852
## JobSatisfaction             0.0083342705  -0.05611170   0.043010800  -0.02589360
## MaritalStatus               0.1300613995  -0.42451872  -0.295682010   0.56170679
```

```
## MonthlyIncome                 -0.5129731880   0.18549022 -0.131945297   0.37638325
## MonthlyRate                    -0.0063689028   0.01351454 -0.133648953   0.12620484
## NumCompaniesWorked             -0.0632302300   0.77572748 -0.161996739   0.35332333
## OverTime                        0.0263166802 -0.02286691 -0.082799701   0.13722969
## PercentSalaryHike               0.0207748178 -0.10387858  0.782940247   0.73829187
## PerformanceRating              -0.0003013086 -0.11874532  1.308292380   0.45896404
## RelationshipSatisfaction       -0.0210826166  0.10326608 -0.100599632   0.05369988
## StockOptionLevel               -0.0663152437  0.36725990  0.309548497 -0.57852012
## TotalWorkingYears              -0.5527463178  0.20219779 -0.077205430   0.34545251
## TrainingTimesLastYear           0.0123218997 -0.06777344  0.006708212 -0.10948656
## WorkLifeBalance                -0.0176734561 -0.08679056 -0.015159311 -0.03138954
## YearsAtCompany                 -0.8391803916 -0.30617019  0.071911209 -0.17208100
## YearsInCurrentRole             -0.4586472061 -0.35520153  0.133088655 -0.39777788
## YearsSinceLastPromotion        -0.3910559442 -0.29010444  0.096864182 -0.14040521
## YearsWithCurrManager           -0.4289511853 -0.58614080  0.127444685 -0.24337554
##                                         PC5
## ï..Age                          -0.206687007
## Attrition                        0.055034123
## BusinessTravel                  -0.001126656
## DailyRate                       -0.121902598
## Department                      -1.240941311
## DistanceFromHome                -0.065373451
## Education                       -0.112092245
## EducationField                   0.022976214
## EmployeeNumber                  -0.036216474
## EnvironmentSatisfaction          0.048841181
## Gender                           0.088849784
## HourlyRate                      -0.053897136
## JobInvolvement                  -0.062602012
## JobLevel                        -0.157422008
## JobRole                         -0.743476322
## JobSatisfaction                 -0.040159123
## MaritalStatus                    0.672881278
## MonthlyIncome                   -0.132196048
## MonthlyRate                     -0.033600033
## NumCompaniesWorked              -0.174593544
## OverTime                        -0.106711766
## PercentSalaryHike               -0.172247256
## PerformanceRating               -0.130162279
## RelationshipSatisfaction         0.085026879
## StockOptionLevel                -0.756460275
## TotalWorkingYears               -0.046684322
## TrainingTimesLastYear           -0.005460060
## WorkLifeBalance                 -0.041112354
## YearsAtCompany                   0.246712573
## YearsInCurrentRole               0.105295574
## YearsSinceLastPromotion          0.130323175
## YearsWithCurrManager             0.151486927
```

```
communalities.data <- rowSums(unrot.fact.data^2)
communalities.data
```

```
##              ï..Age            Attrition       BusinessTravel
##         0.646555673          0.302588211          0.033234114
```

```
##              DailyRate              Department          DistanceFromHome
##            0.058314167            1.844464152               0.011520395
##              Education            EducationField            EmployeeNumber
##            0.079026481            0.016861866               0.012775757
##   EnvironmentSatisfaction               Gender                HourlyRate
##            0.018747226            0.030379659               0.033654350
##          JobInvolvement              JobLevel                   JobRole
##            0.029613728            0.467699683               0.936963200
##          JobSatisfaction            MaritalStatus             MonthlyIncome
##            0.007351146            1.052843693               0.474097825
##             MonthlyRate        NumCompaniesWorked                  OverTime
##            0.035141873            0.787314409               0.038290642
##          PercentSalaryHike      PerformanceRating RelationshipSatisfaction
##            1.198961780            1.953319697               0.031341894
##          StockOptionLevel       TotalWorkingYears     TrainingTimesLastYear
##            1.142015497            0.473889979               0.016807186
##           WorkLifeBalance          YearsAtCompany        YearsInCurrentRole
##            0.010750286            0.893614101               0.523552374
##    YearsSinceLastPromotion      YearsWithCurrManager
##            0.283165757            0.625982252
```

```r
#Performing the varimax rotation
rot.fact.data <- varimax(unrot.fact.data)
unrot.fact.data
```

```
##                                 PC1          PC2          PC3          PC4
## ï..Age                   -0.6029186957  0.39760949 -0.089396341  0.27247053
## Attrition                 0.1570589370 -0.19389173 -0.156466684  0.46131997
## BusinessTravel           -0.0047185572  0.06126243 -0.160388587  0.06109825
## DailyRate                 0.0012222048  0.19133419  0.060597725 -0.05631672
## Department               -0.0234321339 -0.47710026 -0.264293465  0.08064770
## DistanceFromHome         -0.0026377712 -0.03477578  0.076920105  0.01066262
## Education                -0.1033840485  0.14920001 -0.135900644  0.12265366
## EducationField            0.0260718532 -0.11667188 -0.021175880 -0.03991833
## EmployeeNumber            0.0161011922  0.04472627  0.011873052 -0.09520224
## EnvironmentSatisfaction  -0.0077131616  0.03899339 -0.036746878 -0.11589415
## Gender                    0.0357903446  0.05044092  0.089004406 -0.10362604
## HourlyRate                0.0115568107  0.17023199  0.014984592 -0.03758218
## JobInvolvement           -0.0075056082  0.11282082  0.003058004 -0.11358034
## JobLevel                 -0.5242730847  0.15899688 -0.136869864  0.35219648
## JobRole                   0.0847335333 -0.46655818 -0.395975660  0.05052852
## JobSatisfaction           0.0083342705 -0.05611170  0.043010800 -0.02589360
## MaritalStatus             0.1300613995 -0.42451872 -0.295682010  0.56170679
## MonthlyIncome            -0.5129731880  0.18549022 -0.131945297  0.37638325
## MonthlyRate              -0.0063689028  0.01351454 -0.133648953  0.12620484
## NumCompaniesWorked       -0.0632302300  0.77572748 -0.161996739  0.35332333
## OverTime                  0.0263166802 -0.02286691 -0.082799701  0.13722969
## PercentSalaryHike         0.0207748178 -0.10387858  0.782940247  0.73829187
## PerformanceRating        -0.0003013086 -0.11874532  1.308292380  0.45896404
## RelationshipSatisfaction -0.0210826166  0.10326608 -0.100599632  0.05369988
## StockOptionLevel         -0.0663152437  0.36725990  0.309548497 -0.57852012
## TotalWorkingYears        -0.5527463178  0.20219779 -0.077205430  0.34545251
## TrainingTimesLastYear     0.0123218997 -0.06777344  0.006708212 -0.10948656
## WorkLifeBalance          -0.0176734561 -0.08679056 -0.015159311 -0.03138954
```

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```
## YearsAtCompany          -0.8391803916 -0.30617019  0.071911209 -0.17208100
## YearsInCurrentRole       -0.4586472061 -0.35520153  0.133088655 -0.39777788
## YearsSinceLastPromotion  -0.3910559442 -0.29010444  0.096864182 -0.14040521
## YearsWithCurrManager     -0.4289511853 -0.58614080  0.127444685 -0.24337554
##                                        PC5
## ï..Age                    -0.206687007
## Attrition                  0.055034123
## BusinessTravel            -0.001126656
## DailyRate                 -0.121902598
## Department                -1.240941311
## DistanceFromHome          -0.065373451
## Education                 -0.112092245
## EducationField             0.022976214
## EmployeeNumber            -0.036216474
## EnvironmentSatisfaction    0.048841181
## Gender                     0.088849784
## HourlyRate                -0.053897136
## JobInvolvement            -0.062602012
## JobLevel                  -0.157422008
## JobRole                   -0.743476322
## JobSatisfaction           -0.040159123
## MaritalStatus              0.672881278
## MonthlyIncome             -0.132196048
## MonthlyRate               -0.033600033
## NumCompaniesWorked        -0.174593544
## OverTime                  -0.106711766
## PercentSalaryHike         -0.172247256
## PerformanceRating         -0.130162279
## RelationshipSatisfaction   0.085026879
## StockOptionLevel          -0.756460275
## TotalWorkingYears         -0.046684322
## TrainingTimesLastYear     -0.005460060
## WorkLifeBalance           -0.041112354
## YearsAtCompany             0.246712573
## YearsInCurrentRole         0.105295574
## YearsSinceLastPromotion    0.130323175
## YearsWithCurrManager       0.151486927
```

```
fact.load.data<- rot.fact.data$loadings[1:12,1:5]
fact.load.data
```

```
##                                   PC1          PC2           PC3          PC4
## ï..Age                    -0.785686857 -0.0288509340 -0.008111735 -0.16819146
## Attrition                 -0.053999075  0.2017154071  0.042116732  0.48173851
## BusinessTravel            -0.084186003  0.0761680685 -0.130498808  0.04107811
## DailyRate                 -0.061103228  0.0978497852  0.034680357 -0.20829917
## Department                -0.095386497 -0.0067814988  0.232641163 -0.25373293
## DistanceFromHome           0.008328671 -0.0149164992  0.095865629 -0.02307703
## Education                 -0.237399346  0.0998077537 -0.073809162 -0.03279573
## EducationField             0.088401800 -0.0656809221 -0.017606750  0.05206821
## EmployeeNumber             0.037129910  0.0008260205 -0.019482499 -0.10485748
## EnvironmentSatisfaction    0.039151099 -0.0359715813 -0.092843441 -0.06641779
## Gender                     0.084680497 -0.0165696473  0.009121109 -0.06627806
## HourlyRate                -0.050279411  0.0948577575 -0.014349510 -0.14123146
```

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```
##                                PC5
## ï..Age                 -0.008080263
## Attrition              -0.158547756
## BusinessTravel         -0.040347322
## DailyRate               0.020364411
## Department             -1.310273738
## DistanceFromHome       -0.038804092
## Education              -0.078632635
## EducationField         -0.041375211
## EmployeeNumber          0.004667396
## EnvironmentSatisfaction 0.053751611
## Gender                  0.135861485
## HourlyRate              0.044453365
```

```r
scale.data <- scale(emp_churn)
scale.data
```

```
##              ï..Age   Attrition BusinessTravel    DailyRate Department
##    [1,]  0.44619856  2.2801299      0.5898476  0.742273931  1.4010356
##    [2,]  1.32191535 -0.4382732     -0.9128837 -1.297333107 -0.4936491
##    [3,]  0.00834016  2.2801299      0.5898476  1.413882080 -0.4936491
##    [4,] -0.42951824 -0.4382732     -0.9128837  1.460968999 -0.4936491
##    [5,] -1.08630583 -0.4382732      0.5898476 -0.524116344 -0.4936491
##    [6,] -0.53898284 -0.4382732     -0.9128837  0.501882822 -0.4936491
##    [7,]  2.41656135 -0.4382732      0.5898476  1.292447397 -0.4936491
##    [8,] -0.75791204 -0.4382732      0.5898476  1.376708198 -0.4936491
##    [9,]  0.11780476 -0.4382732     -0.9128837 -1.453463415 -0.4936491
##   [10,] -0.10112444 -0.4382732      0.5898476  1.230490925 -0.4936491
##   [11,] -0.21058904 -0.4382732      0.5898476  0.016144086 -0.4936491
##   [12,] -0.86737664 -0.4382732      0.5898476 -1.609593723 -0.4936491
##   [13,] -0.64844744 -0.4382732      0.5898476 -0.328333895 -0.4936491
##   [14,] -0.32005364 -0.4382732      0.5898476  1.346969091 -0.4936491
##   [15,] -0.97684124  2.2801299      0.5898476 -1.733506665 -0.4936491
##   [16,] -0.86737664 -0.4382732      0.5898476  1.453534222 -0.4936491
##   [17,] -0.53898284 -0.4382732      0.5898476 -1.161028870 -0.4936491
##   [18,] -1.63362883 -0.4382732     -2.4156151  0.794317367 -0.4936491
##   [19,]  1.75977375 -0.4382732      0.5898476  1.032230217  1.4010356
##   [20,]  0.11780476 -0.4382732      0.5898476 -1.069333292 -0.4936491
##   [21,] -1.41469963 -0.4382732     -2.4156151 -0.320899118 -0.4936491
##   [22,] -0.10112444  2.2801299      0.5898476  1.029751958  1.4010356
##   [23,] -0.32005364 -0.4382732      0.5898476 -0.950376867 -0.4936491
##   [24,] -1.74309343 -0.4382732      0.5898476 -1.019768115 -0.4936491
##   [25,] -0.32005364  2.2801299      0.5898476 -0.256464388 -0.4936491
##   [26,]  1.75977375 -0.4382732      0.5898476  1.188360525 -0.4936491
##   [27,] -0.53898284  2.2801299     -0.9128837  0.799273884 -0.4936491
##   [28,]  0.55566316 -0.4382732      0.5898476 -0.276290459  1.4010356
##   [29,]  0.77459236 -0.4382732      0.5898476 -0.806637854 -0.4936491
##   [30,]  0.99352156 -0.4382732      0.5898476 -0.241594835  1.4010356
##   [31,] -0.42951824 -0.4382732      0.5898476  0.301143855 -0.4936491
##   [32,]  0.77459236 -0.4382732      0.5898476  1.627012342 -0.4936491
##   [33,] -0.75791204 -0.4382732      0.5898476 -1.678984971 -0.4936491
##   [34,]  0.22726936  2.2801299      0.5898476  0.229274348  1.4010356
##   [35,] -1.41469963  2.2801299      0.5898476  0.026057122 -0.4936491
##   [36,]  0.66512776 -0.4382732      0.5898476  1.166056195 -0.4936491
```

```
##      [37,]  1.43137995  2.2801299         0.5898476  0.164839618  1.4010356
##      [38,] -0.21058904 -0.4382732         0.5898476  0.216883054  1.4010356
##      [39,] -0.10112444 -0.4382732         0.5898476  0.122709217 -0.4936491
##      [40,] -0.42951824 -0.4382732        -0.9128837  0.838926026  1.4010356
##      [41,] -0.21058904 -0.4382732         0.5898476 -0.838855219 -0.4936491
##      [42,] -1.08630583 -0.4382732         0.5898476  1.084273653 -0.4936491
##      [43,] -1.19577043  2.2801299         0.5898476  1.374229939 -0.4936491
##      [44,] -1.08630583 -0.4382732        -0.9128837  0.474621974  1.4010356
##      [45,] -0.75791204 -0.4382732        -0.9128837 -0.201942693 -0.4936491
##      [46,]  0.44619856  2.2801299         0.5898476  1.381664715 -0.4936491
##      [47,] -0.32005364 -0.4382732        -2.4156151  0.650578353  1.4010356
##      [48,]  0.00834016 -0.4382732         0.5898476 -0.977637715 -0.4936491
##      [49,]  0.99352156 -0.4382732        -0.9128837  1.012404146  1.4010356
##      [50,] -0.21058904 -0.4382732         0.5898476  1.057012805 -0.4936491
##      [51,]  1.21245075  2.2801299         0.5898476 -0.437377284 -0.4936491
##      [52,] -0.97684124  2.2801299         0.5898476  1.565055871 -0.4936491
##      [53,]  0.77459236 -0.4382732         0.5898476  1.698881849  1.4010356
##      [54,] -0.21058904 -0.4382732        -2.4156151  0.729882636 -0.4936491
##      [55,] -1.19577043 -0.4382732         0.5898476  1.587360200  1.4010356
##      [56,] -0.42951824 -0.4382732        -0.9128837 -0.712464017 -0.4936491
##      [57,] -0.21058904 -0.4382732        -0.9128837  0.125187476  1.4010356
##      [58,] -0.21058904 -0.4382732         0.5898476  0.841404285 -0.4936491
##      [59,] -0.64844744 -0.4382732         0.5898476 -0.365507777 -0.4936491
##      [60,]  0.00834016 -0.4382732         0.5898476  0.774491296 -0.4936491
##      [61,] -0.53898284 -0.4382732         0.5898476 -0.930550796 -0.4936491
##      [62,]  0.11780476 -0.4382732        -0.9128837 -0.370464295 -0.4936491
##      [63,]  1.43137995 -0.4382732         0.5898476  0.462230680 -0.4936491
##      [64,]  2.41656135 -0.4382732         0.5898476  1.567534129  1.4010356
##      [65,] -0.10112444 -0.4382732         0.5898476  1.042143252 -0.4936491
##      [66,]  1.97870295 -0.4382732         0.5898476  0.083057075 -0.4936491
##      [67,] -0.10112444 -0.4382732        -0.9128837  0.972752004 -0.4936491
##      [68,]  0.88405696 -0.4382732         0.5898476  1.329621279 -0.4936491
##      [69,] -0.21058904 -0.4382732        -0.9128837 -0.343203448 -0.4936491
##      [70,] -0.10112444  2.2801299         0.5898476 -1.200681012 -0.4936491
##      [71,]  2.41656135 -0.4382732        -0.9128837  1.047099770  1.4010356
##      [72,] -0.86737664 -0.4382732         0.5898476  1.302360432 -0.4936491
##      [73,] -0.64844744 -0.4382732         0.5898476  0.692708754 -0.4936491
##      [74,] -0.53898284 -0.4382732         0.5898476 -0.630681475 -0.4936491
##      [75,] -0.10112444 -0.4382732         0.5898476 -1.661637159 -0.4936491
##      [76,] -0.64844744 -0.4382732         0.5898476 -0.139986222 -0.4936491
##      [77,] -0.21058904 -0.4382732         0.5898476 -0.065638456  1.4010356
##      [78,]  0.88405696 -0.4382732         0.5898476 -1.510463368 -0.4936491
##      [79,]  0.00834016 -0.4382732         0.5898476 -1.004898562 -0.4936491
##      [80,]  0.99352156 -0.4382732         0.5898476  0.353187291 -2.3883338
##      [81,] -0.75791204 -0.4382732         0.5898476  0.122709217 -0.4936491
##      [82,] -0.21058904 -0.4382732         0.5898476  1.019838923 -0.4936491
##      [83,]  1.97870295 -0.4382732         0.5898476 -1.713680595  1.4010356
##      [84,]  0.11780476 -0.4382732        -2.4156151 -0.568725004 -0.4936491
##      [85,] -0.32005364 -0.4382732         0.5898476  0.868665132 -0.4936491
##      [86,]  2.08816755 -0.4382732         0.5898476  1.480795070 -0.4936491
##      [87,] -1.52416423 -0.4382732         0.5898476 -0.648029287  1.4010356
##      [88,]  1.54084455 -0.4382732         0.5898476 -0.918159502 -0.4936491
##      [89,] -0.75791204 -0.4382732         0.5898476 -1.275028777 -0.4936491
##      [90,]  0.99352156  2.2801299         0.5898476 -0.330812153  1.4010356
```

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##  [91,]   0.33673396 -0.4382732      -0.9128837 -0.675290134 -0.4936491
##  [92,]   1.54084455 -0.4382732       0.5898476 -0.422507731  1.4010356
##  [93,]  -0.75791204 -0.4382732       0.5898476  1.317229985  1.4010356
##  [94,]   0.99352156 -0.4382732      -0.9128837 -0.407638178 -0.4936491
##  [95,]  -0.53898284 -0.4382732       0.5898476  0.719969601  1.4010356
##  [96,]   1.86923835 -0.4382732       0.5898476  1.027273699 -0.4936491
##  [97,]  -1.41469963 -0.4382732       0.5898476  1.364316903  1.4010356
##  [98,]  -0.97684124 -0.4382732      -2.4156151 -1.691376265  1.4010356
##  [99,]   2.30709675 -0.4382732       0.5898476 -0.298594788  1.4010356
## [100,]   0.77459236 -0.4382732      -2.4156151 -0.776898747 -0.4936491
## [101,]   0.00834016  2.2801299       0.5898476  0.011187569 -2.3883338
## [102,]  -0.53898284 -0.4382732       0.5898476  0.060752746 -0.4936491
## [103,]  -1.85255803  2.2801299      -0.9128837  0.169796135 -0.4936491
## [104,]  -0.32005364 -0.4382732       0.5898476 -0.340725189 -0.4936491
## [105,]   0.00834016 -0.4382732      -2.4156151  0.588621882 -0.4936491
## [106,]   2.41656135 -0.4382732      -2.4156151  1.530360247 -2.3883338
## [107,]   1.43137995 -0.4382732      -0.9128837  0.774491296 -0.4936491
## [108,]  -1.30523503  2.2801299       0.5898476 -1.393985202  1.4010356
## [109,]  -1.30523503 -0.4382732       0.5898476  1.183404007 -0.4936491
## [110,]  -1.63362883 -0.4382732       0.5898476 -0.665377099 -0.4936491
## [111,]   1.54084455 -0.4382732      -0.9128837  1.619577565 -0.4936491
## [112,]  -0.32005364  2.2801299      -0.9128837 -0.358073001 -0.4936491
## [113,]   1.86923835 -0.4382732      -2.4156151 -1.636854570 -2.3883338
## [114,]  -1.41469963 -0.4382732       0.5898476  0.804230402 -0.4936491
## [115,]  -0.32005364 -0.4382732       0.5898476  0.566317552 -0.4936491
## [116,]   0.00834016 -0.4382732       0.5898476  0.957882451  1.4010356
## [117,]  -0.32005364 -0.4382732       0.5898476  1.366795162 -0.4936491
## [118,]  -0.10112444 -0.4382732      -0.9128837  1.646838413  1.4010356
## [119,]  -0.10112444 -0.4382732       0.5898476  0.296187337 -0.4936491
## [120,]   0.66512776 -0.4382732      -0.9128837 -1.012333339  1.4010356
## [121,]  -0.75791204 -0.4382732      -0.9128837  1.262708290 -0.4936491
## [122,]  -0.42951824 -0.4382732      -2.4156151 -0.130073186  1.4010356
## [123,]   2.08816755  2.2801299       0.5898476 -0.895855172 -0.4936491
## [124,]   1.54084455 -0.4382732       0.5898476 -0.293638271 -0.4936491
## [125,]  -0.64844744  2.2801299       0.5898476 -1.371680873  1.4010356
## [126,]  -1.19577043 -0.4382732       0.5898476  0.095448370 -0.4936491
## [127,]   2.30709675  2.2801299       0.5898476 -1.624463276 -0.4936491
## [128,]  -1.96202263  2.2801299       0.5898476 -0.680246652  1.4010356
## [129,]  -1.63362883 -0.4382732       0.5898476 -0.516681568 -0.4936491
## [130,]   1.32191535 -0.4382732       0.5898476 -0.823985666 -0.4936491
## [131,]   0.66512776 -0.4382732      -0.9128837  0.382926397 -0.4936491
## [132,]   1.43137995 -0.4382732      -0.9128837  0.016144086  1.4010356
## [133,]  -0.64844744  2.2801299       0.5898476 -0.645551028  1.4010356
## [134,]   0.44619856 -0.4382732       0.5898476 -0.001203726  1.4010356
## [135,]  -1.19577043 -0.4382732       0.5898476  1.369273421 -2.3883338
## [136,]  -0.10112444 -0.4382732       0.5898476 -1.453463415 -0.4936491
## [137,]   1.54084455  2.2801299      -0.9128837  0.861230356 -0.4936491
## [138,]   0.22726936 -0.4382732       0.5898476  1.304838691  1.4010356
## [139,]  -1.30523503 -0.4382732       0.5898476  0.387882915  1.4010356
## [140,]  -0.75791204 -0.4382732       0.5898476  1.084273653 -2.3883338
## [141,]  -0.53898284  2.2801299       0.5898476  0.571274070 -0.4936491
## [142,]   0.88405696 -0.4382732       0.5898476  1.272621326 -0.4936491
## [143,]   0.11780476 -0.4382732       0.5898476 -1.086681104 -0.4936491
## [144,]  -0.75791204 -0.4382732       0.5898476 -0.903289949 -0.4936491
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## [145,] -0.53898284 -0.4382732      -0.9128837 -0.281246976  1.4010356
## [146,] -0.75791204 -0.4382732       0.5898476 -1.490637298 -0.4936491
## [147,] -0.75791204 -0.4382732       0.5898476  1.547708059 -0.4936491
## [148,]  0.44619856 -0.4382732      -0.9128837  0.135100511 -0.4936491
## [149,]  0.44619856 -0.4382732       0.5898476  0.323448184 -0.4936491
## [150,] -1.96202263 -0.4382732       0.5898476  0.938056380 -0.4936491
## [151,]  0.33673396 -0.4382732      -0.9128837  1.468403775 -0.4936491
## [152,] -0.21058904 -0.4382732       0.5898476 -0.348159965  1.4010356
## [153,]  1.75977375 -0.4382732       0.5898476  1.570012388  1.4010356
## [154,]  0.88405696 -0.4382732       0.5898476 -1.507985110 -0.4936491
## [155,] -0.53898284 -0.4382732      -0.9128837  0.407708985  1.4010356
## [156,] -0.86737664 -0.4382732      -2.4156151  1.718707920 -0.4936491
## [157,]  1.54084455 -0.4382732       0.5898476  0.908317274 -0.4936491
## [158,]  2.30709675 -0.4382732       0.5898476  0.848839062 -0.4936491
## [159,]  0.33673396 -0.4382732       0.5898476 -0.427464249  1.4010356
## [160,] -0.32005364 -0.4382732      -0.9128837 -1.237854894  1.4010356
## [161,] -1.63362883 -0.4382732       0.5898476  1.123925794 -0.4936491
## [162,] -1.08630583 -0.4382732      -2.4156151 -0.276290459 -0.4936491
## [163,] -0.97684124 -0.4382732       0.5898476 -0.898333431 -0.4936491
## [164,]  2.19763215 -0.4382732       0.5898476 -1.161028870 -0.4936491
## [165,] -1.08630583 -0.4382732      -2.4156151  1.604708012 -0.4936491
## [166,]  1.43137995 -0.4382732       0.5898476  1.609664530 -0.4936491
## [167,]  0.44619856 -0.4382732       0.5898476 -0.836376960 -0.4936491
## [168,] -0.75791204 -0.4382732       0.5898476  1.329621279  1.4010356
## [169,]  0.11780476 -0.4382732       0.5898476 -0.249029611  1.4010356
## [170,] -0.53898284 -0.4382732       0.5898476 -1.691376265 -0.4936491
## [171,] -1.08630583 -0.4382732       0.5898476  0.878578168 -0.4936491
## [172,] -1.96202263  2.2801299      -0.9128837 -0.496855497  1.4010356
## [173,] -0.10112444 -0.4382732      -0.9128837  1.679055778 -0.4936491
## [174,] -0.75791204 -0.4382732      -2.4156151 -1.713680595 -0.4936491
## [175,]  0.88405696 -0.4382732       0.5898476  1.153664901  1.4010356
## [176,]  2.08816755 -0.4382732       0.5898476 -0.221768764 -0.4936491
## [177,] -0.42951824 -0.4382732       0.5898476 -1.656680641 -0.4936491
## [178,] -1.96202263  2.2801299       0.5898476 -1.237854894 -0.4936491
## [179,]  0.99352156 -0.4382732       0.5898476 -0.685203170  1.4010356
## [180,]  0.11780476 -0.4382732       0.5898476  1.431229892 -0.4936491
## [181,] -0.64844744 -0.4382732       0.5898476 -1.641811088 -0.4936491
## [182,] -0.32005364 -0.4382732       0.5898476 -0.429942508 -0.4936491
## [183,]  0.44619856  2.2801299       0.5898476  1.371751680  1.4010356
## [184,]  1.43137995 -0.4382732       0.5898476 -1.175898423 -0.4936491
## [185,]  1.75977375 -0.4382732       0.5898476  0.697665271 -0.4936491
## [186,] -0.42951824 -0.4382732       0.5898476  0.318491667 -0.4936491
## [187,]  0.33673396 -0.4382732       0.5898476  0.462230680 -0.4936491
## [188,]  1.97870295 -0.4382732       0.5898476 -0.273812200 -0.4936491
## [189,] -0.32005364 -0.4382732      -0.9128837  0.660491389 -0.4936491
## [190,]  1.54084455 -0.4382732       0.5898476 -1.213072306 -0.4936491
## [191,]  1.65030915 -0.4382732       0.5898476 -0.256464388 -0.4936491
## [192,] -1.08630583 -0.4382732       0.5898476  0.226796089 -0.4936491
## [193,] -0.21058904  2.2801299       0.5898476 -0.610855404 -0.4936491
## [194,]  0.66512776 -0.4382732      -2.4156151  1.342012574 -0.4936491
## [195,]  0.88405696 -0.4382732      -2.4156151  0.972752004 -0.4936491
## [196,]  0.00834016 -0.4382732       0.5898476 -1.270072259 -0.4936491
## [197,] -0.21058904 -0.4382732      -0.9128837 -1.646767605 -0.4936491
## [198,]  0.55566316 -0.4382732      -2.4156151  0.306100372 -0.4936491
```

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## [199,]  0.11780476 -0.4382732     0.5898476  1.136317089 -0.4936491
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## [201,] -1.08630583 -0.4382732    -0.9128837 -0.819029148 -0.4936491
## [202,]  1.32191535 -0.4382732    -2.4156151  0.494448045 -0.4936491
## [203,] -0.32005364 -0.4382732    -0.9128837  0.187143947 -0.4936491
## [204,]  0.33673396 -0.4382732     0.5898476  0.254056936 -0.4936491
## [205,]  0.11780476  2.2801299     0.5898476  0.935578121 -0.4936491
## [206,] -0.86737664  2.2801299     0.5898476 -1.688898006  1.4010356
## [207,] -1.63362883 -0.4382732     0.5898476  0.826534732 -0.4936491
## [208,] -0.10112444 -0.4382732    -0.9128837 -0.415072955 -0.4936491
## [209,]  0.33673396 -0.4382732    -2.4156151  0.863708615 -0.4936491
## [210,]  0.99352156 -0.4382732     0.5898476 -0.392768625 -0.4936491
## [211,] -0.53898284  2.2801299     0.5898476  0.601013176  1.4010356
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## [213,] -1.08630583 -0.4382732    -0.9128837  1.089230170  1.4010356
## [214,]  1.54084455 -0.4382732     0.5898476  1.651794931 -0.4936491
## [215,] -0.75791204  2.2801299     0.5898476  0.501882822 -0.4936491
## [216,]  0.44619856 -0.4382732     0.5898476  0.231752607  1.4010356
## [217,] -0.75791204  2.2801299    -0.9128837 -1.161028870  1.4010356
## [218,] -0.86737664  2.2801299     0.5898476  0.469665457 -0.4936491
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## [220,]  1.86923835 -0.4382732     0.5898476  0.853795579  1.4010356
## [221,] -0.10112444 -0.4382732     0.5898476  1.470882034 -0.4936491
## [222,] -0.42951824 -0.4382732     0.5898476 -1.624463276 -0.4936491
## [223,]  0.00834016 -0.4382732    -0.9128837 -0.345681707 -0.4936491
## [224,]  0.11780476 -0.4382732     0.5898476 -1.693854524  1.4010356
## [225,] -0.64844744 -0.4382732    -2.4156151  0.437448092 -0.4936491
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## [230,] -0.86737664  2.2801299     0.5898476  0.231752607 -0.4936491
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## [232,]  0.55566316 -0.4382732     0.5898476 -0.670333617 -0.4936491
## [233,]  2.41656135 -0.4382732     0.5898476  0.038448416 -2.3883338
## [234,]  1.43137995 -0.4382732     0.5898476  0.127665735  1.4010356
## [235,] -0.42951824  2.2801299     0.5898476  0.026057122 -0.4936491
## [236,]  0.66512776 -0.4382732     0.5898476  0.573752329  1.4010356
## [237,] -0.42951824  2.2801299     0.5898476 -0.836376960 -0.4936491
## [238,]  1.65030915 -0.4382732    -2.4156151 -0.078029750  1.4010356
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## [245,]  0.88405696 -0.4382732     0.5898476 -1.364246096 -0.4936491
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## [252,]  0.22726936 -0.4382732    -0.9128837 -0.737246606 -0.4936491
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## [253,] -0.86737664 -0.4382732    0.5898476 -0.340725189 -0.4936491
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## [271,]  1.97870295 -0.4382732    0.5898476 -0.868594325 -0.4936491
## [272,]  1.10298615  2.2801299   -2.4156151 -0.338246930 -0.4936491
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## [276,]  0.00834016 -0.4382732   -2.4156151 -0.184594881 -0.4936491
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## [278,]  0.11780476 -0.4382732    0.5898476 -1.190767976  1.4010356
## [279,] -1.19577043 -0.4382732   -0.9128837  1.676577519 -0.4936491
## [280,]  1.43137995 -0.4382732    0.5898476 -0.013595020 -0.4936491
## [281,]  1.75977375 -0.4382732    0.5898476  0.662969647 -0.4936491
## [282,]  0.55566316 -0.4382732    0.5898476 -0.415072955  1.4010356
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## [285,] -1.19577043 -0.4382732   -0.9128837 -0.759550935 -0.4936491
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## [306,] -0.10112444 -0.4382732   -2.4156151  0.749708707 -0.4936491
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## [309,]  2.30709675 -0.4382732   -2.4156151 -1.022246374 -0.4936491
## [310,] -0.64844744 -0.4382732    0.5898476 -0.276290459 -0.4936491
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## [315,]  0.22726936 -0.4382732    0.5898476 -1.698811041 -0.4936491
## [316,]  0.66512776 -0.4382732   -0.9128837 -1.530289439 -0.4936491
## [317,]  1.32191535 -0.4382732    0.5898476  0.715013083 -0.4936491
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## [423,] -1.96202263  2.2801299    0.5898476 -0.776898747 -2.3883338
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```

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## [694,] -0.10112444  2.2801299     0.5898476 -0.675290134  1.4010356
## [695,] -0.42951824 -0.4382732     0.5898476  0.660491389 -0.4936491
## [696,]  0.00834016  2.2801299     0.5898476 -0.439855543  1.4010356
## [697,]  0.88405696 -0.4382732    -2.4156151  0.006231051 -0.4936491
## [698,] -0.86737664 -0.4382732    -0.9128837  1.490708105  1.4010356
## [699,] -0.21058904 -0.4382732     0.5898476  1.032230217  1.4010356
## [700,]  1.65030915 -0.4382732     0.5898476  0.620839247 -0.4936491
## [701,]  2.30709675  2.2801299     0.5898476 -1.272550518 -0.4936491
## [702,]  1.75977375 -0.4382732     0.5898476  1.421316857  1.4010356
## [703,] -0.75791204 -0.4382732     0.5898476 -1.416289532  1.4010356
## [704,]  0.11780476 -0.4382732    -2.4156151 -1.612071981  1.4010356
## [705,] -0.21058904 -0.4382732     0.5898476  0.197056983  1.4010356
## [706,]  0.22726936 -0.4382732     0.5898476  0.249100419  1.4010356
## [707,]  0.33673396  2.2801299    -2.4156151  1.676577519  1.4010356
## [708,]  1.10298615 -0.4382732    -0.9128837  1.428751634 -0.4936491
## [709,] -0.10112444 -0.4382732    -2.4156151  1.057012805  1.4010356
## [710,] -0.64844744  2.2801299    -2.4156151 -1.158550611 -0.4936491
## [711,] -0.42951824 -0.4382732    -2.4156151 -0.199464434  1.4010356
## [712,] -0.86737664  2.2801299     0.5898476  0.256535195 -0.4936491
## [713,] -0.42951824 -0.4382732     0.5898476 -0.846289995 -0.4936491
## [714,]  0.88405696 -0.4382732     0.5898476  0.425056797 -0.4936491
## [715,]  1.43137995 -0.4382732     0.5898476  0.801752143 -0.4936491
## [716,] -0.42951824 -0.4382732    -0.9128837  0.060752746 -0.4936491
## [717,]  0.44619856 -0.4382732    -0.9128837  0.092970111 -0.4936491
## [718,] -1.08630583 -0.4382732     0.5898476  0.821578214 -0.4936491
## [719,]  0.88405696 -0.4382732    -2.4156151 -1.374159131 -0.4936491
## [720,]  1.10298615 -0.4382732     0.5898476  0.377969879  1.4010356
## [721,] -0.75791204  2.2801299     0.5898476 -1.646767605 -0.4936491
## [722,]  1.43137995 -0.4382732     0.5898476  0.338317737 -0.4936491
## [723,]  0.11780476 -0.4382732    -0.9128837  1.458490740 -0.4936491
## [724,]  0.99352156 -0.4382732     0.5898476 -0.586072816 -0.4936491
## [725,] -1.41469963 -0.4382732     0.5898476  1.000012852 -0.4936491
## [726,] -0.21058904  2.2801299     0.5898476 -0.447290320 -0.4936491
## [727,] -0.64844744 -0.4382732    -0.9128837  0.125187476 -0.4936491
## [728,] -2.07148723 -0.4382732    -2.4156151 -1.277507036 -0.4936491
## [729,]  1.86923835 -0.4382732     0.5898476  1.582403683 -0.4936491
## [730,] -0.21058904 -0.4382732     0.5898476 -0.543942415 -0.4936491
## [731,] -0.75791204 -0.4382732     0.5898476 -1.609593723 -0.4936491
## [732,] -1.85255803  2.2801299     0.5898476  0.729882636 -0.4936491
## [733,] -0.75791204  2.2801299    -0.9128837 -1.718637112 -0.4936491
## [734,] -1.19577043 -0.4382732     0.5898476  0.653056612 -0.4936491
## [735,] -1.63362883 -0.4382732     0.5898476 -1.450985156 -0.4936491
## [736,]  1.21245075 -0.4382732     0.5898476 -1.302289625 -0.4936491
## [737,]  1.21245075 -0.4382732     0.5898476  1.369273421 -0.4936491
## [738,]  0.44619856 -0.4382732     0.5898476 -0.628203216 -0.4936491
```

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## [739,]  0.22726936 -0.4382732     0.5898476 -0.833898701 -0.4936491
## [740,] -1.08630583 -0.4382732     0.5898476  0.625795765 -0.4936491
## [741,] -0.21058904 -0.4382732     0.5898476 -0.001203726 -0.4936491
## [742,]  0.55566316 -0.4382732     0.5898476 -1.332028731  1.4010356
## [743,]  1.43137995 -0.4382732     0.5898476  0.003752792 -0.4936491
## [744,]  2.41656135 -0.4382732     0.5898476 -0.216812246 -0.4936491
## [745,]  0.00834016  2.2801299     0.5898476  0.838926026 -0.4936491
## [746,]  1.97870295 -0.4382732    -0.9128837 -1.654202382 -0.4936491
## [747,]  0.44619856 -0.4382732    -2.4156151 -1.376637390 -0.4936491
## [748,]  0.11780476 -0.4382732     0.5898476  0.576230587  1.4010356
## [749,] -1.19577043  2.2801299    -2.4156151 -1.332028731  1.4010356
## [750,]  1.65030915  2.2801299     0.5898476 -1.329550472  1.4010356
## [751,]  0.77459236 -0.4382732     0.5898476  1.599751495  1.4010356
## [752,]  1.43137995 -0.4382732    -2.4156151 -1.629419793  1.4010356
## [753,] -0.10112444  2.2801299     0.5898476  0.204491759 -0.4936491
## [754,]  0.22726936 -0.4382732    -0.9128837  0.353187291 -0.4936491
## [755,] -0.42951824 -0.4382732    -2.4156151  0.583665364  1.4010356
## [756,]  0.88405696 -0.4382732     0.5898476  1.069404100  1.4010356
## [757,] -0.53898284 -0.4382732    -2.4156151  0.759621743 -0.4936491
## [758,] -0.32005364 -0.4382732     0.5898476 -1.453463415  1.4010356
## [759,]  2.41656135 -0.4382732     0.5898476  0.710056566  1.4010356
## [760,]  0.88405696 -0.4382732     0.5898476 -0.035899350 -2.3883338
## [761,]  1.75977375 -0.4382732    -0.9128837 -1.681463229  1.4010356
## [762,] -0.10112444  2.2801299     0.5898476 -0.353116483 -0.4936491
## [763,] -1.19577043  2.2801299    -0.9128837 -1.141202799 -0.4936491
## [764,] -0.32005364 -0.4382732     0.5898476  1.314751726  1.4010356
## [765,] -0.97684124 -0.4382732     0.5898476  0.846360803  1.4010356
## [766,]  0.11780476 -0.4382732    -0.9128837  0.950447675 -0.4936491
## [767,]  1.43137995 -0.4382732     0.5898476  1.639403636 -0.4936491
## [768,]  0.00834016 -0.4382732     0.5898476 -1.681463229 -0.4936491
## [769,]  0.33673396 -0.4382732     0.5898476 -1.245289671  1.4010356
## [770,] -1.19577043 -0.4382732    -0.9128837  0.293709078 -0.4936491
## [771,]  0.99352156 -0.4382732     0.5898476 -0.923116020 -0.4936491
## [772,]  1.86923835 -0.4382732     0.5898476  0.692708754  1.4010356
## [773,]  2.08816755 -0.4382732    -0.9128837  1.084273653 -0.4936491
## [774,] -0.10112444 -0.4382732     0.5898476 -0.016073279 -0.4936491
## [775,]  1.97870295 -0.4382732    -2.4156151 -0.888420396 -0.4936491
## [776,]  0.66512776 -0.4382732     0.5898476 -0.960289903  1.4010356
## [777,] -1.85255803  2.2801299    -0.9128837 -0.082986268  1.4010356
## [778,] -1.74309343  2.2801299     0.5898476  1.317229985 -0.4936491
## [779,]  0.99352156 -0.4382732     0.5898476  0.496926304 -0.4936491
## [780,]  1.54084455  2.2801299     0.5898476  1.289969138 -0.4936491
## [781,] -0.97684124  2.2801299    -2.4156151  1.396534268 -0.4936491
## [782,] -1.19577043 -0.4382732     0.5898476 -1.512941627 -0.4936491
## [783,] -0.75791204 -0.4382732     0.5898476  0.925665086 -0.4936491
## [784,]  0.44619856 -0.4382732     0.5898476 -0.727333570 -0.4936491
## [785,]  0.11780476 -0.4382732     0.5898476 -1.170941905 -0.4936491
## [786,]  0.33673396 -0.4382732     0.5898476  1.708794884 -0.4936491
## [787,] -1.08630583 -0.4382732    -2.4156151  1.175969230 -0.4936491
## [788,]  1.97870295 -0.4382732    -0.9128837  0.715013083 -0.4936491
## [789,] -0.97684124 -0.4382732     0.5898476  0.135100511 -0.4936491
## [790,]  0.77459236  2.2801299     0.5898476  1.421316857 -2.3883338
## [791,] -0.42951824 -0.4382732     0.5898476 -0.367986036 -0.4936491
## [792,] -0.21058904  2.2801299     0.5898476  0.995056334  1.4010356
```

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## [793,]  -0.42951824  2.2801299    -0.9128837   0.060752746 -0.4936491
## [794,]  -0.97684124 -0.4382732     0.5898476   0.229274348 -0.4936491
## [795,]  -0.32005364 -0.4382732    -0.9128837  -0.457203355 -0.4936491
## [796,]   0.00834016 -0.4382732     0.5898476  -1.222985341  1.4010356
## [797,]  -1.30523503  2.2801299     0.5898476   1.032230217 -0.4936491
## [798,]  -1.19577043  2.2801299     0.5898476   1.307316950 -0.4936491
## [799,]  -0.42951824  2.2801299     0.5898476   0.531621928 -0.4936491
## [800,]   0.55566316 -0.4382732     0.5898476  -0.826463924 -0.4936491
## [801,]  -0.97684124  2.2801299    -0.9128837   0.511795857 -0.4936491
## [802,]   1.43137995  2.2801299    -0.9128837   0.387882915  1.4010356
## [803,]  -0.42951824 -0.4382732    -0.9128837   0.415143762  1.4010356
## [804,]  -0.32005364 -0.4382732    -2.4156151  -0.261420906 -0.4936491
## [805,]   1.21245075 -0.4382732    -2.4156151   1.138795348 -0.4936491
## [806,]   0.88405696 -0.4382732    -2.4156151   0.613404470  1.4010356
## [807,]   1.65030915 -0.4382732     0.5898476   0.474621974 -0.4936491
## [808,]   0.11780476 -0.4382732     0.5898476  -0.080508009  1.4010356
## [809,]  -0.86737664 -0.4382732     0.5898476   0.754665225 -0.4936491
## [810,]  -0.97684124 -0.4382732     0.5898476   0.365578585 -0.4936491
## [811,]   0.99352156 -0.4382732     0.5898476  -0.982594232  1.4010356
## [812,]   0.11780476 -0.4382732     0.5898476  -1.666593676  1.4010356
## [813,]   0.66512776 -0.4382732    -0.9128837   0.692708754 -0.4936491
## [814,]   0.22726936  2.2801299    -0.9128837  -1.485680780 -0.4936491
## [815,]   0.33673396 -0.4382732     0.5898476   1.252795255 -0.4936491
## [816,]  -1.74309343 -0.4382732     0.5898476   0.449839386 -0.4936491
## [817,]   0.22726936 -0.4382732    -2.4156151  -0.900811690 -0.4936491
## [818,]  -0.10112444 -0.4382732    -2.4156151  -1.450985156 -0.4936491
## [819,]  -0.64844744 -0.4382732    -0.9128837  -0.023508055  1.4010356
## [820,]  -0.97684124 -0.4382732     0.5898476   1.607186271 -0.4936491
## [821,]  -0.21058904 -0.4382732    -0.9128837   0.940534639  1.4010356
## [822,]   1.32191535 -0.4382732     0.5898476  -1.557550287  1.4010356
## [823,]  -0.32005364 -0.4382732    -0.9128837   0.496926304 -0.4936491
## [824,]  -0.86737664 -0.4382732    -0.9128837  -0.774420488 -0.4936491
## [825,]   0.55566316 -0.4382732     0.5898476  -1.522854663 -0.4936491
## [826,]  -0.86737664 -0.4382732     0.5898476  -0.209377470 -0.4936491
## [827,]   0.11780476 -0.4382732     0.5898476  -0.915681243 -2.3883338
## [828,]  -0.97684124 -0.4382732    -0.9128837  -0.073073233 -0.4936491
## [829,]  -2.07148723  2.2801299    -2.4156151  -1.376637390 -0.4936491
## [830,]  -0.42951824  2.2801299     0.5898476  -0.494377238  1.4010356
## [831,]   0.44619856 -0.4382732     0.5898476  -1.574898099 -0.4936491
## [832,]  -0.64844744  2.2801299    -0.9128837   0.177230912 -0.4936491
## [833,]   0.00834016 -0.4382732     0.5898476  -1.079246328 -0.4936491
## [834,]  -1.08630583 -0.4382732     0.5898476  -1.495593815 -0.4936491
## [835,]  -0.32005364 -0.4382732     0.5898476   1.480795070  1.4010356
## [836,]  -0.21058904 -0.4382732     0.5898476  -0.680246652 -2.3883338
## [837,]  -0.86737664  2.2801299     0.5898476  -0.977637715  1.4010356
## [838,]   0.33673396 -0.4382732    -0.9128837  -0.519159826 -0.4936491
## [839,]   0.55566316  2.2801299    -0.9128837  -0.796724818  1.4010356
## [840,]   0.55566316 -0.4382732     0.5898476  -0.385333848  1.4010356
## [841,]  -0.21058904 -0.4382732     0.5898476   0.444882868 -0.4936491
## [842,]  -1.41469963 -0.4382732     0.5898476  -0.806637854 -0.4936491
## [843,]  -0.97684124  2.2801299     0.5898476   1.691447072 -0.4936491
## [844,]  -1.19577043 -0.4382732     0.5898476   1.441142928 -0.4936491
## [845,]  -0.75791204 -0.4382732     0.5898476   0.122709217  1.4010356
## [846,]   0.33673396 -0.4382732    -0.9128837   0.246622160 -0.4936491
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## [847,] -0.21058904 -0.4382732      0.5898476  0.040926675 -0.4936491
## [848,] -0.32005364 -0.4382732     -0.9128837 -0.330812153 -0.4936491
## [849,] -0.21058904 -0.4382732     -0.9128837 -0.412594696 -0.4936491
## [850,]  0.66512776  2.2801299      0.5898476  1.411403822  1.4010356
## [851,] -0.53898284 -0.4382732     -2.4156151  0.147491806  1.4010356
## [852,]  2.08816755 -0.4382732      0.5898476 -0.209377470 -0.4936491
## [853,] -0.86737664 -0.4382732      0.5898476  1.483273328 -0.4936491
## [854,] -1.96202263 -0.4382732      0.5898476 -0.390290366 -0.4936491
## [855,]  0.88405696 -0.4382732      0.5898476  1.622055824 -0.4936491
## [856,]  0.00834016 -0.4382732      0.5898476  0.432491574 -0.4936491
## [857,] -1.85255803 -0.4382732      0.5898476  0.006231051 -0.4936491
## [858,]  0.77459236  2.2801299      0.5898476  0.729882636 -0.4936491
## [859,]  1.75977375 -0.4382732      0.5898476  1.042143252 -0.4936491
## [860,] -0.86737664 -0.4382732      0.5898476  0.345752514 -0.4936491
## [861,] -1.63362883  2.2801299     -0.9128837  1.123925794 -0.4936491
## [862,]  0.99352156 -0.4382732      0.5898476  1.485751587  1.4010356
## [863,]  0.77459236 -0.4382732     -2.4156151 -1.713680595 -0.4936491
## [864,] -0.42951824 -0.4382732      0.5898476 -1.624463276 -2.3883338
## [865,]  0.44619856  2.2801299     -2.4156151  0.256535195 -0.4936491
## [866,] -0.75791204 -0.4382732      0.5898476  1.304838691  1.4010356
## [867,]  0.33673396 -0.4382732     -0.9128837  0.945491157  1.4010356
## [868,]  1.43137995 -0.4382732     -0.9128837  1.532838506 -0.4936491
## [869,] -0.97684124 -0.4382732      0.5898476  0.933099863 -0.4936491
## [870,]  0.99352156 -0.4382732      0.5898476  1.604708012 -0.4936491
## [871,] -0.21058904 -0.4382732      0.5898476  1.384142974  1.4010356
## [872,] -1.41469963  2.2801299      0.5898476  0.449839386 -0.4936491
## [873,] -0.42951824 -0.4382732     -0.9128837  0.851317320  1.4010356
## [874,] -0.10112444 -0.4382732      0.5898476  0.283796043 -0.4936491
## [875,] -0.75791204 -0.4382732      0.5898476  0.125187476 -0.4936491
## [876,]  0.77459236 -0.4382732      0.5898476 -1.493115556 -0.4936491
## [877,] -1.85255803 -0.4382732      0.5898476 -0.367986036  1.4010356
## [878,]  0.99352156 -0.4382732      0.5898476 -1.617028499 -0.4936491
## [879,]  0.55566316 -0.4382732     -2.4156151 -1.545158992 -2.3883338
## [880,]  2.52602595 -0.4382732      0.5898476 -0.263899164  1.4010356
## [881,] -0.53898284 -0.4382732     -0.9128837 -1.701289300 -0.4936491
## [882,] -0.53898284 -0.4382732     -0.9128837  1.272621326 -0.4936491
## [883,] -0.10112444 -0.4382732      0.5898476 -1.089159363 -0.4936491
## [884,] -0.42951824 -0.4382732      0.5898476 -1.698811041 -0.4936491
## [885,]  0.33673396 -0.4382732      0.5898476 -1.723593630  1.4010356
## [886,] -1.30523503 -0.4382732      0.5898476  1.371751680  1.4010356
## [887,] -0.75791204 -0.4382732      0.5898476  1.641881895 -0.4936491
## [888,]  0.55566316 -0.4382732     -0.9128837 -0.853724772 -0.4936491
## [889,] -0.21058904 -0.4382732     -2.4156151  1.014882405  1.4010356
## [890,] -1.08630583 -0.4382732      0.5898476  0.744752190 -0.4936491
## [891,]  1.86923835 -0.4382732     -0.9128837  0.405230726 -0.4936491
## [892,]  0.77459236 -0.4382732      0.5898476  0.779447814 -0.4936491
## [893,] -1.96202263  2.2801299     -2.4156151 -0.739724865 -0.4936491
## [894,] -0.86737664 -0.4382732      0.5898476  0.514274116 -0.4936491
## [895,]  1.86923835 -0.4382732      0.5898476 -0.291160012 -0.4936491
## [896,] -0.64844744 -0.4382732      0.5898476  1.312273467 -0.4936491
## [897,] -0.64844744 -0.4382732      0.5898476  0.643143577 -0.4936491
## [898,]  2.41656135 -0.4382732      0.5898476 -1.180854941  1.4010356
## [899,]  0.66512776 -0.4382732      0.5898476  0.291230819 -0.4936491
## [900,]  1.32191535 -0.4382732      0.5898476  0.732360895 -0.4936491
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##  [901,] -0.10112444 -0.4382732   -0.9128837 -0.826463924 -0.4936491
##  [902,]  1.21245075 -0.4382732    0.5898476  0.412665503 -0.4936491
##  [903,] -1.08630583 -0.4382732    0.5898476  0.903360756 -0.4936491
##  [904,] -0.86737664 -0.4382732    0.5898476  1.304838691 -0.4936491
##  [905,]  1.21245075 -0.4382732    0.5898476 -0.216812246 -0.4936491
##  [906,] -0.86737664 -0.4382732    0.5898476 -0.268855682 -0.4936491
##  [907,] -0.32005364 -0.4382732    0.5898476  1.282534361 -0.4936491
##  [908,]  0.77459236 -0.4382732    0.5898476  0.734839154  1.4010356
##  [909,] -0.42951824 -0.4382732    0.5898476 -0.660420581  1.4010356
##  [910,] -1.96202263 -0.4382732    0.5898476 -1.332028731 -0.4936491
##  [911,] -1.52416423 -0.4382732    0.5898476 -1.064376775 -0.4936491
##  [912,] -1.30523503  2.2801299   -0.9128837 -0.504290273  1.4010356
##  [913,] -1.19577043 -0.4382732    0.5898476 -0.543942415 -0.4936491
##  [914,]  0.88405696  2.2801299    0.5898476  1.602229753  1.4010356
##  [915,]  1.97870295 -0.4382732   -2.4156151 -1.550115510 -0.4936491
##  [916,] -1.74309343  2.2801299   -0.9128837 -1.366724355 -0.4936491
##  [917,]  0.99352156 -0.4382732    0.5898476 -1.572419840  1.4010356
##  [918,] -0.32005364 -0.4382732    0.5898476 -1.664115417  1.4010356
##  [919,]  1.54084455 -0.4382732   -0.9128837 -1.401419979  1.4010356
##  [920,]  2.41656135 -0.4382732    0.5898476  1.552664576 -0.4936491
##  [921,] -0.32005364 -0.4382732   -0.9128837 -1.654202382 -0.4936491
##  [922,] -0.97684124 -0.4382732   -0.9128837 -0.028464573 -0.4936491
##  [923,]  0.77459236 -0.4382732    0.5898476  0.982665040 -0.4936491
##  [924,] -0.32005364 -0.4382732   -0.9128837 -0.382855589 -2.3883338
##  [925,] -0.21058904 -0.4382732    0.5898476 -0.167247069 -0.4936491
##  [926,]  0.55566316 -0.4382732    0.5898476 -0.494377238 -0.4936491
##  [927,]  0.66512776 -0.4382732    0.5898476 -0.672811875  1.4010356
##  [928,] -0.10112444 -0.4382732    0.5898476 -0.925594279 -0.4936491
##  [929,]  0.77459236  2.2801299    0.5898476 -0.449768578 -0.4936491
##  [930,] -0.97684124 -0.4382732   -0.9128837 -1.510463368 -0.4936491
##  [931,]  1.54084455 -0.4382732   -0.9128837  0.410187244 -0.4936491
##  [932,] -0.75791204 -0.4382732   -2.4156151  0.189622206 -0.4936491
##  [933,] -0.86737664  2.2801299    0.5898476  0.008709310 -0.4936491
##  [934,] -0.97684124 -0.4382732    0.5898476 -0.402681660 -0.4936491
##  [935,] -1.30523503 -0.4382732    0.5898476 -1.329550472 -0.4936491
##  [936,] -0.53898284 -0.4382732    0.5898476 -0.491898979  1.4010356
##  [937,]  0.88405696 -0.4382732   -0.9128837 -1.086681104 -0.4936491
##  [938,]  0.22726936 -0.4382732    0.5898476 -0.967724679 -0.4936491
##  [939,]  2.30709675 -0.4382732    0.5898476  0.112796182 -0.4936491
##  [940,] -0.53898284  2.2801299    0.5898476  0.710056566 -0.4936491
##  [941,]  0.22726936  2.2801299    0.5898476 -1.096594140 -0.4936491
##  [942,] -0.75791204 -0.4382732    0.5898476  0.831491250 -0.4936491
##  [943,] -0.10112444 -0.4382732    0.5898476 -1.183333200 -0.4936491
##  [944,]  0.99352156 -0.4382732    0.5898476  0.467187198 -2.3883338
##  [945,] -0.97684124 -0.4382732   -2.4156151  1.669142743 -0.4936491
##  [946,]  1.43137995 -0.4382732    0.5898476  1.287490879 -0.4936491
##  [947,]  0.33673396  2.2801299    0.5898476 -1.247767930  1.4010356
##  [948,]  1.65030915  2.2801299    0.5898476  0.563839293  1.4010356
##  [949,] -0.75791204 -0.4382732    0.5898476 -0.417551213 -0.4936491
##  [950,]  0.22726936 -0.4382732    0.5898476 -0.690159687 -0.4936491
##  [951,] -0.64844744 -0.4382732   -2.4156151 -0.534029380  1.4010356
##  [952,]  0.44619856 -0.4382732   -2.4156151 -1.354333061  1.4010356
##  [953,] -0.64844744  2.2801299   -0.9128837  0.638187059  1.4010356
##  [954,]  0.77459236  2.2801299    0.5898476  0.328404702 -0.4936491
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##  [955,]  0.55566316 -0.4382732     -2.4156151 -0.762029194 -0.4936491
##  [956,]  1.97870295 -0.4382732      0.5898476 -1.289898330 -0.4936491
##  [957,]  2.08816755 -0.4382732      0.5898476 -1.478246003 -2.3883338
##  [958,]  0.33673396 -0.4382732     -2.4156151 -0.853724772 -0.4936491
##  [959,] -0.32005364 -0.4382732      0.5898476  0.348230773 -0.4936491
##  [960,]  0.33673396 -0.4382732      0.5898476 -0.692637946 -0.4936491
##  [961,]  0.44619856 -0.4382732     -0.9128837  0.534100187  1.4010356
##  [962,] -0.21058904 -0.4382732     -0.9128837 -0.794246559 -0.4936491
##  [963,]  1.54084455 -0.4382732      0.5898476 -0.080508009 -2.3883338
##  [964,]  0.11780476 -0.4382732      0.5898476  0.511795857  1.4010356
##  [965,] -0.32005364 -0.4382732      0.5898476 -0.732290088  1.4010356
##  [966,] -1.30523503 -0.4382732      0.5898476  0.197056983 -0.4936491
##  [967,]  2.30709675  2.2801299      0.5898476 -0.499333756 -0.4936491
##  [968,]  0.33673396 -0.4382732      0.5898476 -1.173420164 -0.4936491
##  [969,] -0.10112444 -0.4382732     -0.9128837 -0.484464202  1.4010356
##  [970,]  1.21245075 -0.4382732      0.5898476  0.130143994 -0.4936491
##  [971,] -1.08630583 -0.4382732      0.5898476  1.210664854  1.4010356
##  [972,]  1.54084455 -0.4382732      0.5898476  1.493186364 -0.4936491
##  [973,] -2.07148723 -0.4382732     -2.4156151  0.796795626 -0.4936491
##  [974,] -0.21058904 -0.4382732      0.5898476  0.035970157 -0.4936491
##  [975,] -1.08630583 -0.4382732     -0.9128837 -0.023508055  1.4010356
##  [976,]  1.97870295  2.2801299      0.5898476 -1.327072213  1.4010356
##  [977,]  2.08816755 -0.4382732      0.5898476  1.403969045 -0.4936491
##  [978,] -0.32005364 -0.4382732     -2.4156151  0.487013269 -0.4936491
##  [979,]  0.33673396 -0.4382732      0.5898476  0.990099816 -0.4936491
##  [980,] -0.32005364 -0.4382732      0.5898476 -1.282463554 -0.4936491
##  [981,] -0.64844744  2.2801299     -0.9128837 -0.246551352  1.4010356
##  [982,] -0.21058904  2.2801299     -0.9128837 -0.348159965  1.4010356
##  [983,]  0.11780476 -0.4382732     -0.9128837 -0.271333941 -0.4936491
##  [984,] -0.32005364 -0.4382732      0.5898476 -0.987550750 -0.4936491
##  [985,] -0.97684124 -0.4382732      0.5898476 -0.164768810  1.4010356
##  [986,] -0.64844744  2.2801299      0.5898476 -1.170941905 -0.4936491
##  [987,]  0.22726936 -0.4382732      0.5898476  1.723664437  1.4010356
##  [988,]  1.54084455 -0.4382732     -0.9128837 -0.648029287  1.4010356
##  [989,]  0.44619856 -0.4382732     -0.9128837  0.985143299 -0.4936491
##  [990,]  0.00834016 -0.4382732      0.5898476  1.577447165 -0.4936491
##  [991,] -0.42951824 -0.4382732     -0.9128837  0.764578260  1.4010356
##  [992,] -0.53898284 -0.4382732      0.5898476 -0.752116159  1.4010356
##  [993,]  0.22726936 -0.4382732     -2.4156151  1.691447072 -0.4936491
##  [994,] -1.30523503 -0.4382732      0.5898476  1.411403822  1.4010356
##  [995,]  1.65030915 -0.4382732     -0.9128837 -1.190767976 -0.4936491
##  [996,]  0.66512776 -0.4382732      0.5898476  0.316013408 -0.4936491
##  [997,] -1.08630583 -0.4382732      0.5898476 -1.480724262  1.4010356
##  [998,] -1.08630583  2.2801299      0.5898476 -1.654202382 -0.4936491
##  [999,] -1.19577043 -0.4382732      0.5898476 -0.296116529 -0.4936491
## [1000,]  0.55566316 -0.4382732      0.5898476  0.853795579 -2.3883338
## [1001,]  1.65030915 -0.4382732      0.5898476 -1.349376543 -0.4936491
## [1002,]  0.00834016 -0.4382732      0.5898476  1.634447119 -0.4936491
## [1003,] -0.21058904 -0.4382732     -0.9128837 -1.493115556 -0.4936491
## [1004,] -1.30523503 -0.4382732      0.5898476  0.363100326 -0.4936491
## [1005,] -1.19577043 -0.4382732      0.5898476 -0.372942554 -0.4936491
## [1006,] -0.86737664 -0.4382732      0.5898476 -1.165985388 -2.3883338
## [1007,]  1.32191535  2.2801299     -0.9128837  1.666664484 -0.4936491
## [1008,] -0.86737664  2.2801299     -0.9128837 -1.153594093 -0.4936491
```

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## [1009,]   1.86923835 -0.4382732    0.5898476  0.417622021 -0.4936491
## [1010,]   2.30709675 -0.4382732    0.5898476  0.625795765 -0.4936491
## [1011,]   1.97870295 -0.4382732    0.5898476  0.826534732 -0.4936491
## [1012,]  -0.10112444 -0.4382732    0.5898476  0.920708568  1.4010356
## [1013,]  -0.64844744  2.2801299   -0.9128837 -0.335768671  1.4010356
## [1014,]  -0.75791204 -0.4382732    0.5898476  0.130143994  1.4010356
## [1015,]  -0.64844744 -0.4382732    0.5898476 -1.537724216 -0.4936491
## [1016,]  -0.32005364 -0.4382732   -0.9128837 -0.600942369 -0.4936491
## [1017,]  -0.64844744  2.2801299    0.5898476 -1.488159039 -0.4936491
## [1018,]  -1.08630583 -0.4382732    0.5898476  1.423795116 -0.4936491
## [1019,]  -0.10112444 -0.4382732    0.5898476 -1.562506804 -0.4936491
## [1020,]  -0.10112444 -0.4382732    0.5898476 -1.173420164  1.4010356
## [1021,]   1.10298615 -0.4382732    0.5898476 -0.836376960 -0.4936491
## [1022,]  -1.30523503  2.2801299    0.5898476 -1.039594186  1.4010356
## [1023,]   0.00834016 -0.4382732   -2.4156151  1.513012435 -0.4936491
## [1024,]   2.08816755 -0.4382732    0.5898476  1.121447536 -0.4936491
## [1025,]   1.10298615 -0.4382732    0.5898476 -1.099072398 -0.4936491
## [1026,]  -1.41469963 -0.4382732    0.5898476  1.669142743  1.4010356
## [1027,]  -0.53898284 -0.4382732    0.5898476 -0.499333756  1.4010356
## [1028,]  -0.32005364 -0.4382732    0.5898476 -0.994985527 -0.4936491
## [1029,]   0.44619856 -0.4382732    0.5898476  1.190838784 -0.4936491
## [1030,]   0.33673396 -0.4382732   -2.4156151 -0.345681707 -0.4936491
## [1031,]  -0.64844744 -0.4382732    0.5898476 -1.180854941  1.4010356
## [1032,]   0.99352156  2.2801299    0.5898476 -1.054463739  1.4010356
## [1033,]   0.22726936  2.2801299   -2.4156151 -0.521638085 -0.4936491
## [1034,]  -0.64844744  2.2801299   -0.9128837  1.592316718 -0.4936491
## [1035,]   0.88405696 -0.4382732    0.5898476  0.583665364 -0.4936491
## [1036,]  -0.64844744 -0.4382732    0.5898476  1.475838552 -2.3883338
## [1037,]  -0.64844744  2.2801299   -0.9128837 -0.692637946 -0.4936491
## [1038,]   0.88405696 -0.4382732    0.5898476  1.599751495 -0.4936491
## [1039,]   1.21245075 -0.4382732    0.5898476  1.037186735  1.4010356
## [1040,]  -0.32005364  2.2801299    0.5898476  0.754665225 -2.3883338
## [1041,]   0.33673396 -0.4382732   -2.4156151 -1.448506897 -0.4936491
## [1042,]  -0.97684124 -0.4382732    0.5898476  0.157404841  1.4010356
## [1043,]   0.77459236 -0.4382732   -2.4156151  0.442404609 -0.4936491
## [1044,]   1.75977375 -0.4382732    0.5898476 -0.880985619 -0.4936491
## [1045,]   1.32191535 -0.4382732    0.5898476  1.716229661 -0.4936491
## [1046,]   0.33673396 -0.4382732    0.5898476  0.231752607 -0.4936491
## [1047,]   0.77459236 -0.4382732    0.5898476  1.646838413 -0.4936491
## [1048,]  -0.42951824 -0.4382732   -0.9128837 -0.923116020  1.4010356
## [1049,]  -0.32005364 -0.4382732    0.5898476  1.297403914  1.4010356
## [1050,]  -0.75791204 -0.4382732    0.5898476  1.376708198  1.4010356
## [1051,]   0.55566316 -0.4382732   -0.9128837 -0.135029704 -0.4936491
## [1052,]   0.77459236 -0.4382732   -0.9128837 -1.039594186  1.4010356
## [1053,]  -0.75791204 -0.4382732   -2.4156151  0.464708939 -0.4936491
## [1054,]   2.19763215 -0.4382732    0.5898476 -0.985072491 -0.4936491
## [1055,]   1.32191535 -0.4382732    0.5898476  1.703838366 -0.4936491
## [1056,]  -0.32005364 -0.4382732   -0.9128837  0.065709263 -0.4936491
## [1057,]  -0.97684124  2.2801299   -0.9128837  1.718707920  1.4010356
## [1058,]  -0.86737664  2.2801299   -0.9128837 -1.703767559  1.4010356
## [1059,]  -0.32005364  2.2801299    0.5898476 -0.030942832  1.4010356
## [1060,]  -0.21058904 -0.4382732    0.5898476 -0.353116483  1.4010356
## [1061,]  -1.41469963  2.2801299   -0.9128837 -1.044550704 -0.4936491
## [1062,]  -1.41469963 -0.4382732   -2.4156151  0.068187522  1.4010356
```

```
## [1063,]   0.77459236 -0.4382732    -0.9128837  0.967795487 -0.4936491
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## [1065,]  -0.75791204 -0.4382732     0.5898476 -1.170941905 -2.3883338
## [1066,]   1.97870295 -0.4382732     0.5898476  1.057012805 -0.4936491
## [1067,]  -0.42951824 -0.4382732     0.5898476  0.734839154 -0.4936491
## [1068,]   1.10298615 -0.4382732     0.5898476 -0.573681521  1.4010356
## [1069,]  -0.97684124  2.2801299    -0.9128837 -1.272550518 -0.4936491
## [1070,]  -0.97684124 -0.4382732     0.5898476  1.537795023 -0.4936491
## [1071,]  -0.97684124 -0.4382732    -0.9128837 -0.831420442  1.4010356
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## [1073,]  -0.86737664 -0.4382732    -0.9128837 -0.972681197 -0.4936491
## [1074,]  -0.97684124 -0.4382732     0.5898476  0.695187013 -0.4936491
## [1075,]  -0.42951824 -0.4382732     0.5898476 -0.709985758 -0.4936491
## [1076,]  -0.53898284 -0.4382732     0.5898476 -0.762029194 -0.4936491
## [1077,]   1.86923835 -0.4382732    -0.9128837  0.613404470 -0.4936491
## [1078,]  -0.86737664  2.2801299     0.5898476 -1.433637344 -0.4936491
## [1079,]   0.77459236 -0.4382732     0.5898476 -1.651724123 -0.4936491
## [1080,]   0.22726936 -0.4382732     0.5898476  0.710056566 -0.4936491
## [1081,]   0.99352156 -0.4382732     0.5898476 -1.423724308  1.4010356
## [1082,]  -0.21058904 -0.4382732     0.5898476  0.561361034 -0.4936491
## [1083,]  -1.52416423 -0.4382732     0.5898476 -0.732290088 -0.4936491
## [1084,]   0.33673396  2.2801299     0.5898476 -0.313464341 -0.4936491
## [1085,]  -0.32005364 -0.4382732     0.5898476  0.417622021  1.4010356
## [1086,]  -0.64844744  2.2801299    -0.9128837 -0.598464110 -0.4936491
## [1087,]   1.43137995 -0.4382732    -0.9128837 -1.163507129 -0.4936491
## [1088,]  -0.32005364 -0.4382732     0.5898476  1.579925424  1.4010356
## [1089,]   0.55566316 -0.4382732     0.5898476  1.009925887 -0.4936491
## [1090,]   0.00834016 -0.4382732     0.5898476 -0.318420859 -0.4936491
## [1091,]  -0.86737664 -0.4382732     0.5898476 -0.895855172 -0.4936491
## [1092,]  -0.42951824 -0.4382732     0.5898476 -0.563768486 -0.4936491
## [1093,]   0.88405696 -0.4382732     0.5898476  0.365578585 -0.4936491
## [1094,]   0.55566316 -0.4382732    -0.9128837 -1.275028777 -0.4936491
## [1095,]   0.33673396 -0.4382732     0.5898476  1.337056056  1.4010356
## [1096,]  -0.42951824 -0.4382732     0.5898476 -0.529072862 -0.4936491
## [1097,]   0.33673396 -0.4382732     0.5898476  0.236709124 -2.3883338
## [1098,]  -1.41469963 -0.4382732     0.5898476 -1.121376728 -0.4936491
## [1099,]   0.33673396 -0.4382732    -2.4156151  0.841404285 -0.4936491
## [1100,]   0.88405696 -0.4382732     0.5898476 -0.655464063 -0.4936491
## [1101,]  -0.21058904 -0.4382732     0.5898476  1.485751587  1.4010356
## [1102,]  -0.53898284 -0.4382732     0.5898476  0.053317969 -0.4936491
## [1103,]  -0.10112444 -0.4382732     0.5898476  0.878578168  1.4010356
## [1104,]   1.21245075 -0.4382732     0.5898476 -0.769463971  1.4010356
## [1105,]  -0.86737664 -0.4382732     0.5898476 -0.506768532 -0.4936491
## [1106,]  -0.42951824 -0.4382732     0.5898476  1.089230170  1.4010356
## [1107,]  -0.75791204  2.2801299     0.5898476 -0.154855775  1.4010356
## [1108,]   0.11780476 -0.4382732    -0.9128837  0.211926536 -2.3883338
## [1109,]  -0.21058904 -0.4382732     0.5898476  0.469665457 -0.4936491
## [1110,]  -0.75791204 -0.4382732     0.5898476  1.203230078  1.4010356
## [1111,]  -0.21058904  2.2801299     0.5898476 -1.731028407 -0.4936491
## [1112,]   1.75977375  2.2801299     0.5898476 -0.484464202 -0.4936491
## [1113,]   0.11780476  2.2801299     0.5898476  0.249100419 -0.4936491
## [1114,]  -0.53898284 -0.4382732    -2.4156151  0.985143299 -0.4936491
## [1115,]   1.21245075 -0.4382732     0.5898476  0.757143484 -0.4936491
## [1116,]  -0.32005364 -0.4382732     0.5898476 -0.801681336 -0.4936491
```

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## [1117,]  1.97870295 -0.4382732      0.5898476 -0.291160012  1.4010356
## [1118,] -0.32005364 -0.4382732      0.5898476  1.359360386 -0.4936491
## [1119,] -1.19577043 -0.4382732      0.5898476 -0.814072630 -0.4936491
## [1120,]  0.11780476 -0.4382732      0.5898476  1.096664947  1.4010356
## [1121,]  0.11780476 -0.4382732      0.5898476 -0.905768208  1.4010356
## [1122,] -0.10112444 -0.4382732      0.5898476  0.202013500  1.4010356
## [1123,] -0.86737664 -0.4382732      0.5898476  1.406447304 -0.4936491
## [1124,] -0.21058904 -0.4382732      0.5898476 -0.328333895 -0.4936491
## [1125,]  0.22726936 -0.4382732      0.5898476  1.634447119  1.4010356
## [1126,] -0.86737664 -0.4382732     -0.9128837  0.477100233 -0.4936491
## [1127,]  1.43137995 -0.4382732      0.5898476 -1.334506990  1.4010356
## [1128,] -1.52416423 -0.4382732      0.5898476  0.432491574 -0.4936491
## [1129,] -0.10112444 -0.4382732     -0.9128837  1.237925702 -0.4936491
## [1130,]  0.55566316 -0.4382732      0.5898476  0.635708800 -0.4936491
## [1131,] -0.21058904 -0.4382732      0.5898476 -0.130073186 -0.4936491
## [1132,] -0.32005364 -0.4382732     -0.9128837 -0.370464295 -0.4936491
## [1133,]  0.33673396 -0.4382732      0.5898476 -1.696332783  1.4010356
## [1134,]  0.66512776 -0.4382732      0.5898476  0.464708939 -0.4936491
## [1135,] -0.21058904 -0.4382732      0.5898476  1.354403868 -0.4936491
## [1136,]  0.99352156 -0.4382732      0.5898476 -0.593507592  1.4010356
## [1137,] -0.97684124  2.2801299      0.5898476 -1.173420164 -0.4936491
## [1138,] -1.63362883 -0.4382732     -2.4156151 -0.856203031 -0.4936491
## [1139,]  1.43137995 -0.4382732     -0.9128837  1.069404100 -0.4936491
## [1140,] -0.53898284 -0.4382732      0.5898476 -0.417551213 -0.4936491
## [1141,]  0.77459236 -0.4382732      0.5898476  1.265186549 -0.4936491
## [1142,] -0.75791204 -0.4382732      0.5898476 -1.391506943 -0.4936491
## [1143,]  0.88405696 -0.4382732      0.5898476  0.526665410 -0.4936491
## [1144,]  0.88405696 -0.4382732     -2.4156151 -1.156072352  1.4010356
## [1145,] -0.64844744 -0.4382732     -0.9128837 -0.216812246  1.4010356
## [1146,] -0.10112444 -0.4382732      0.5898476 -0.603420627 -0.4936491
## [1147,] -0.32005364 -0.4382732     -0.9128837 -0.933029055 -0.4936491
## [1148,]  1.32191535 -0.4382732      0.5898476 -0.199464434 -0.4936491
## [1149,]  0.22726936 -0.4382732      0.5898476  1.448577704 -0.4936491
## [1150,] -1.08630583 -0.4382732      0.5898476  1.237925702 -0.4936491
## [1151,] -0.21058904 -0.4382732      0.5898476  0.040926675 -0.4936491
## [1152,] -0.97684124 -0.4382732      0.5898476 -0.551377192 -0.4936491
## [1153,] -1.74309343 -0.4382732      0.5898476 -0.635637993 -0.4936491
## [1154,] -2.07148723  2.2801299     -0.9128837 -0.640594510  1.4010356
## [1155,]  1.10298615 -0.4382732      0.5898476  0.925665086 -2.3883338
## [1156,]  0.22726936 -0.4382732      0.5898476 -1.567463322 -0.4936491
## [1157,]  0.33673396 -0.4382732      0.5898476  0.202013500 -0.4936491
## [1158,] -0.21058904 -0.4382732     -2.4156151 -1.473289486 -0.4936491
## [1159,]  0.00834016 -0.4382732      0.5898476 -0.325855636 -0.4936491
## [1160,]  0.22726936 -0.4382732     -0.9128837 -0.226725282 -0.4936491
## [1161,]  0.88405696 -0.4382732      0.5898476  1.304838691 -0.4936491
## [1162,]  0.11780476 -0.4382732      0.5898476 -1.004898562 -0.4936491
## [1163,] -0.21058904  2.2801299      0.5898476 -0.162290551  1.4010356
## [1164,]  0.00834016 -0.4382732      0.5898476  1.654273189 -0.4936491
## [1165,]  0.33673396 -0.4382732      0.5898476 -0.878507360 -0.4936491
## [1166,]  0.77459236 -0.4382732     -0.9128837 -0.496855497 -2.3883338
## [1167,]  1.21245075 -0.4382732     -0.9128837 -1.084202845 -0.4936491
## [1168,] -0.21058904  2.2801299      0.5898476 -0.097855821  1.4010356
## [1169,] -1.41469963 -0.4382732     -0.9128837 -0.583594557 -0.4936491
## [1170,] -1.08630583 -0.4382732      0.5898476 -0.784333524 -0.4936491
```

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## [1171,] -1.08630583 -0.4382732    -0.9128837 -0.524116344 -0.4936491
## [1172,]  0.33673396  2.2801299     0.5898476  1.304838691 -0.4936491
## [1173,] -0.86737664 -0.4382732     0.5898476 -0.826463924  1.4010356
## [1174,] -0.10112444 -0.4382732     0.5898476 -0.226725282 -0.4936491
## [1175,] -1.30523503 -0.4382732    -0.9128837 -0.075551491 -0.4936491
## [1176,]  0.22726936 -0.4382732     0.5898476 -0.769463971 -0.4936491
## [1177,]  1.32191535 -0.4382732     0.5898476 -1.242811412 -0.4936491
## [1178,]  1.43137995 -0.4382732     0.5898476  0.026057122 -0.4936491
## [1179,] -1.85255803 -0.4382732     0.5898476  0.838926026  1.4010356
## [1180,] -0.32005364 -0.4382732     0.5898476  0.811665179 -0.4936491
## [1181,] -0.10112444 -0.4382732     0.5898476 -1.218028824 -0.4936491
## [1182,]  1.32191535 -0.4382732     0.5898476 -0.836376960 -0.4936491
## [1183,] -0.10112444 -0.4382732    -2.4156151  0.226796089 -0.4936491
## [1184,] -0.10112444 -0.4382732     0.5898476  0.588621882 -0.4936491
## [1185,]  1.86923835 -0.4382732     0.5898476 -0.541464156 -0.4936491
## [1186,]  0.66512776 -0.4382732     0.5898476  1.210664854 -0.4936491
## [1187,] -0.21058904  2.2801299    -0.9128837  0.192100465  1.4010356
## [1188,]  0.11780476 -0.4382732    -0.9128837  0.957882451 -0.4936491
## [1189,] -0.86737664 -0.4382732     0.5898476  0.467187198  1.4010356
## [1190,] -0.42951824 -0.4382732     0.5898476 -1.017289856  1.4010356
## [1191,] -0.53898284 -0.4382732     0.5898476  0.432491574 -0.4936491
## [1192,] -0.64844744 -0.4382732     0.5898476  0.767056519  1.4010356
## [1193,]  1.32191535 -0.4382732     0.5898476 -0.838855219 -0.4936491
## [1194,]  0.11780476 -0.4382732    -0.9128837 -1.621985017 -0.4936491
## [1195,]  1.10298615 -0.4382732     0.5898476  1.047099770  1.4010356
## [1196,]  1.32191535 -0.4382732     0.5898476  0.016144086 -0.4936491
## [1197,]  0.44619856 -0.4382732     0.5898476  1.000012852  1.4010356
## [1198,] -1.85255803 -0.4382732     0.5898476 -0.187073140  1.4010356
## [1199,] -0.42951824 -0.4382732    -2.4156151 -0.675290134  1.4010356
## [1200,] -0.10112444 -0.4382732     0.5898476  1.359360386 -0.4936491
## [1201,]  0.77459236 -0.4382732     0.5898476 -0.680246652 -2.3883338
## [1202,] -1.52416423  2.2801299     0.5898476  1.282534361 -0.4936491
## [1203,]  0.11780476 -0.4382732     0.5898476  1.716229661 -0.4936491
## [1204,]  1.75977375 -0.4382732     0.5898476  1.468403775 -0.4936491
## [1205,]  1.21245075  2.2801299    -0.9128837 -0.234160058  1.4010356
## [1206,] -0.53898284  2.2801299     0.5898476  1.131360571 -0.4936491
## [1207,] -1.19577043 -0.4382732    -2.4156151 -0.040855867 -0.4936491
## [1208,]  1.97870295 -0.4382732     0.5898476  1.582403683 -0.4936491
## [1209,] -0.32005364 -0.4382732     0.5898476  0.878578168 -0.4936491
## [1210,]  2.52602595 -0.4382732     0.5898476 -1.071811551 -0.4936491
## [1211,] -0.42951824 -0.4382732     0.5898476 -1.327072213 -0.4936491
## [1212,]  0.00834016 -0.4382732    -0.9128837  1.178447489  1.4010356
## [1213,] -0.32005364 -0.4382732     0.5898476 -0.308507824 -0.4936491
## [1214,] -1.52416423  2.2801299     0.5898476 -0.930550796  1.4010356
## [1215,]  0.77459236 -0.4382732     0.5898476  0.293709078 -0.4936491
## [1216,] -0.21058904 -0.4382732    -0.9128837 -1.626941535 -0.4936491
## [1217,]  0.66512776 -0.4382732     0.5898476  0.933099863  1.4010356
## [1218,] -1.41469963 -0.4382732     0.5898476 -0.548898933 -0.4936491
## [1219,]  0.44619856 -0.4382732     0.5898476  0.286274301  1.4010356
## [1220,] -0.86737664 -0.4382732     0.5898476  0.692708754 -0.4936491
## [1221,] -0.10112444 -0.4382732     0.5898476 -0.675290134  1.4010356
## [1222,]  0.88405696 -0.4382732    -2.4156151  1.079317135 -0.4936491
## [1223,] -1.41469963  2.2801299     0.5898476 -1.393985202 -2.3883338
## [1224,]  1.10298615  2.2801299    -0.9128837  0.719969601  1.4010356
```

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## [1225,] -1.19577043 -0.4382732   0.5898476 -1.022246374 -0.4936491
## [1226,]  0.88405696 -0.4382732   0.5898476  0.501882822 -0.4936491
## [1227,] -0.53898284 -0.4382732  -0.9128837 -0.538985897 -0.4936491
## [1228,] -0.64844744 -0.4382732   0.5898476 -0.152377516 -0.4936491
## [1229,]  0.44619856 -0.4382732  -2.4156151 -0.620768439 -2.3883338
## [1230,]  0.33673396 -0.4382732   0.5898476 -1.074289810 -0.4936491
## [1231,] -1.41469963 -0.4382732   0.5898476 -0.734768347 -0.4936491
## [1232,]  0.99352156 -0.4382732   0.5898476 -0.211855728 -0.4936491
## [1233,] -0.21058904 -0.4382732   0.5898476  1.406447304 -0.4936491
## [1234,] -0.75791204 -0.4382732   0.5898476 -0.023508055 -0.4936491
## [1235,]  1.10298615 -0.4382732  -2.4156151 -0.643072769  1.4010356
## [1236,]  0.99352156 -0.4382732   0.5898476  1.175969230  1.4010356
## [1237,] -0.10112444  2.2801299   0.5898476  1.619577565  1.4010356
## [1238,] -0.53898284  2.2801299   0.5898476  0.400274209  1.4010356
## [1239,] -1.52416423 -0.4382732   0.5898476 -1.592245911 -0.4936491
## [1240,] -0.64844744 -0.4382732  -0.9128837 -1.584811134 -0.4936491
## [1241,]  0.22726936 -0.4382732  -2.4156151 -0.025986314 -0.4936491
## [1242,] -0.53898284 -0.4382732   0.5898476 -1.069333292  1.4010356
## [1243,]  0.33673396 -0.4382732   0.5898476 -0.474551167  1.4010356
## [1244,]  0.88405696 -0.4382732   0.5898476 -1.552593769 -2.3883338
## [1245,] -0.75791204 -0.4382732  -0.9128837  1.262708290 -0.4936491
## [1246,] -1.41469963 -0.4382732  -0.9128837  0.234230865 -2.3883338
## [1247,] -0.75791204  2.2801299  -0.9128837 -0.501812014 -2.3883338
## [1248,] -0.64844744 -0.4382732   0.5898476  0.496926304  1.4010356
## [1249,] -1.08630583 -0.4382732   0.5898476  0.623317506 -0.4936491
## [1250,] -0.86737664  2.2801299   0.5898476 -0.928072537  1.4010356
## [1251,] -0.86737664 -0.4382732  -0.9128837 -0.846289995 -0.4936491
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## [1253,] -0.32005364 -0.4382732   0.5898476 -1.540202475 -0.4936491
## [1254,] -0.42951824 -0.4382732  -2.4156151  1.190838784  1.4010356
## [1255,]  1.32191535 -0.4382732   0.5898476  1.265186549  1.4010356
## [1256,] -0.42951824  2.2801299   0.5898476 -1.465854709  1.4010356
## [1257,]  0.11780476 -0.4382732  -0.9128837 -0.516681568 -0.4936491
## [1258,] -0.64844744  2.2801299   0.5898476  0.685273977  1.4010356
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## [1260,] -0.75791204 -0.4382732   0.5898476 -1.232898377 -0.4936491
## [1261,] -0.53898284 -0.4382732  -2.4156151  0.373013361 -0.4936491
## [1262,]  0.11780476 -0.4382732   0.5898476  0.075622299 -0.4936491
## [1263,]  0.66512776  2.2801299  -0.9128837  0.011187569 -0.4936491
## [1264,]  0.55566316 -0.4382732   0.5898476  0.130143994 -0.4936491
## [1265,]  1.97870295 -0.4382732   0.5898476 -0.804159595 -0.4936491
## [1266,] -0.42951824 -0.4382732  -2.4156151 -0.068116715 -0.4936491
## [1267,]  0.44619856 -0.4382732   0.5898476 -0.630681475 -0.4936491
## [1268,] -0.32005364 -0.4382732  -2.4156151  1.418838598  1.4010356
## [1269,]  1.75977375 -0.4382732  -2.4156151 -0.350638224 -0.4936491
## [1270,]  0.66512776 -0.4382732   0.5898476 -1.384072167 -2.3883338
## [1271,] -0.32005364 -0.4382732   0.5898476 -0.722377053  1.4010356
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## [1275,] -0.64844744 -0.4382732   0.5898476 -1.503028592  1.4010356
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## [1277,]  0.00834016 -0.4382732   0.5898476 -0.529072862  1.4010356
## [1278,]  0.99352156 -0.4382732   0.5898476 -0.169725328 -0.4936491
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## [1281,]  0.00834016 -0.4382732    0.5898476  1.081795394 -2.3883338
## [1282,] -0.21058904  2.2801299    0.5898476 -1.237854894  1.4010356
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## [1284,] -0.97684124 -0.4382732    0.5898476  0.938056380 -0.4936491
## [1285,]  0.22726936 -0.4382732    0.5898476  1.116491018 -0.4936491
## [1286,]  0.99352156 -0.4382732   -2.4156151  0.115274440  1.4010356
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## [1289,] -0.21058904 -0.4382732   -2.4156151  0.935578121 -0.4936491
## [1290,]  0.11780476 -0.4382732   -2.4156151  1.322186503 -2.3883338
## [1291,] -0.32005364  2.2801299   -0.9128837 -1.408854755 -0.4936491
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## [1294,]  0.66512776 -0.4382732   -2.4156151 -1.138724540 -0.4936491
## [1295,]  0.44619856 -0.4382732    0.5898476 -0.880985619 -0.4936491
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## [1298,] -1.19577043  2.2801299    0.5898476  0.291230819 -2.3883338
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## [1300,]  0.33673396 -0.4382732    0.5898476  0.970273745 -0.4936491
## [1301,] -0.32005364 -0.4382732    0.5898476  0.018622345  1.4010356
## [1302,]  2.30709675 -0.4382732   -2.4156151 -1.121376728  1.4010356
## [1303,] -0.21058904 -0.4382732    0.5898476 -1.530289439 -0.4936491
## [1304,]  1.10298615 -0.4382732    0.5898476  0.491969786 -0.4936491
## [1305,]  0.33673396 -0.4382732    0.5898476 -0.130073186 -0.4936491
## [1306,]  1.86923835 -0.4382732    0.5898476 -0.920637761 -0.4936491
## [1307,] -0.64844744 -0.4382732   -0.9128837  0.799273884  1.4010356
## [1308,] -0.97684124 -0.4382732    0.5898476  1.027273699 -0.4936491
## [1309,]  0.11780476 -0.4382732    0.5898476 -0.196986175  1.4010356
## [1310,] -1.19577043 -0.4382732    0.5898476 -0.571203262  1.4010356
## [1311,]  2.30709675 -0.4382732   -0.9128837  1.024795440 -0.4936491
## [1312,] -2.07148723 -0.4382732   -2.4156151  1.557621094 -0.4936491
## [1313,] -0.64844744  2.2801299    0.5898476 -1.099072398 -2.3883338
## [1314,] -0.86737664  2.2801299    0.5898476 -1.121376728 -2.3883338
## [1315,]  0.88405696 -0.4382732   -2.4156151 -0.529072862  1.4010356
## [1316,] -0.10112444 -0.4382732    0.5898476 -0.923116020 -0.4936491
## [1317,]  0.66512776 -0.4382732   -0.9128837  1.535316764  1.4010356
## [1318,] -1.08630583 -0.4382732   -0.9128837  1.225534407 -0.4936491
## [1319,] -0.86737664 -0.4382732   -0.9128837 -0.566246745 -0.4936491
## [1320,] -0.53898284 -0.4382732   -0.9128837  1.277577843  1.4010356
## [1321,]  0.55566316 -0.4382732   -2.4156151 -1.108985434 -0.4936491
## [1322,]  1.10298615 -0.4382732    0.5898476 -1.475767744 -0.4936491
## [1323,]  0.99352156 -0.4382732    0.5898476 -0.239116576 -0.4936491
## [1324,] -0.97684124 -0.4382732   -2.4156151 -1.294854848 -2.3883338
## [1325,] -0.86737664 -0.4382732    0.5898476 -0.189551399 -0.4936491
## [1326,]  0.55566316 -0.4382732    0.5898476  0.841404285 -0.4936491
## [1327,] -0.53898284  2.2801299    0.5898476 -0.962768161  1.4010356
## [1328,]  0.99352156 -0.4382732    0.5898476  1.280056102  1.4010356
## [1329,] -1.08630583 -0.4382732    0.5898476 -0.184594881  1.4010356
## [1330,] -0.86737664 -0.4382732    0.5898476 -1.116420210 -2.3883338
## [1331,]  0.66512776 -0.4382732    0.5898476  0.050839710 -0.4936491
## [1332,]  1.21245075 -0.4382732    0.5898476  1.044621511 -0.4936491
```

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## [1333,] -0.86737664  2.2801299    -0.9128837 -0.851246513 -0.4936491
## [1334,]  0.99352156  2.2801299     0.5898476  1.118969277  1.4010356
## [1335,] -1.08630583 -0.4382732    -0.9128837  0.814143438 -0.4936491
## [1336,]  0.22726936 -0.4382732     0.5898476  0.080578816 -0.4936491
## [1337,]  1.97870295 -0.4382732     0.5898476  0.083057075 -0.4936491
## [1338,] -0.97684124 -0.4382732     0.5898476  0.915752051  1.4010356
## [1339,] -0.75791204  2.2801299     0.5898476  0.353187291  1.4010356
## [1340,] -1.63362883  2.2801299     0.5898476 -1.019768115 -0.4936491
## [1341,] -0.10112444 -0.4382732     0.5898476  1.148708383  1.4010356
## [1342,] -0.64844744 -0.4382732     0.5898476 -1.218028824 -0.4936491
## [1343,] -0.32005364 -0.4382732     0.5898476  1.679055778  1.4010356
## [1344,] -0.86737664 -0.4382732     0.5898476 -0.521638085 -0.4936491
## [1345,]  0.00834016 -0.4382732     0.5898476 -0.048290644 -0.4936491
## [1346,] -0.21058904 -0.4382732     0.5898476 -1.446028638 -0.4936491
## [1347,]  0.88405696 -0.4382732     0.5898476 -0.610855404 -0.4936491
## [1348,] -0.10112444 -0.4382732    -0.9128837  1.017360664 -2.3883338
## [1349,]  0.33673396 -0.4382732     0.5898476  0.829012991 -0.4936491
## [1350,] -1.19577043 -0.4382732     0.5898476 -0.794246559 -0.4936491
## [1351,] -1.08630583 -0.4382732     0.5898476 -0.722377053  1.4010356
## [1352,]  1.21245075 -0.4382732    -0.9128837 -1.698811041 -0.4936491
## [1353,]  0.77459236 -0.4382732     0.5898476 -1.567463322 -0.4936491
## [1354,] -0.32005364  2.2801299    -2.4156151  0.407708985 -0.4936491
## [1355,]  2.08816755  2.2801299     0.5898476  0.890969462 -0.4936491
## [1356,] -0.10112444 -0.4382732     0.5898476 -1.158550611  1.4010356
## [1357,]  0.44619856 -0.4382732     0.5898476 -1.153594093  1.4010356
## [1358,]  0.55566316 -0.4382732     0.5898476  1.470882034 -0.4936491
## [1359,] -0.64844744 -0.4382732     0.5898476  0.685273977  1.4010356
## [1360,] -0.32005364 -0.4382732     0.5898476 -0.167247069  1.4010356
## [1361,] -0.64844744 -0.4382732     0.5898476 -0.821507407 -0.4936491
## [1362,] -1.19577043 -0.4382732    -0.9128837  0.727404378 -0.4936491
## [1363,]  0.88405696 -0.4382732    -0.9128837  1.225534407 -0.4936491
## [1364,] -0.42951824 -0.4382732     0.5898476 -1.450985156  1.4010356
## [1365,] -0.97684124 -0.4382732    -0.9128837 -0.048290644  1.4010356
## [1366,] -0.86737664  2.2801299    -0.9128837 -0.139986222  1.4010356
## [1367,]  0.22726936 -0.4382732    -2.4156151  1.111534500  1.4010356
## [1368,] -1.08630583 -0.4382732     0.5898476  1.366795162 -0.4936491
## [1369,] -0.32005364 -0.4382732    -0.9128837 -0.167247069 -0.4936491
## [1370,] -0.97684124  2.2801299     0.5898476  1.666664484  1.4010356
## [1371,]  1.10298615 -0.4382732    -2.4156151  0.908317274 -0.4936491
## [1372,]  2.08816755 -0.4382732     0.5898476  1.587360200  1.4010356
## [1373,]  0.22726936 -0.4382732     0.5898476  0.159883100 -0.4936491
## [1374,]  0.11780476 -0.4382732    -0.9128837  1.465925516 -0.4936491
## [1375,]  2.30709675 -0.4382732     0.5898476 -0.489420720  1.4010356
## [1376,] -0.53898284  2.2801299    -0.9128837 -1.398941720 -0.4936491
## [1377,]  0.11780476 -0.4382732     0.5898476  1.000012852 -0.4936491
## [1378,]  1.32191535 -0.4382732    -0.9128837  0.648100094 -0.4936491
## [1379,]  0.55566316 -0.4382732     0.5898476 -0.950376867  1.4010356
## [1380,] -1.08630583  2.2801299    -0.9128837  1.324664762 -2.3883338
## [1381,] -0.21058904 -0.4382732     0.5898476 -0.298594788  1.4010356
## [1382,] -0.97684124 -0.4382732    -2.4156151  0.744752190 -0.4936491
## [1383,] -0.64844744 -0.4382732    -2.4156151  0.430013315 -0.4936491
## [1384,] -0.10112444 -0.4382732    -2.4156151  1.359360386 -0.4936491
## [1385,] -0.32005364 -0.4382732     0.5898476  0.333361220  1.4010356
## [1386,] -0.32005364 -0.4382732     0.5898476  1.081795394  1.4010356
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## [1387,] -1.19577043 -0.4382732    0.5898476 -1.599680687 -0.4936491
## [1388,] -0.86737664 -0.4382732    0.5898476 -1.651724123 -0.4936491
## [1389,] -0.53898284 -0.4382732   -2.4156151  0.851317320 -0.4936491
## [1390,] -0.64844744 -0.4382732   -0.9128837  0.799273884 -0.4936491
## [1391,] -0.97684124  2.2801299    0.5898476  1.490708105 -0.4936491
## [1392,]  0.11780476 -0.4382732    0.5898476  1.490708105  1.4010356
## [1393,] -0.21058904 -0.4382732    0.5898476  1.044621511  1.4010356
## [1394,] -1.08630583 -0.4382732    0.5898476  0.375491620  1.4010356
## [1395,] -0.53898284 -0.4382732    0.5898476  1.413882080 -0.4936491
## [1396,] -0.64844744  2.2801299   -0.9128837 -0.120160151  1.4010356
## [1397,]  1.75977375  2.2801299    0.5898476  0.905839015  1.4010356
## [1398,]  1.86923835 -0.4382732    0.5898476 -1.604637205 -0.4936491
## [1399,] -0.42951824 -0.4382732   -0.9128837  1.240403961 -0.4936491
## [1400,]  0.66512776 -0.4382732    0.5898476 -0.566246745 -0.4936491
## [1401,]  0.11780476 -0.4382732   -0.9128837  1.589838459 -2.3883338
## [1402,]  1.97870295 -0.4382732    0.5898476 -1.520376404 -2.3883338
## [1403,] -0.64844744 -0.4382732    0.5898476  1.173490972 -0.4936491
## [1404,]  0.22726936 -0.4382732    0.5898476 -1.693854524  1.4010356
## [1405,]  0.55566316 -0.4382732   -2.4156151 -1.158550611 -0.4936491
## [1406,] -0.64844744 -0.4382732   -2.4156151 -0.261420906 -0.4936491
## [1407,]  1.86923835 -0.4382732    0.5898476 -1.599680687 -0.4936491
## [1408,] -1.41469963 -0.4382732    0.5898476 -0.078029750 -0.4936491
## [1409,] -1.52416423 -0.4382732    0.5898476 -0.573681521 -0.4936491
## [1410,]  0.33673396 -0.4382732   -0.9128837 -0.273812200 -0.4936491
## [1411,]  0.33673396 -0.4382732    0.5898476 -0.888420396  1.4010356
## [1412,] -1.30523503 -0.4382732    0.5898476 -1.222985341 -2.3883338
## [1413,] -0.75791204 -0.4382732    0.5898476  0.268926489 -0.4936491
## [1414,] -1.30523503 -0.4382732    0.5898476  0.432491574 -0.4936491
## [1415,]  1.10298615 -0.4382732    0.5898476  0.935578121 -0.4936491
## [1416,] -0.42951824 -0.4382732   -2.4156151  1.265186549 -0.4936491
## [1417,]  0.11780476 -0.4382732    0.5898476  1.285012620  1.4010356
## [1418,] -0.64844744 -0.4382732    0.5898476  0.871143391  1.4010356
## [1419,]  0.11780476 -0.4382732   -0.9128837 -0.729811829 -0.4936491
## [1420,]  0.55566316 -0.4382732    0.5898476 -0.608377145 -0.4936491
## [1421,]  0.44619856 -0.4382732    0.5898476 -0.397725143 -0.4936491
## [1422,]  1.10298615 -0.4382732   -2.4156151  0.890969462 -0.4936491
## [1423,] -0.21058904 -0.4382732    0.5898476  1.703838366 -0.4936491
## [1424,] -1.63362883 -0.4382732    0.5898476 -0.548898933 -0.4936491
## [1425,] -0.21058904 -0.4382732    0.5898476  1.468403775 -0.4936491
## [1426,] -0.42951824 -0.4382732    0.5898476 -0.747159641 -0.4936491
## [1427,] -0.53898284 -0.4382732    0.5898476 -1.327072213 -0.4936491
## [1428,]  0.33673396 -0.4382732    0.5898476 -0.643072769 -0.4936491
## [1429,] -0.53898284 -0.4382732    0.5898476 -1.408854755  1.4010356
## [1430,]  0.22726936 -0.4382732    0.5898476 -1.701289300 -0.4936491
## [1431,]  0.11780476 -0.4382732    0.5898476 -1.490637298 -0.4936491
## [1432,] -0.53898284 -0.4382732    0.5898476 -0.003681985  1.4010356
## [1433,]  0.00834016 -0.4382732    0.5898476 -1.589767652 -0.4936491
## [1434,] -1.30523503 -0.4382732    0.5898476  1.436186410  1.4010356
## [1435,]  1.65030915 -0.4382732   -2.4156151 -0.538985897  1.4010356
## [1436,]  0.77459236 -0.4382732    0.5898476  0.581187105 -0.4936491
## [1437,] -1.74309343 -0.4382732    0.5898476 -0.747159641  1.4010356
## [1438,]  0.22726936 -0.4382732   -2.4156151 -1.728550148 -0.4936491
## [1439,] -1.52416423  2.2801299   -0.9128837 -0.407638178  1.4010356
## [1440,] -0.10112444 -0.4382732    0.5898476 -0.608377145  1.4010356
```

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## [1441,] -0.10112444 -0.4382732    -0.9128837 -0.283725235 -0.4936491
## [1442,]  2.08816755 -0.4382732    -2.4156151 -0.335768671 -0.4936491
## [1443,] -0.86737664  2.2801299     0.5898476  0.717491342 -0.4936491
## [1444,]  0.55566316 -0.4382732     0.5898476 -1.245289671 -0.4936491
## [1445,]  2.08816755  2.2801299     0.5898476 -1.220507082 -0.4936491
## [1446,]  0.44619856 -0.4382732     0.5898476 -0.546420674 -0.4936491
## [1447,] -0.32005364 -0.4382732     0.5898476 -0.244073094  1.4010356
## [1448,] -0.10112444 -0.4382732    -2.4156151 -1.242811412  1.4010356
## [1449,]  0.44619856 -0.4382732     0.5898476  0.316013408  1.4010356
## [1450,] -0.53898284 -0.4382732     0.5898476 -0.677768393 -0.4936491
## [1451,] -0.21058904 -0.4382732     0.5898476  0.851317320 -2.3883338
## [1452,]  0.11780476 -0.4382732     0.5898476 -1.133768022  1.4010356
## [1453,]  1.43137995  2.2801299    -0.9128837  0.187143947  1.4010356
## [1454,] -0.10112444 -0.4382732     0.5898476  0.786882590  1.4010356
## [1455,]  0.88405696 -0.4382732     0.5898476 -1.061898516  1.4010356
## [1456,]  0.33673396 -0.4382732     0.5898476  1.287490879 -0.4936491
## [1457,] -0.21058904 -0.4382732    -0.9128837  0.982665040 -0.4936491
## [1458,]  0.33673396 -0.4382732     0.5898476  0.970273745 -0.4936491
## [1459,] -0.21058904 -0.4382732     0.5898476 -1.277507036 -0.4936491
## [1460,] -0.86737664 -0.4382732     0.5898476  1.426273375 -0.4936491
## [1461,] -0.86737664 -0.4382732     0.5898476 -0.828942183 -0.4936491
## [1462,]  1.43137995  2.2801299     0.5898476 -0.972681197  1.4010356
## [1463,]  0.22726936 -0.4382732     0.5898476 -0.199464434  1.4010356
## [1464,] -0.64844744 -0.4382732    -2.4156151 -1.183333200 -0.4936491
## [1465,] -1.19577043 -0.4382732     0.5898476  0.903360756  1.4010356
## [1466,] -0.10112444 -0.4382732    -0.9128837  0.202013500 -0.4936491
## [1467,]  0.22726936 -0.4382732     0.5898476 -0.469594649 -0.4936491
## [1468,] -1.08630583 -0.4382732     0.5898476 -1.604637205 -0.4936491
## [1469,]  1.32191535 -0.4382732    -0.9128837  0.546491481  1.4010356
## [1470,] -0.32005364 -0.4382732     0.5898476 -0.432420766 -0.4936491
##          DistanceFromHome   Education EducationField EmployeeCount
##    [1,]       -1.01056544 -0.89138490     -0.9370948           NaN
##    [2,]       -0.14709966 -1.86779013     -0.9370948           NaN
##    [3,]       -0.88721318 -0.89138490      1.3162247           NaN
##    [4,]       -0.76386093  1.06142554     -0.9370948           NaN
##    [5,]       -0.88721318 -1.86779013      0.5651182           NaN
##    [6,]       -0.88721318 -0.89138490     -0.9370948           NaN
##    [7,]       -0.76386093  0.08502032      0.5651182           NaN
##    [8,]        1.82653640 -1.86779013     -0.9370948           NaN
##    [9,]        1.70318415  0.08502032     -0.9370948           NaN
##   [10,]        2.19659316  0.08502032      0.5651182           NaN
##   [11,]        0.83971837  0.08502032      0.5651182           NaN
##   [12,]        0.71636612 -0.89138490     -0.9370948           NaN
##   [13,]        2.07324091 -1.86779013     -0.9370948           NaN
##   [14,]        1.20977513 -0.89138490      0.5651182           NaN
##   [15,]        1.82653640  0.08502032     -0.9370948           NaN
##   [16,]        1.45647964  1.06142554     -0.9370948           NaN
##   [17,]       -0.51715642 -0.89138490     -0.9370948           NaN
##   [18,]        0.83971837 -0.89138490      0.5651182           NaN
##   [19,]       -0.88721318  1.06142554     -0.9370948           NaN
##   [20,]       -0.88721318  0.08502032     -0.9370948           NaN
##   [21,]        0.22295710 -0.89138490      1.3162247           NaN
##   [22,]       -0.02374741  1.06142554     -0.9370948           NaN
##   [23,]       -0.27045191  1.06142554     -0.9370948           NaN
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##  [24,]     0.71636612 -0.89138490   -0.9370948      NaN
##  [25,]    -0.39380417 -1.86779013    0.5651182      NaN
##  [26,]    -0.51715642  0.08502032    1.3162247      NaN
##  [27,]     0.83971837 -1.86779013   -0.9370948      NaN
##  [28,]    -0.14709966  1.06142554   -0.1859883      NaN
##  [29,]    -0.27045191  1.06142554    0.5651182      NaN
##  [30,]    -0.88721318  1.06142554   -0.1859883      NaN
##  [31,]    -0.88721318  0.08502032    0.5651182      NaN
##  [32,]     0.09960485  1.06142554    1.3162247      NaN
##  [33,]    -0.02374741 -0.89138490    0.5651182      NaN
##  [34,]    -0.51715642  0.08502032    2.0673313      NaN
##  [35,]    -1.01056544  0.08502032    0.5651182      NaN
##  [36,]    -0.88721318 -0.89138490    0.5651182      NaN
##  [37,]    -0.76386093 -0.89138490   -0.1859883      NaN
##  [38,]    -0.88721318  0.08502032   -0.1859883      NaN
##  [39,]    -0.51715642  1.06142554   -0.9370948      NaN
##  [40,]    -1.01056544  0.08502032   -0.9370948      NaN
##  [41,]    -0.64050868 -0.89138490    1.3162247      NaN
##  [42,]    -0.88721318  1.06142554   -0.9370948      NaN
##  [43,]     1.94988866  0.08502032   -0.9370948      NaN
##  [44,]    -0.14709966  0.08502032   -0.9370948      NaN
##  [45,]    -1.01056544 -0.89138490    0.5651182      NaN
##  [46,]     0.34630935  0.08502032    2.0673313      NaN
##  [47,]     1.70318415  1.06142554   -0.1859883      NaN
##  [48,]     1.20977513 -0.89138490   -0.9370948      NaN
##  [49,]    -0.51715642  1.06142554   -0.1859883      NaN
##  [50,]    -0.14709966 -1.86779013   -0.9370948      NaN
##  [51,]    -1.01056544 -0.89138490   -0.9370948      NaN
##  [52,]    -0.51715642  1.06142554    2.0673313      NaN
##  [53,]    -1.01056544  2.03783076   -0.1859883      NaN
##  [54,]     0.22295710 -0.89138490    0.5651182      NaN
##  [55,]     1.70318415  0.08502032   -0.1859883      NaN
##  [56,]    -1.01056544 -0.89138490   -0.9370948      NaN
##  [57,]     1.08642288  2.03783076   -0.9370948      NaN
##  [58,]     1.70318415  1.06142554    0.5651182      NaN
##  [59,]    -0.27045191  1.06142554   -0.9370948      NaN
##  [60,]    -1.01056544  1.06142554   -0.9370948      NaN
##  [61,]    -1.01056544  0.08502032    0.5651182      NaN
##  [62,]     2.44329767  2.03783076   -0.9370948      NaN
##  [63,]    -0.27045191 -0.89138490    0.5651182      NaN
##  [64,]     1.94988866  0.08502032   -0.9370948      NaN
##  [65,]    -0.14709966  0.08502032    2.0673313      NaN
##  [66,]    -0.14709966  0.08502032    0.5651182      NaN
##  [67,]     0.22295710  0.08502032   -0.9370948      NaN
##  [68,]    -0.27045191  0.08502032   -0.9370948      NaN
##  [69,]    -1.01056544  0.08502032    0.5651182      NaN
##  [70,]    -0.02374741  0.08502032    0.5651182      NaN
##  [71,]    -1.01056544 -1.86779013   -0.9370948      NaN
##  [72,]    -0.88721318  0.08502032   -0.9370948      NaN
##  [73,]    -1.01056544  1.06142554    0.5651182      NaN
##  [74,]    -1.01056544  0.08502032   -0.9370948      NaN
##  [75,]    -0.39380417  0.08502032   -0.9370948      NaN
##  [76,]    -0.14709966  1.06142554   -0.9370948      NaN
##  [77,]    -1.01056544  1.06142554   -0.1859883      NaN
```

```
##   [78,]    -0.39380417  1.06142554     1.3162247         NaN
##   [79,]    -0.27045191  1.06142554     0.5651182         NaN
##   [80,]    -0.51715642 -0.89138490     0.5651182         NaN
##   [81,]    -1.01056544 -1.86779013    -0.9370948         NaN
##   [82,]    -1.01056544  0.08502032     0.5651182         NaN
##   [83,]    -1.01056544 -0.89138490    -0.9370948         NaN
##   [84,]    -0.39380417  0.08502032     0.5651182         NaN
##   [85,]    -1.01056544 -0.89138490     0.5651182         NaN
##   [86,]    -0.27045191  0.08502032    -0.9370948         NaN
##   [87,]    -0.88721318 -1.86779013     2.0673313         NaN
##   [88,]    -0.02374741  1.06142554    -0.9370948         NaN
##   [89,]    -0.88721318  0.08502032    -0.9370948         NaN
##   [90,]    -0.02374741 -0.89138490     0.5651182         NaN
##   [91,]    -1.01056544  1.06142554    -0.9370948         NaN
##   [92,]     1.45647964  1.06142554    -0.1859883         NaN
##   [93,]    -0.64050868 -0.89138490     0.5651182         NaN
##   [94,]    -1.01056544  0.08502032     0.5651182         NaN
##   [95,]    -0.39380417  1.06142554     0.5651182         NaN
##   [96,]    -0.88721318  1.06142554     2.0673313         NaN
##   [97,]    -0.76386093 -0.89138490     1.3162247         NaN
##   [98,]    -0.64050868  0.08502032     0.5651182         NaN
##   [99,]     0.09960485  1.06142554     0.5651182         NaN
##  [100,]     1.70318415  0.08502032     0.5651182         NaN
##  [101,]    -0.39380417  1.06142554    -1.6882013         NaN
##  [102,]    -1.01056544 -1.86779013    -0.9370948         NaN
##  [103,]    -0.39380417  0.08502032    -0.9370948         NaN
##  [104,]    -0.39380417  1.06142554     1.3162247         NaN
##  [105,]    -0.88721318 -0.89138490    -0.9370948         NaN
##  [106,]    -0.88721318  1.06142554    -1.6882013         NaN
##  [107,]    -1.01056544  0.08502032    -0.9370948         NaN
##  [108,]    -0.51715642  0.08502032    -0.1859883         NaN
##  [109,]    -0.27045191 -1.86779013     0.5651182         NaN
##  [110,]     0.71636612  0.08502032     0.5651182         NaN
##  [111,]    -1.01056544  1.06142554     0.5651182         NaN
##  [112,]    -0.27045191  0.08502032    -0.9370948         NaN
##  [113,]     2.07324091  0.08502032    -1.6882013         NaN
##  [114,]     1.08642288 -1.86779013    -0.9370948         NaN
##  [115,]    -0.39380417  1.06142554    -0.9370948         NaN
##  [116,]    -0.76386093  0.08502032    -0.9370948         NaN
##  [117,]    -0.51715642  0.08502032     0.5651182         NaN
##  [118,]     0.22295710 -0.89138490     2.0673313         NaN
##  [119,]    -0.76386093 -0.89138490    -0.9370948         NaN
##  [120,]     2.07324091 -0.89138490    -0.9370948         NaN
##  [121,]     1.70318415  0.08502032    -0.9370948         NaN
##  [122,]     1.57983189 -0.89138490    -0.1859883         NaN
##  [123,]     0.59301386  1.06142554    -0.9370948         NaN
##  [124,]    -0.39380417  0.08502032    -0.9370948         NaN
##  [125,]    -0.39380417  1.06142554    -0.9370948         NaN
##  [126,]    -0.39380417  0.08502032     1.3162247         NaN
##  [127,]     1.70318415  1.06142554     0.5651182         NaN
##  [128,]     1.57983189 -1.86779013    -0.1859883         NaN
##  [129,]    -0.88721318 -1.86779013     2.0673313         NaN
##  [130,]     1.33312739  1.06142554     0.5651182         NaN
##  [131,]     2.31994542  0.08502032     0.5651182         NaN
```

```
## [132,]      0.34630935  0.08502032  -0.1859883      NaN
## [133,]      1.33312739  0.08502032  -0.9370948      NaN
## [134,]     -0.02374741 -1.86779013  -0.9370948      NaN
## [135,]      1.94988866 -1.86779013  -0.9370948      NaN
## [136,]     -0.39380417 -0.89138490   0.5651182      NaN
## [137,]     -0.14709966  1.06142554  -0.9370948      NaN
## [138,]     -0.64050868  1.06142554  -0.9370948      NaN
## [139,]      2.31994542  0.08502032  -0.9370948      NaN
## [140,]     -0.02374741  0.08502032  -1.6882013      NaN
## [141,]     -0.02374741  0.08502032   0.5651182      NaN
## [142,]      2.44329767  0.08502032   0.5651182      NaN
## [143,]     -0.76386093  2.03783076   2.0673313      NaN
## [144,]      1.08642288  0.08502032  -0.9370948      NaN
## [145,]     -0.02374741 -0.89138490   0.5651182      NaN
## [146,]     -0.51715642  0.08502032   2.0673313      NaN
## [147,]     -0.88721318 -1.86779013   0.5651182      NaN
## [148,]      0.09960485  0.08502032  -0.9370948      NaN
## [149,]     -0.02374741  1.06142554  -0.9370948      NaN
## [150,]     -0.76386093 -1.86779013   0.5651182      NaN
## [151,]      2.07324091  0.08502032   0.5651182      NaN
## [152,]     -1.01056544  2.03783076  -0.1859883      NaN
## [153,]     -0.39380417 -0.89138490  -0.1859883      NaN
## [154,]     -0.02374741  0.08502032  -0.9370948      NaN
## [155,]     -0.14709966  0.08502032  -0.1859883      NaN
## [156,]     -1.01056544 -1.86779013   2.0673313      NaN
## [157,]     -0.27045191  1.06142554   0.5651182      NaN
## [158,]     -0.02374741  0.08502032   0.5651182      NaN
## [159,]     -0.64050868  1.06142554  -0.1859883      NaN
## [160,]     -0.88721318  1.06142554  -0.1859883      NaN
## [161,]      1.20977513 -1.86779013   0.5651182      NaN
## [162,]     -0.02374741  0.08502032   0.5651182      NaN
## [163,]      1.45647964  0.08502032   0.5651182      NaN
## [164,]      1.82653640 -0.89138490  -0.9370948      NaN
## [165,]     -0.76386093  0.08502032   0.5651182      NaN
## [166,]      0.22295710  0.08502032  -0.9370948      NaN
## [167,]      0.59301386  0.08502032  -0.9370948      NaN
## [168,]     -0.51715642  0.08502032  -0.9370948      NaN
## [169,]     -1.01056544  1.06142554  -0.9370948      NaN
## [170,]     -0.39380417  2.03783076  -0.9370948      NaN
## [171,]      0.96307062  0.08502032   2.0673313      NaN
## [172,]     -1.01056544 -1.86779013   2.0673313      NaN
## [173,]     -0.76386093 -0.89138490   0.5651182      NaN
## [174,]     -0.02374741  0.08502032   0.5651182      NaN
## [175,]     -0.64050868 -0.89138490  -0.9370948      NaN
## [176,]     -0.14709966  0.08502032  -0.9370948      NaN
## [177,]     -0.88721318  0.08502032  -0.9370948      NaN
## [178,]     -0.88721318  0.08502032  -0.9370948      NaN
## [179,]     -1.01056544 -0.89138490  -0.1859883      NaN
## [180,]     -0.02374741 -0.89138490  -0.9370948      NaN
## [181,]      0.34630935 -1.86779013   0.5651182      NaN
## [182,]      2.19659316 -0.89138490   0.5651182      NaN
## [183,]      1.33312739 -0.89138490  -0.1859883      NaN
## [184,]     -1.01056544  0.08502032   0.5651182      NaN
## [185,]      0.46966161 -0.89138490   0.5651182      NaN
```

```
## [186,]      0.59301386  0.08502032       0.5651182       NaN
## [187,]     -0.64050868 -1.86779013       0.5651182       NaN
## [188,]      0.59301386  1.06142554       0.5651182       NaN
## [189,]     -0.88721318 -1.86779013      -0.9370948       NaN
## [190,]     -0.76386093  0.08502032       0.5651182       NaN
## [191,]     -1.01056544  1.06142554      -0.9370948       NaN
## [192,]     -0.02374741  0.08502032       0.5651182       NaN
## [193,]      1.70318415 -0.89138490      -0.9370948       NaN
## [194,]     -0.27045191  0.08502032       0.5651182       NaN
## [195,]     -0.88721318 -0.89138490       0.5651182       NaN
## [196,]      1.45647964  0.08502032      -0.9370948       NaN
## [197,]     -0.88721318  0.08502032       0.5651182       NaN
## [198,]      1.45647964 -0.89138490       0.5651182       NaN
## [199,]     -0.88721318  1.06142554      -0.9370948       NaN
## [200,]      2.44329767  0.08502032       2.0673313       NaN
## [201,]     -1.01056544 -1.86779013       2.0673313       NaN
## [202,]      1.08642288  1.06142554      -0.9370948       NaN
## [203,]      0.09960485  1.06142554       0.5651182       NaN
## [204,]      1.20977513 -0.89138490       0.5651182       NaN
## [205,]      2.44329767 -1.86779013       0.5651182       NaN
## [206,]      2.19659316  0.08502032      -0.1859883       NaN
## [207,]     -0.51715642  0.08502032      -0.9370948       NaN
## [208,]      1.08642288 -1.86779013       0.5651182       NaN
## [209,]     -0.02374741  2.03783076      -0.9370948       NaN
## [210,]     -1.01056544  1.06142554       0.5651182       NaN
## [211,]     -0.64050868  1.06142554       0.5651182       NaN
## [212,]     -1.01056544 -1.86779013      -0.9370948       NaN
## [213,]      1.33312739  0.08502032      -0.9370948       NaN
## [214,]     -0.14709966  1.06142554      -0.9370948       NaN
## [215,]     -0.76386093  0.08502032       2.0673313       NaN
## [216,]     -0.39380417  0.08502032      -0.9370948       NaN
## [217,]      2.07324091  1.06142554      -0.1859883       NaN
## [218,]     -1.01056544  0.08502032       2.0673313       NaN
## [219,]     -0.39380417  0.08502032       0.5651182       NaN
## [220,]     -0.76386093  0.08502032      -0.1859883       NaN
## [221,]     -0.51715642 -0.89138490      -0.9370948       NaN
## [222,]     -0.64050868  1.06142554       0.5651182       NaN
## [223,]      0.22295710  0.08502032       1.3162247       NaN
## [224,]     -0.76386093  0.08502032      -0.9370948       NaN
## [225,]     -1.01056544  1.06142554       0.5651182       NaN
## [226,]     -0.76386093  0.08502032      -0.9370948       NaN
## [227,]     -0.64050868  1.06142554      -0.1859883       NaN
## [228,]     -1.01056544 -1.86779013       0.5651182       NaN
## [229,]     -1.01056544  0.08502032      -0.1859883       NaN
## [230,]      1.08642288 -1.86779013       0.5651182       NaN
## [231,]     -0.88721318  0.08502032      -0.9370948       NaN
## [232,]     -0.64050868 -0.89138490       2.0673313       NaN
## [233,]     -0.39380417 -0.89138490       0.5651182       NaN
## [234,]     -1.01056544  1.06142554       0.5651182       NaN
## [235,]      0.59301386  0.08502032       0.5651182       NaN
## [236,]      0.83971837  0.08502032      -0.1859883       NaN
## [237,]     -0.88721318 -0.89138490      -0.9370948       NaN
## [238,]     -0.88721318  1.06142554      -0.9370948       NaN
## [239,]     -0.64050868 -0.89138490      -0.9370948       NaN
```

```
## [240,]    -1.01056544  0.08502032   -0.9370948      NaN
## [241,]    -1.01056544  1.06142554    0.5651182      NaN
## [242,]     2.07324091  1.06142554   -0.1859883      NaN
## [243,]     1.20977513 -0.89138490   -0.9370948      NaN
## [244,]     1.82653640 -0.89138490    2.0673313      NaN
## [245,]    -1.01056544  0.08502032    1.3162247      NaN
## [246,]    -0.76386093  1.06142554    0.5651182      NaN
## [247,]    -0.51715642  1.06142554   -0.9370948      NaN
## [248,]    -0.88721318  1.06142554   -0.9370948      NaN
## [249,]    -1.01056544 -0.89138490    0.5651182      NaN
## [250,]    -0.27045191  1.06142554   -0.9370948      NaN
## [251,]     0.09960485  0.08502032    0.5651182      NaN
## [252,]    -0.88721318  1.06142554    2.0673313      NaN
## [253,]     0.71636612  0.08502032   -0.9370948      NaN
## [254,]     0.96307062 -0.89138490   -0.9370948      NaN
## [255,]     1.33312739 -0.89138490   -0.1859883      NaN
## [256,]    -1.01056544  0.08502032   -0.9370948      NaN
## [257,]    -0.88721318  0.08502032    0.5651182      NaN
## [258,]    -0.88721318 -0.89138490    0.5651182      NaN
## [259,]    -1.01056544  0.08502032   -0.9370948      NaN
## [260,]     2.44329767 -0.89138490    0.5651182      NaN
## [261,]    -0.27045191  0.08502032   -0.9370948      NaN
## [262,]    -0.88721318 -0.89138490   -0.9370948      NaN
## [263,]    -0.88721318 -1.86779013    2.0673313      NaN
## [264,]    -0.88721318  0.08502032    2.0673313      NaN
## [265,]    -0.88721318  1.06142554   -0.9370948      NaN
## [266,]    -0.88721318  0.08502032    0.5651182      NaN
## [267,]     1.70318415  0.08502032    0.5651182      NaN
## [268,]    -0.51715642 -0.89138490   -0.9370948      NaN
## [269,]     1.33312739 -0.89138490    0.5651182      NaN
## [270,]    -0.39380417  0.08502032   -0.9370948      NaN
## [271,]    -1.01056544  0.08502032    0.5651182      NaN
## [272,]     2.44329767  1.06142554   -0.9370948      NaN
## [273,]    -0.02374741  0.08502032    0.5651182      NaN
## [274,]    -0.39380417  1.06142554    0.5651182      NaN
## [275,]    -0.76386093 -0.89138490    0.5651182      NaN
## [276,]    -1.01056544  1.06142554    0.5651182      NaN
## [277,]     1.57983189  0.08502032   -0.9370948      NaN
## [278,]    -0.27045191 -0.89138490    0.5651182      NaN
## [279,]    -1.01056544  0.08502032   -0.9370948      NaN
## [280,]    -0.64050868 -1.86779013   -0.9370948      NaN
## [281,]    -0.76386093  1.06142554    0.5651182      NaN
## [282,]    -1.01056544 -1.86779013   -0.9370948      NaN
## [283,]    -0.88721318 -0.89138490   -0.9370948      NaN
## [284,]     1.33312739 -0.89138490    2.0673313      NaN
## [285,]     0.22295710 -0.89138490    0.5651182      NaN
## [286,]    -1.01056544  0.08502032   -0.9370948      NaN
## [287,]     1.82653640  0.08502032   -0.9370948      NaN
## [288,]     1.70318415  1.06142554   -0.9370948      NaN
## [289,]     0.83971837  1.06142554    0.5651182      NaN
## [290,]    -0.14709966 -0.89138490   -0.9370948      NaN
## [291,]     0.09960485  1.06142554   -0.9370948      NaN
## [292,]    -0.76386093  0.08502032    2.0673313      NaN
## [293,]    -0.51715642  0.08502032   -0.1859883      NaN
```

```
## [294,]    -0.64050868  1.06142554   -0.1859883      NaN
## [295,]    -0.02374741  0.08502032    0.5651182      NaN
## [296,]     2.07324091  0.08502032   -0.1859883      NaN
## [297,]    -0.76386093  0.08502032   -0.9370948      NaN
## [298,]     0.83971837  0.08502032   -0.1859883      NaN
## [299,]     1.08642288  1.06142554   -0.9370948      NaN
## [300,]    -0.88721318  0.08502032    0.5651182      NaN
## [301,]    -0.88721318  1.06142554   -0.9370948      NaN
## [302,]     0.09960485  0.08502032    0.5651182      NaN
## [303,]     0.83971837 -0.89138490    0.5651182      NaN
## [304,]    -0.27045191  0.08502032    2.0673313      NaN
## [305,]    -1.01056544  0.08502032    0.5651182      NaN
## [306,]     1.82653640  1.06142554   -0.9370948      NaN
## [307,]    -0.27045191  0.08502032   -0.9370948      NaN
## [308,]     1.94988866 -0.89138490   -0.9370948      NaN
## [309,]    -1.01056544  1.06142554   -0.9370948      NaN
## [310,]    -0.51715642  1.06142554    2.0673313      NaN
## [311,]    -0.88721318  0.08502032   -1.6882013      NaN
## [312,]    -0.27045191  0.08502032   -0.9370948      NaN
## [313,]    -0.88721318  1.06142554   -0.9370948      NaN
## [314,]    -0.51715642  1.06142554   -0.9370948      NaN
## [315,]     0.09960485 -1.86779013    0.5651182      NaN
## [316,]     0.09960485  1.06142554   -0.9370948      NaN
## [317,]    -1.01056544 -0.89138490    2.0673313      NaN
## [318,]    -0.14709966  1.06142554    0.5651182      NaN
## [319,]    -0.51715642  0.08502032   -0.9370948      NaN
## [320,]    -0.14709966 -0.89138490    2.0673313      NaN
## [321,]    -0.88721318  0.08502032   -0.9370948      NaN
## [322,]    -0.27045191  0.08502032   -0.1859883      NaN
## [323,]    -0.88721318  1.06142554    0.5651182      NaN
## [324,]    -0.88721318  1.06142554    0.5651182      NaN
## [325,]     2.31994542 -0.89138490    0.5651182      NaN
## [326,]    -0.27045191 -0.89138490   -0.9370948      NaN
## [327,]    -0.27045191 -0.89138490    0.5651182      NaN
## [328,]    -0.76386093 -0.89138490    0.5651182      NaN
## [329,]     0.09960485  0.08502032   -0.1859883      NaN
## [330,]    -0.51715642  2.03783076   -0.9370948      NaN
## [331,]     0.09960485  1.06142554   -0.9370948      NaN
## [332,]    -1.01056544 -1.86779013   -0.1859883      NaN
## [333,]     1.33312739  1.06142554   -0.9370948      NaN
## [334,]    -0.27045191  0.08502032   -0.9370948      NaN
## [335,]    -0.14709966  1.06142554    1.3162247      NaN
## [336,]    -1.01056544 -0.89138490    0.5651182      NaN
## [337,]    -0.14709966  1.06142554    1.3162247      NaN
## [338,]    -0.02374741  2.03783076    1.3162247      NaN
## [339,]    -0.51715642  0.08502032   -0.1859883      NaN
## [340,]    -0.14709966  1.06142554   -0.1859883      NaN
## [341,]    -0.51715642 -0.89138490    0.5651182      NaN
## [342,]     0.71636612 -0.89138490   -0.9370948      NaN
## [343,]    -0.27045191  1.06142554    0.5651182      NaN
## [344,]     0.09960485 -1.86779013   -0.1859883      NaN
## [345,]    -0.51715642  1.06142554    2.0673313      NaN
## [346,]     2.07324091 -1.86779013   -0.9370948      NaN
## [347,]    -0.39380417  0.08502032    0.5651182      NaN
```

```
## [348,]    -0.64050868 -1.86779013    0.5651182    NaN
## [349,]     1.70318415  2.03783076   -0.9370948    NaN
## [350,]    -0.88721318  0.08502032   -0.9370948    NaN
## [351,]    -0.88721318 -1.86779013    2.0673313    NaN
## [352,]    -0.88721318  0.08502032    0.5651182    NaN
## [353,]     2.44329767 -1.86779013    0.5651182    NaN
## [354,]    -0.39380417  0.08502032    0.5651182    NaN
## [355,]     1.94988866 -0.89138490    2.0673313    NaN
## [356,]    -1.01056544  0.08502032   -0.9370948    NaN
## [357,]    -0.88721318  1.06142554    1.3162247    NaN
## [358,]    -1.01056544 -1.86779013    2.0673313    NaN
## [359,]    -1.01056544  2.03783076    0.5651182    NaN
## [360,]    -0.76386093  1.06142554    0.5651182    NaN
## [361,]    -1.01056544  1.06142554    0.5651182    NaN
## [362,]     0.09960485  1.06142554   -0.9370948    NaN
## [363,]    -0.02374741 -0.89138490    0.5651182    NaN
## [364,]    -0.51715642  0.08502032   -0.1859883    NaN
## [365,]     0.09960485  0.08502032    0.5651182    NaN
## [366,]    -0.27045191  1.06142554    0.5651182    NaN
## [367,]    -0.64050868  0.08502032   -0.1859883    NaN
## [368,]     0.09960485  0.08502032    2.0673313    NaN
## [369,]     1.57983189 -0.89138490   -0.1859883    NaN
## [370,]    -0.02374741  1.06142554   -0.9370948    NaN
## [371,]     0.34630935  0.08502032   -0.9370948    NaN
## [372,]     1.70318415  0.08502032   -0.9370948    NaN
## [373,]    -0.02374741  1.06142554   -0.9370948    NaN
## [374,]    -1.01056544 -0.89138490    0.5651182    NaN
## [375,]    -0.02374741  1.06142554   -0.9370948    NaN
## [376,]    -0.27045191  0.08502032    1.3162247    NaN
## [377,]     0.59301386 -0.89138490   -0.9370948    NaN
## [378,]    -0.88721318  0.08502032   -0.9370948    NaN
## [379,]     1.20977513  0.08502032   -0.1859883    NaN
## [380,]    -0.88721318  0.08502032   -0.9370948    NaN
## [381,]     0.09960485  1.06142554   -0.1859883    NaN
## [382,]    -0.88721318 -1.86779013    2.0673313    NaN
## [383,]    -0.76386093 -1.86779013    2.0673313    NaN
## [384,]     0.22295710  0.08502032    0.5651182    NaN
## [385,]    -0.88721318 -0.89138490    0.5651182    NaN
## [386,]    -0.64050868  0.08502032    2.0673313    NaN
## [387,]     0.59301386  0.08502032   -0.9370948    NaN
## [388,]    -0.88721318 -0.89138490   -0.1859883    NaN
## [389,]    -1.01056544  1.06142554   -0.9370948    NaN
## [390,]     0.09960485  1.06142554   -0.9370948    NaN
## [391,]     0.34630935  0.08502032   -0.9370948    NaN
## [392,]    -0.88721318  0.08502032    0.5651182    NaN
## [393,]    -0.51715642 -0.89138490    0.5651182    NaN
## [394,]    -0.64050868  1.06142554   -0.1859883    NaN
## [395,]    -0.27045191 -0.89138490    0.5651182    NaN
## [396,]     1.45647964  0.08502032    0.5651182    NaN
## [397,]    -0.14709966  1.06142554    1.3162247    NaN
## [398,]    -0.64050868 -0.89138490   -0.9370948    NaN
## [399,]     1.94988866  2.03783076    0.5651182    NaN
## [400,]    -1.01056544 -0.89138490   -0.9370948    NaN
## [401,]    -1.01056544 -1.86779013   -0.9370948    NaN
```

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## [402,]      -0.39380417  0.08502032   -0.9370948       NaN
## [403,]       0.34630935  0.08502032    2.0673313       NaN
## [404,]      -1.01056544  0.08502032   -0.1859883       NaN
## [405,]       0.96307062 -0.89138490    0.5651182       NaN
## [406,]      -0.76386093  0.08502032    0.5651182       NaN
## [407,]      -0.76386093  0.08502032    0.5651182       NaN
## [408,]       0.09960485 -0.89138490   -0.9370948       NaN
## [409,]      -0.64050868 -0.89138490   -0.9370948       NaN
## [410,]       2.44329767 -0.89138490   -0.9370948       NaN
## [411,]      -0.88721318  0.08502032   -0.9370948       NaN
## [412,]      -0.27045191  0.08502032   -0.9370948       NaN
## [413,]       1.08642288  0.08502032    0.5651182       NaN
## [414,]       2.31994542  1.06142554    2.0673313       NaN
## [415,]      -1.01056544 -1.86779013    2.0673313       NaN
## [416,]      -0.39380417 -0.89138490   -0.1859883       NaN
## [417,]      -0.88721318 -0.89138490   -0.9370948       NaN
## [418,]      -0.88721318  1.06142554   -0.9370948       NaN
## [419,]       1.70318415  0.08502032   -0.9370948       NaN
## [420,]      -0.76386093  0.08502032   -0.9370948       NaN
## [421,]      -0.76386093  1.06142554    0.5651182       NaN
## [422,]       1.94988866  2.03783076    2.0673313       NaN
## [423,]      -0.88721318 -0.89138490    2.0673313       NaN
## [424,]       1.57983189  1.06142554    1.3162247       NaN
## [425,]       2.44329767  0.08502032   -0.1859883       NaN
## [426,]       2.44329767  1.06142554   -0.9370948       NaN
## [427,]      -0.88721318  0.08502032    0.5651182       NaN
## [428,]       2.31994542  0.08502032   -0.1859883       NaN
## [429,]      -0.88721318 -0.89138490    0.5651182       NaN
## [430,]      -0.88721318  0.08502032   -0.9370948       NaN
## [431,]       1.57983189  0.08502032   -0.9370948       NaN
## [432,]      -0.14709966  1.06142554   -0.9370948       NaN
## [433,]      -0.88721318  1.06142554   -0.9370948       NaN
## [434,]       0.09960485  0.08502032   -0.1859883       NaN
## [435,]      -0.02374741 -1.86779013   -0.9370948       NaN
## [436,]       0.71636612 -1.86779013    0.5651182       NaN
## [437,]       0.09960485 -1.86779013    0.5651182       NaN
## [438,]      -0.27045191 -1.86779013   -0.1859883       NaN
## [439,]       0.83971837  0.08502032   -0.9370948       NaN
## [440,]       1.33312739  0.08502032   -0.9370948       NaN
## [441,]       1.70318415  0.08502032   -1.6882013       NaN
## [442,]      -0.51715642 -0.89138490    1.3162247       NaN
## [443,]       0.09960485  1.06142554    0.5651182       NaN
## [444,]      -0.64050868 -1.86779013    2.0673313       NaN
## [445,]      -0.88721318  2.03783076   -0.1859883       NaN
## [446,]       1.08642288  2.03783076   -0.9370948       NaN
## [447,]       0.09960485 -0.89138490   -0.9370948       NaN
## [448,]      -1.01056544  0.08502032   -0.1859883       NaN
## [449,]      -0.39380417  0.08502032   -0.9370948       NaN
## [450,]      -0.14709966 -1.86779013   -0.9370948       NaN
## [451,]      -0.88721318 -1.86779013   -0.9370948       NaN
## [452,]       1.82653640  0.08502032    0.5651182       NaN
## [453,]      -0.88721318  0.08502032    1.3162247       NaN
## [454,]       0.96307062  1.06142554   -0.9370948       NaN
## [455,]       1.20977513  0.08502032    2.0673313       NaN
```

```
## [456,]     -1.01056544  2.03783076    0.5651182         NaN
## [457,]     -0.27045191  0.08502032   -0.9370948         NaN
## [458,]     -0.51715642  0.08502032   -0.1859883         NaN
## [459,]      2.31994542  0.08502032    1.3162247         NaN
## [460,]     -0.88721318  1.06142554    1.3162247         NaN
## [461,]      2.44329767 -0.89138490    0.5651182         NaN
## [462,]     -1.01056544  0.08502032    0.5651182         NaN
## [463,]      1.45647964  1.06142554   -0.9370948         NaN
## [464,]      1.82653640  0.08502032    2.0673313         NaN
## [465,]     -1.01056544  0.08502032    2.0673313         NaN
## [466,]      1.08642288 -1.86779013    0.5651182         NaN
## [467,]     -0.88721318  2.03783076   -0.9370948         NaN
## [468,]     -0.02374741  1.06142554    0.5651182         NaN
## [469,]     -0.39380417 -0.89138490    2.0673313         NaN
## [470,]      0.22295710  1.06142554    1.3162247         NaN
## [471,]      1.82653640  0.08502032    0.5651182         NaN
## [472,]      0.09960485  0.08502032    0.5651182         NaN
## [473,]     -1.01056544  1.06142554   -0.9370948         NaN
## [474,]      1.08642288  1.06142554   -0.9370948         NaN
## [475,]      1.70318415  0.08502032    0.5651182         NaN
## [476,]      2.31994542 -0.89138490   -0.1859883         NaN
## [477,]      0.96307062 -0.89138490    1.3162247         NaN
## [478,]     -0.76386093  0.08502032    0.5651182         NaN
## [479,]      0.46966161 -1.86779013    0.5651182         NaN
## [480,]     -0.27045191  0.08502032   -0.9370948         NaN
## [481,]      0.34630935  1.06142554   -0.9370948         NaN
## [482,]     -1.01056544 -0.89138490   -0.9370948         NaN
## [483,]      0.46966161  1.06142554    0.5651182         NaN
## [484,]      1.94988866 -0.89138490    1.3162247         NaN
## [485,]     -0.39380417  1.06142554    0.5651182         NaN
## [486,]     -0.39380417  1.06142554    0.5651182         NaN
## [487,]     -0.88721318  0.08502032   -0.1859883         NaN
## [488,]     -1.01056544  0.08502032   -0.9370948         NaN
## [489,]     -0.88721318  1.06142554   -0.9370948         NaN
## [490,]     -0.39380417  1.06142554    1.3162247         NaN
## [491,]     -1.01056544 -1.86779013   -0.9370948         NaN
## [492,]     -0.02374741  2.03783076    0.5651182         NaN
## [493,]     -1.01056544  1.06142554   -0.9370948         NaN
## [494,]     -1.01056544  1.06142554   -0.9370948         NaN
## [495,]      0.59301386  0.08502032    2.0673313         NaN
## [496,]     -0.88721318 -1.86779013   -0.1859883         NaN
## [497,]      1.57983189 -1.86779013    2.0673313         NaN
## [498,]     -0.76386093  1.06142554    1.3162247         NaN
## [499,]     -0.39380417 -1.86779013    0.5651182         NaN
## [500,]     -0.14709966  1.06142554   -0.1859883         NaN
## [501,]     -0.02374741  1.06142554   -0.9370948         NaN
## [502,]     -0.76386093  0.08502032    0.5651182         NaN
## [503,]     -1.01056544 -1.86779013    0.5651182         NaN
## [504,]     -1.01056544  2.03783076   -0.9370948         NaN
## [505,]      2.07324091  1.06142554   -0.9370948         NaN
## [506,]     -0.39380417  0.08502032   -0.9370948         NaN
## [507,]     -0.76386093  0.08502032    1.3162247         NaN
## [508,]     -0.76386093 -0.89138490    0.5651182         NaN
## [509,]     -0.39380417  1.06142554   -0.9370948         NaN
```

```
## [510,]     -0.39380417  0.08502032    -0.9370948    NaN
## [511,]      1.20977513  1.06142554     0.5651182    NaN
## [512,]     -0.02374741 -0.89138490     0.5651182    NaN
## [513,]     -0.76386093  1.06142554     0.5651182    NaN
## [514,]      0.09960485 -1.86779013     0.5651182    NaN
## [515,]     -0.76386093  0.08502032    -0.9370948    NaN
## [516,]     -0.76386093  0.08502032    -0.9370948    NaN
## [517,]     -0.64050868  0.08502032     0.5651182    NaN
## [518,]     -0.14709966  0.08502032    -0.9370948    NaN
## [519,]     -0.27045191  1.06142554    -0.1859883    NaN
## [520,]     -1.01056544  1.06142554    -0.9370948    NaN
## [521,]     -0.88721318 -1.86779013    -0.1859883    NaN
## [522,]     -0.76386093 -1.86779013     0.5651182    NaN
## [523,]      0.09960485 -0.89138490    -0.9370948    NaN
## [524,]      2.31994542 -1.86779013     0.5651182    NaN
## [525,]     -0.02374741  0.08502032     0.5651182    NaN
## [526,]     -0.76386093 -0.89138490    -0.9370948    NaN
## [527,]     -0.88721318  1.06142554     2.0673313    NaN
## [528,]      0.09960485  0.08502032    -0.1859883    NaN
## [529,]     -0.14709966 -0.89138490     2.0673313    NaN
## [530,]     -1.01056544  1.06142554    -0.9370948    NaN
## [531,]     -1.01056544 -0.89138490    -0.9370948    NaN
## [532,]     -0.76386093 -0.89138490    -0.9370948    NaN
## [533,]      0.59301386  1.06142554    -0.1859883    NaN
## [534,]     -0.51715642  1.06142554    -0.9370948    NaN
## [535,]     -0.27045191  0.08502032    -0.9370948    NaN
## [536,]      0.09960485  1.06142554    -1.6882013    NaN
## [537,]      0.83971837  1.06142554    -0.1859883    NaN
## [538,]      0.09960485 -0.89138490    -0.9370948    NaN
## [539,]     -1.01056544  0.08502032    -1.6882013    NaN
## [540,]     -0.14709966  1.06142554    -0.1859883    NaN
## [541,]     -1.01056544 -0.89138490    -0.9370948    NaN
## [542,]     -0.14709966  0.08502032    -0.9370948    NaN
## [543,]     -1.01056544  0.08502032    -0.9370948    NaN
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## [545,]     -0.76386093  0.08502032     0.5651182    NaN
## [546,]      2.19659316  2.03783076    -0.1859883    NaN
## [547,]      0.09960485  0.08502032    -0.9370948    NaN
## [548,]      1.20977513  0.08502032     0.5651182    NaN
## [549,]      0.71636612  0.08502032    -0.9370948    NaN
## [550,]     -0.14709966 -0.89138490     0.5651182    NaN
## [551,]     -0.02374741 -1.86779013     0.5651182    NaN
## [552,]     -0.76386093  0.08502032    -1.6882013    NaN
## [553,]     -0.02374741  0.08502032     0.5651182    NaN
## [554,]     -0.88721318 -1.86779013     0.5651182    NaN
## [555,]     -0.27045191  0.08502032     0.5651182    NaN
## [556,]      0.09960485  0.08502032    -0.1859883    NaN
## [557,]     -0.39380417  0.08502032    -0.9370948    NaN
## [558,]     -0.88721318  1.06142554    -0.9370948    NaN
## [559,]      1.82653640  1.06142554    -0.9370948    NaN
## [560,]     -0.88721318  2.03783076     0.5651182    NaN
## [561,]     -0.14709966  2.03783076    -0.9370948    NaN
## [562,]     -0.76386093  1.06142554    -0.1859883    NaN
## [563,]     -1.01056544  1.06142554     1.3162247    NaN
```

```
## [564,]     2.07324091 -1.86779013    0.5651182    NaN
## [565,]    -0.88721318 -0.89138490    2.0673313    NaN
## [566,]     0.09960485 -1.86779013    0.5651182    NaN
## [567,]     2.19659316 -0.89138490   -0.9370948    NaN
## [568,]    -0.88721318  0.08502032    1.3162247    NaN
## [569,]    -0.88721318  0.08502032    0.5651182    NaN
## [570,]    -0.14709966  1.06142554   -0.9370948    NaN
## [571,]     1.20977513  1.06142554    0.5651182    NaN
## [572,]    -1.01056544 -0.89138490   -0.9370948    NaN
## [573,]     2.19659316  0.08502032    0.5651182    NaN
## [574,]    -0.14709966  0.08502032    2.0673313    NaN
## [575,]    -1.01056544  1.06142554   -0.9370948    NaN
## [576,]     1.20977513  1.06142554    0.5651182    NaN
## [577,]    -0.14709966 -1.86779013   -0.1859883    NaN
## [578,]     0.09960485 -1.86779013   -0.9370948    NaN
## [579,]    -0.88721318  1.06142554   -0.9370948    NaN
## [580,]    -0.88721318  1.06142554    0.5651182    NaN
## [581,]    -0.14709966  1.06142554   -0.9370948    NaN
## [582,]    -1.01056544  0.08502032   -0.9370948    NaN
## [583,]    -0.88721318 -0.89138490    0.5651182    NaN
## [584,]    -0.14709966 -0.89138490   -0.9370948    NaN
## [585,]    -0.14709966  0.08502032   -0.9370948    NaN
## [586,]    -0.39380417  0.08502032   -0.9370948    NaN
## [587,]    -0.02374741  0.08502032   -0.9370948    NaN
## [588,]     0.22295710  1.06142554   -0.9370948    NaN
## [589,]    -0.88721318  0.08502032    0.5651182    NaN
## [590,]    -1.01056544 -0.89138490   -0.9370948    NaN
## [591,]    -0.27045191  0.08502032    0.5651182    NaN
## [592,]     0.83971837  0.08502032   -0.1859883    NaN
## [593,]    -0.88721318 -0.89138490    1.3162247    NaN
## [594,]    -1.01056544  0.08502032    1.3162247    NaN
## [595,]     1.70318415 -0.89138490   -0.9370948    NaN
## [596,]    -0.88721318  1.06142554   -0.9370948    NaN
## [597,]    -1.01056544  1.06142554   -0.9370948    NaN
## [598,]    -1.01056544 -0.89138490   -0.9370948    NaN
## [599,]    -0.88721318  1.06142554    0.5651182    NaN
## [600,]     0.46966161  0.08502032   -1.6882013    NaN
## [601,]    -0.64050868  0.08502032   -0.9370948    NaN
## [602,]     0.83971837  1.06142554    0.5651182    NaN
## [603,]    -0.88721318  0.08502032    0.5651182    NaN
## [604,]    -0.88721318  0.08502032   -0.9370948    NaN
## [605,]     2.44329767  0.08502032   -0.9370948    NaN
## [606,]     0.34630935  0.08502032   -0.9370948    NaN
## [607,]     0.83971837  1.06142554   -0.9370948    NaN
## [608,]     0.22295710  0.08502032   -0.1859883    NaN
## [609,]    -0.88721318 -1.86779013    0.5651182    NaN
## [610,]     0.59301386 -0.89138490   -0.9370948    NaN
## [611,]    -0.51715642 -1.86779013    2.0673313    NaN
## [612,]    -0.27045191  0.08502032    1.3162247    NaN
## [613,]    -0.88721318  1.06142554   -0.1859883    NaN
## [614,]    -0.76386093 -0.89138490   -1.6882013    NaN
## [615,]    -0.51715642 -0.89138490    0.5651182    NaN
## [616,]    -0.76386093  0.08502032    0.5651182    NaN
## [617,]     2.07324091  1.06142554   -0.1859883    NaN
```

```
##  [618,]     -0.64050868  0.08502032      0.5651182         NaN
##  [619,]     -0.88721318 -1.86779013      0.5651182         NaN
##  [620,]     -1.01056544  0.08502032      0.5651182         NaN
##  [621,]      2.19659316 -1.86779013      0.5651182         NaN
##  [622,]     -1.01056544 -0.89138490     -0.9370948         NaN
##  [623,]      0.46966161  1.06142554     -0.9370948         NaN
##  [624,]     -0.51715642  1.06142554     -0.9370948         NaN
##  [625,]     -0.27045191 -0.89138490     -0.1859883         NaN
##  [626,]     -0.02374741  0.08502032     -0.1859883         NaN
##  [627,]     -0.14709966 -0.89138490      0.5651182         NaN
##  [628,]      1.94988866  1.06142554      0.5651182         NaN
##  [629,]      0.83971837  1.06142554     -0.1859883         NaN
##  [630,]     -0.14709966 -0.89138490      0.5651182         NaN
##  [631,]     -1.01056544 -0.89138490     -0.9370948         NaN
##  [632,]     -0.14709966  1.06142554     -0.9370948         NaN
##  [633,]     -0.88721318 -1.86779013      0.5651182         NaN
##  [634,]     -0.14709966  0.08502032     -0.9370948         NaN
##  [635,]     -0.76386093 -1.86779013      1.3162247         NaN
##  [636,]     -0.02374741  0.08502032     -0.9370948         NaN
##  [637,]      1.94988866  1.06142554     -0.9370948         NaN
##  [638,]     -1.01056544  0.08502032     -0.9370948         NaN
##  [639,]     -0.64050868 -1.86779013     -0.1859883         NaN
##  [640,]     -1.01056544  0.08502032      2.0673313         NaN
##  [641,]     -0.64050868 -1.86779013     -0.9370948         NaN
##  [642,]     -0.51715642 -0.89138490     -0.9370948         NaN
##  [643,]     -0.02374741  0.08502032     -0.1859883         NaN
##  [644,]     -0.76386093  0.08502032     -0.9370948         NaN
##  [645,]      0.22295710  1.06142554     -0.9370948         NaN
##  [646,]     -1.01056544  0.08502032      0.5651182         NaN
##  [647,]     -0.14709966  0.08502032     -0.1859883         NaN
##  [648,]      1.94988866  0.08502032      2.0673313         NaN
##  [649,]      1.45647964 -0.89138490      0.5651182         NaN
##  [650,]      1.70318415  1.06142554     -0.9370948         NaN
##  [651,]     -1.01056544  0.08502032     -0.9370948         NaN
##  [652,]     -0.88721318 -0.89138490     -0.1859883         NaN
##  [653,]      1.20977513 -0.89138490      0.5651182         NaN
##  [654,]     -0.88721318  1.06142554     -0.9370948         NaN
##  [655,]     -0.88721318  0.08502032     -0.9370948         NaN
##  [656,]     -0.76386093 -0.89138490     -1.6882013         NaN
##  [657,]      1.94988866  1.06142554     -0.9370948         NaN
##  [658,]     -0.27045191 -1.86779013      0.5651182         NaN
##  [659,]     -0.02374741 -0.89138490     -0.9370948         NaN
##  [660,]     -0.51715642  1.06142554      0.5651182         NaN
##  [661,]     -0.88721318 -1.86779013     -0.9370948         NaN
##  [662,]     -0.14709966  0.08502032     -0.9370948         NaN
##  [663,]     -0.88721318  0.08502032      0.5651182         NaN
##  [664,]      1.08642288 -1.86779013      1.3162247         NaN
##  [665,]      0.59301386 -1.86779013     -0.9370948         NaN
##  [666,]     -0.88721318  1.06142554     -0.9370948         NaN
##  [667,]     -0.76386093 -1.86779013     -0.9370948         NaN
##  [668,]     -0.88721318  1.06142554     -0.9370948         NaN
##  [669,]     -0.02374741  0.08502032      0.5651182         NaN
##  [670,]     -0.39380417  0.08502032      0.5651182         NaN
##  [671,]     -0.64050868  0.08502032     -0.9370948         NaN
```

```
## [672,]     0.09960485  0.08502032   -0.9370948      NaN
## [673,]     0.59301386 -0.89138490    0.5651182      NaN
## [674,]    -1.01056544  1.06142554    1.3162247      NaN
## [675,]    -0.51715642  0.08502032    2.0673313      NaN
## [676,]    -0.27045191  1.06142554   -0.9370948      NaN
## [677,]     1.45647964 -1.86779013   -0.9370948      NaN
## [678,]    -0.14709966 -0.89138490    1.3162247      NaN
## [679,]     1.33312739  1.06142554    0.5651182      NaN
## [680,]     1.33312739 -0.89138490   -0.1859883      NaN
## [681,]    -0.27045191  1.06142554    1.3162247      NaN
## [682,]    -1.01056544  0.08502032    2.0673313      NaN
## [683,]    -1.01056544  0.08502032   -0.9370948      NaN
## [684,]     1.20977513 -0.89138490   -0.1859883      NaN
## [685,]     0.09960485  1.06142554   -0.1859883      NaN
## [686,]    -1.01056544  0.08502032    0.5651182      NaN
## [687,]    -0.39380417  0.08502032    0.5651182      NaN
## [688,]    -0.88721318  1.06142554    0.5651182      NaN
## [689,]     1.45647964  0.08502032    1.3162247      NaN
## [690,]    -0.64050868  0.08502032    2.0673313      NaN
## [691,]     0.34630935  0.08502032    0.5651182      NaN
## [692,]    -0.02374741  1.06142554    0.5651182      NaN
## [693,]    -0.76386093  1.06142554    0.5651182      NaN
## [694,]    -0.76386093 -1.86779013   -0.9370948      NaN
## [695,]    -1.01056544  0.08502032   -0.9370948      NaN
## [696,]    -1.01056544  1.06142554   -0.9370948      NaN
## [697,]    -0.64050868 -0.89138490   -0.9370948      NaN
## [698,]     1.33312739  0.08502032    2.0673313      NaN
## [699,]     1.08642288  0.08502032    0.5651182      NaN
## [700,]    -1.01056544 -0.89138490   -0.9370948      NaN
## [701,]    -0.88721318  0.08502032    2.0673313      NaN
## [702,]    -0.88721318 -0.89138490    0.5651182      NaN
## [703,]    -0.14709966 -0.89138490    1.3162247      NaN
## [704,]     0.09960485  0.08502032    2.0673313      NaN
## [705,]    -0.76386093  1.06142554   -0.9370948      NaN
## [706,]    -0.88721318  2.03783076   -0.9370948      NaN
## [707,]     1.82653640  0.08502032   -0.9370948      NaN
## [708,]     0.83971837  1.06142554    0.5651182      NaN
## [709,]    -0.14709966  1.06142554    2.0673313      NaN
## [710,]    -0.02374741 -0.89138490    0.5651182      NaN
## [711,]     0.96307062  0.08502032   -0.9370948      NaN
## [712,]     0.09960485  0.08502032   -0.9370948      NaN
## [713,]     0.46966161 -1.86779013   -0.9370948      NaN
## [714,]    -1.01056544  1.06142554    0.5651182      NaN
## [715,]    -1.01056544 -0.89138490    0.5651182      NaN
## [716,]    -1.01056544  1.06142554    1.3162247      NaN
## [717,]    -0.02374741  0.08502032    0.5651182      NaN
## [718,]     0.83971837  1.06142554    2.0673313      NaN
## [719,]     1.70318415 -0.89138490   -0.9370948      NaN
## [720,]    -0.64050868 -0.89138490   -0.9370948      NaN
## [721,]     1.57983189  0.08502032   -0.9370948      NaN
## [722,]     1.82653640  0.08502032   -0.9370948      NaN
## [723,]     0.09960485 -1.86779013    0.5651182      NaN
## [724,]    -0.27045191 -0.89138490    0.5651182      NaN
## [725,]     0.96307062 -1.86779013    0.5651182      NaN
```

```
## [726,]      0.59301386  1.06142554      1.3162247       NaN
## [727,]     -1.01056544 -1.86779013     -0.9370948       NaN
## [728,]     -0.51715642 -0.89138490     -0.9370948       NaN
## [729,]      0.96307062  0.08502032      2.0673313       NaN
## [730,]      1.94988866  1.06142554      0.5651182       NaN
## [731,]     -0.14709966 -0.89138490     -0.9370948       NaN
## [732,]      0.22295710  0.08502032      0.5651182       NaN
## [733,]     -0.51715642  0.08502032      0.5651182       NaN
## [734,]     -0.88721318 -0.89138490      0.5651182       NaN
## [735,]     -0.14709966 -1.86779013     -0.9370948       NaN
## [736,]     -0.39380417  0.08502032     -0.9370948       NaN
## [737,]     -0.64050868  1.06142554     -0.9370948       NaN
## [738,]     -0.27045191 -0.89138490      0.5651182       NaN
## [739,]     -1.01056544 -1.86779013     -0.9370948       NaN
## [740,]     -0.88721318  1.06142554     -0.9370948       NaN
## [741,]      0.09960485  0.08502032      1.3162247       NaN
## [742,]     -0.51715642 -0.89138490     -0.1859883       NaN
## [743,]     -0.02374741  0.08502032     -0.9370948       NaN
## [744,]     -0.88721318  0.08502032     -0.9370948       NaN
## [745,]      0.22295710 -0.89138490      0.5651182       NaN
## [746,]      1.08642288  1.06142554      0.5651182       NaN
## [747,]     -0.27045191 -1.86779013     -0.9370948       NaN
## [748,]     -0.76386093  1.06142554     -0.9370948       NaN
## [749,]      2.44329767 -0.89138490      0.5651182       NaN
## [750,]     -0.88721318 -1.86779013     -0.1859883       NaN
## [751,]      2.31994542  0.08502032      0.5651182       NaN
## [752,]     -1.01056544  0.08502032     -0.9370948       NaN
## [753,]      0.83971837  1.06142554     -0.9370948       NaN
## [754,]      1.57983189  0.08502032      0.5651182       NaN
## [755,]     -0.14709966 -1.86779013     -0.9370948       NaN
## [756,]      0.22295710 -0.89138490     -0.9370948       NaN
## [757,]      2.44329767  1.06142554      0.5651182       NaN
## [758,]     -1.01056544  1.06142554     -0.1859883       NaN
## [759,]     -1.01056544 -0.89138490      2.0673313       NaN
## [760,]      1.82653640  1.06142554      0.5651182       NaN
## [761,]     -0.88721318  0.08502032     -0.1859883       NaN
## [762,]      0.71636612  0.08502032      1.3162247       NaN
## [763,]     -0.88721318  0.08502032     -0.9370948       NaN
## [764,]      0.09960485  1.06142554     -0.9370948       NaN
## [765,]      0.09960485 -1.86779013      0.5651182       NaN
## [766,]     -0.76386093  1.06142554      1.3162247       NaN
## [767,]     -0.88721318  1.06142554      0.5651182       NaN
## [768,]     -0.76386093  0.08502032      1.3162247       NaN
## [769,]      2.07324091  0.08502032     -0.1859883       NaN
## [770,]     -1.01056544 -1.86779013      0.5651182       NaN
## [771,]     -1.01056544  1.06142554      0.5651182       NaN
## [772,]     -0.88721318  1.06142554     -0.9370948       NaN
## [773,]     -0.02374741  0.08502032      0.5651182       NaN
## [774,]      0.34630935  2.03783076      0.5651182       NaN
## [775,]     -0.88721318 -1.86779013      0.5651182       NaN
## [776,]      1.94988866  0.08502032      0.5651182       NaN
## [777,]     -0.02374741  0.08502032     -0.1859883       NaN
## [778,]      0.09960485  0.08502032     -0.9370948       NaN
## [779,]     -0.14709966  1.06142554     -0.9370948       NaN
```

```
## [780,]     -0.64050868  1.06142554    -0.9370948           NaN
## [781,]      1.82653640 -0.89138490     2.0673313           NaN
## [782,]     -1.01056544 -0.89138490     0.5651182           NaN
## [783,]      1.33312739  0.08502032     1.3162247           NaN
## [784,]     -0.27045191 -0.89138490     2.0673313           NaN
## [785,]      0.96307062 -1.86779013    -0.9370948           NaN
## [786,]      1.33312739  1.06142554     2.0673313           NaN
## [787,]     -0.14709966  2.03783076    -0.9370948           NaN
## [788,]     -0.88721318 -1.86779013    -0.9370948           NaN
## [789,]      0.09960485  0.08502032     1.3162247           NaN
## [790,]     -1.01056544 -0.89138490     0.5651182           NaN
## [791,]     -0.51715642  0.08502032    -0.9370948           NaN
## [792,]     -0.64050868  0.08502032     2.0673313           NaN
## [793,]      2.44329767  1.06142554     0.5651182           NaN
## [794,]      0.71636612 -0.89138490    -0.9370948           NaN
## [795,]     -0.76386093 -1.86779013    -0.9370948           NaN
## [796,]      0.09960485  1.06142554    -0.9370948           NaN
## [797,]     -0.64050868 -1.86779013     2.0673313           NaN
## [798,]      1.45647964  0.08502032     0.5651182           NaN
## [799,]      1.94988866  0.08502032     0.5651182           NaN
## [800,]     -0.88721318 -0.89138490     0.5651182           NaN
## [801,]     -1.01056544  0.08502032     0.5651182           NaN
## [802,]     -1.01056544  1.06142554     1.3162247           NaN
## [803,]     -0.27045191  0.08502032    -0.9370948           NaN
## [804,]     -0.76386093  1.06142554    -0.9370948           NaN
## [805,]     -1.01056544  1.06142554     0.5651182           NaN
## [806,]     -0.02374741  1.06142554    -0.9370948           NaN
## [807,]     -0.27045191  1.06142554    -0.9370948           NaN
## [808,]      0.09960485  1.06142554    -0.1859883           NaN
## [809,]      2.31994542  1.06142554    -0.9370948           NaN
## [810,]     -0.76386093  0.08502032     0.5651182           NaN
## [811,]     -0.76386093 -1.86779013    -0.1859883           NaN
## [812,]     -0.88721318 -0.89138490    -0.1859883           NaN
## [813,]      2.19659316  0.08502032    -0.9370948           NaN
## [814,]     -0.88721318  0.08502032    -0.9370948           NaN
## [815,]      0.59301386  0.08502032     0.5651182           NaN
## [816,]     -1.01056544 -1.86779013     2.0673313           NaN
## [817,]     -0.02374741  0.08502032    -0.9370948           NaN
## [818,]      1.08642288  1.06142554    -0.9370948           NaN
## [819,]      1.33312739  0.08502032    -0.9370948           NaN
## [820,]     -0.88721318 -1.86779013    -0.9370948           NaN
## [821,]      0.22295710 -0.89138490    -0.1859883           NaN
## [822,]     -0.14709966  1.06142554     2.0673313           NaN
## [823,]     -0.88721318 -0.89138490    -0.9370948           NaN
## [824,]      0.09960485  0.08502032    -0.9370948           NaN
## [825,]      2.44329767  0.08502032     0.5651182           NaN
## [826,]     -0.14709966 -1.86779013     0.5651182           NaN
## [827,]     -1.01056544  0.08502032    -1.6882013           NaN
## [828,]     -0.39380417  0.08502032    -0.9370948           NaN
## [829,]     -0.14709966 -1.86779013     0.5651182           NaN
## [830,]     -0.02374741  1.06142554    -0.1859883           NaN
## [831,]      0.34630935  1.06142554    -0.9370948           NaN
## [832,]      0.71636612  0.08502032     0.5651182           NaN
## [833,]      1.94988866 -0.89138490     0.5651182           NaN
```

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```
## [834,]    -0.39380417  0.08502032   -0.9370948         NaN
## [835,]    -0.02374741 -1.86779013   -0.9370948         NaN
## [836,]    -0.14709966  1.06142554    2.0673313         NaN
## [837,]     1.70318415 -1.86779013   -0.9370948         NaN
## [838,]    -0.02374741  1.06142554    0.5651182         NaN
## [839,]     0.34630935  0.08502032   -0.9370948         NaN
## [840,]    -0.64050868  1.06142554   -0.1859883         NaN
## [841,]    -1.01056544  1.06142554    0.5651182         NaN
## [842,]     1.82653640  0.08502032    0.5651182         NaN
## [843,]     0.34630935 -1.86779013   -0.9370948         NaN
## [844,]    -0.76386093  1.06142554    0.5651182         NaN
## [845,]     0.09960485  0.08502032   -0.1859883         NaN
## [846,]     2.07324091 -0.89138490    0.5651182         NaN
## [847,]    -0.88721318  0.08502032   -0.9370948         NaN
## [848,]    -1.01056544  0.08502032    0.5651182         NaN
## [849,]    -0.64050868  1.06142554    1.3162247         NaN
## [850,]    -0.02374741  0.08502032   -0.1859883         NaN
## [851,]    -0.88721318 -1.86779013   -0.9370948         NaN
## [852,]    -0.64050868  1.06142554    2.0673313         NaN
## [853,]    -0.39380417 -1.86779013    0.5651182         NaN
## [854,]    -0.02374741 -0.89138490   -0.9370948         NaN
## [855,]    -0.27045191  0.08502032    0.5651182         NaN
## [856,]    -1.01056544  0.08502032   -0.9370948         NaN
## [857,]    -0.76386093  0.08502032   -0.9370948         NaN
## [858,]     0.09960485  1.06142554   -0.9370948         NaN
## [859,]    -0.27045191 -0.89138490    0.5651182         NaN
## [860,]     0.71636612 -1.86779013   -0.9370948         NaN
## [861,]    -0.76386093  1.06142554   -0.9370948         NaN
## [862,]    -0.88721318  0.08502032   -0.1859883         NaN
## [863,]     0.96307062  0.08502032   -0.9370948         NaN
## [864,]    -0.88721318  0.08502032   -1.6882013         NaN
## [865,]    -0.51715642 -0.89138490   -0.9370948         NaN
## [866,]     2.44329767  1.06142554   -0.9370948         NaN
## [867,]    -0.88721318  1.06142554    0.5651182         NaN
## [868,]    -0.88721318  0.08502032    0.5651182         NaN
## [869,]     1.20977513  1.06142554    0.5651182         NaN
## [870,]     0.71636612 -0.89138490   -0.9370948         NaN
## [871,]     0.96307062  1.06142554   -0.9370948         NaN
## [872,]     0.96307062 -0.89138490   -0.9370948         NaN
## [873,]     1.94988866  0.08502032    0.5651182         NaN
## [874,]    -0.39380417  1.06142554   -0.9370948         NaN
## [875,]    -0.27045191  1.06142554   -0.9370948         NaN
## [876,]     2.44329767  1.06142554    1.3162247         NaN
## [877,]     1.45647964  0.08502032   -0.1859883         NaN
## [878,]    -0.88721318  1.06142554    2.0673313         NaN
## [879,]    -0.88721318  2.03783076    0.5651182         NaN
## [880,]    -0.27045191  1.06142554   -0.1859883         NaN
## [881,]     0.46966161  0.08502032    1.3162247         NaN
## [882,]    -0.88721318 -0.89138490   -0.9370948         NaN
## [883,]    -1.01056544  0.08502032    2.0673313         NaN
## [884,]    -0.02374741  0.08502032    0.5651182         NaN
## [885,]     0.09960485  0.08502032    2.0673313         NaN
## [886,]     0.09960485  1.06142554   -0.9370948         NaN
## [887,]    -1.01056544  0.08502032    0.5651182         NaN
```

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```
## [888,]      2.07324091  2.03783076     0.5651182         NaN
## [889,]     -0.14709966 -0.89138490    -0.1859883         NaN
## [890,]      0.59301386  0.08502032    -0.9370948         NaN
## [891,]     -1.01056544  1.06142554    -0.9370948         NaN
## [892,]     -0.88721318 -1.86779013    -0.9370948         NaN
## [893,]      0.09960485  0.08502032     0.5651182         NaN
## [894,]     -1.01056544  0.08502032    -0.9370948         NaN
## [895,]     -0.76386093  0.08502032    -0.9370948         NaN
## [896,]      0.22295710 -0.89138490     0.5651182         NaN
## [897,]      1.82653640  0.08502032     0.5651182         NaN
## [898,]     -0.76386093  0.08502032    -0.9370948         NaN
## [899,]     -0.76386093  0.08502032    -0.9370948         NaN
## [900,]     -0.64050868 -0.89138490     0.5651182         NaN
## [901,]     -0.76386093  0.08502032     2.0673313         NaN
## [902,]     -0.88721318 -0.89138490     2.0673313         NaN
## [903,]     -0.64050868 -0.89138490    -0.9370948         NaN
## [904,]     -0.27045191  0.08502032    -0.9370948         NaN
## [905,]     -1.01056544  0.08502032    -0.9370948         NaN
## [906,]     -1.01056544  0.08502032    -0.9370948         NaN
## [907,]      1.33312739  0.08502032     2.0673313         NaN
## [908,]     -0.51715642  0.08502032    -0.1859883         NaN
## [909,]      0.09960485  2.03783076    -0.1859883         NaN
## [910,]      1.94988866  0.08502032    -0.9370948         NaN
## [911,]     -1.01056544 -0.89138490    -0.9370948         NaN
## [912,]      1.82653640 -1.86779013    -0.9370948         NaN
## [913,]     -0.64050868 -0.89138490    -0.9370948         NaN
## [914,]     -0.88721318  0.08502032    -0.1859883         NaN
## [915,]     -0.14709966 -1.86779013     0.5651182         NaN
## [916,]      0.09960485 -0.89138490    -0.9370948         NaN
## [917,]     -0.64050868 -0.89138490    -0.1859883         NaN
## [918,]     -0.88721318  0.08502032    -0.1859883         NaN
## [919,]     -0.02374741  0.08502032    -0.9370948         NaN
## [920,]      1.08642288  1.06142554     0.5651182         NaN
## [921,]      1.20977513  0.08502032     0.5651182         NaN
## [922,]     -1.01056544  1.06142554     0.5651182         NaN
## [923,]     -0.64050868 -0.89138490    -0.9370948         NaN
## [924,]      0.22295710  0.08502032    -0.9370948         NaN
## [925,]     -0.39380417 -1.86779013    -0.9370948         NaN
## [926,]     -0.27045191  1.06142554     0.5651182         NaN
## [927,]     -0.64050868  1.06142554    -0.1859883         NaN
## [928,]     -0.88721318  1.06142554    -0.9370948         NaN
## [929,]      0.71636612  0.08502032     0.5651182         NaN
## [930,]     -0.88721318  0.08502032    -0.9370948         NaN
## [931,]     -0.39380417 -0.89138490     0.5651182         NaN
## [932,]     -0.02374741 -0.89138490     0.5651182         NaN
## [933,]     -0.27045191  0.08502032     2.0673313         NaN
## [934,]     -1.01056544  0.08502032     2.0673313         NaN
## [935,]     -1.01056544  0.08502032     0.5651182         NaN
## [936,]     -0.14709966  0.08502032     0.5651182         NaN
## [937,]      1.94988866  0.08502032     0.5651182         NaN
## [938,]      0.46966161  1.06142554     0.5651182         NaN
## [939,]      1.70318415  1.06142554    -0.9370948         NaN
## [940,]     -0.27045191 -0.89138490    -0.9370948         NaN
## [941,]      1.70318415  0.08502032     0.5651182         NaN
```

```
## [942,]     -0.39380417  0.08502032    2.0673313      NaN
## [943,]      0.09960485  1.06142554    2.0673313      NaN
## [944,]     -1.01056544 -0.89138490   -0.9370948      NaN
## [945,]     -1.01056544  0.08502032   -0.9370948      NaN
## [946,]      2.31994542  0.08502032   -0.9370948      NaN
## [947,]      1.94988866  1.06142554   -0.1859883      NaN
## [948,]     -0.51715642  0.08502032   -0.9370948      NaN
## [949,]      0.96307062  1.06142554    0.5651182      NaN
## [950,]      1.08642288 -0.89138490   -0.9370948      NaN
## [951,]     -0.88721318  1.06142554   -0.9370948      NaN
## [952,]      0.09960485 -0.89138490    0.5651182      NaN
## [953,]     -1.01056544  0.08502032   -0.9370948      NaN
## [954,]     -0.76386093  0.08502032   -0.9370948      NaN
## [955,]     -0.88721318 -1.86779013   -0.9370948      NaN
## [956,]     -0.88721318 -0.89138490    0.5651182      NaN
## [957,]     -0.14709966  1.06142554   -0.9370948      NaN
## [958,]      0.83971837 -0.89138490   -0.9370948      NaN
## [959,]     -0.02374741  0.08502032   -0.9370948      NaN
## [960,]     -0.88721318  0.08502032   -0.9370948      NaN
## [961,]     -1.01056544  0.08502032   -0.1859883      NaN
## [962,]     -0.64050868  1.06142554   -0.9370948      NaN
## [963,]     -0.51715642  0.08502032   -0.9370948      NaN
## [964,]     -0.88721318 -0.89138490   -0.9370948      NaN
## [965,]      0.71636612 -0.89138490    0.5651182      NaN
## [966,]      1.20977513 -1.86779013    0.5651182      NaN
## [967,]     -0.27045191  1.06142554    0.5651182      NaN
## [968,]     -1.01056544  1.06142554   -0.9370948      NaN
## [969,]     -0.27045191  0.08502032   -0.1859883      NaN
## [970,]     -0.64050868  0.08502032   -0.9370948      NaN
## [971,]      0.22295710  0.08502032    0.5651182      NaN
## [972,]      0.22295710 -0.89138490    2.0673313      NaN
## [973,]     -1.01056544  0.08502032   -0.9370948      NaN
## [974,]     -1.01056544  0.08502032    0.5651182      NaN
## [975,]     -0.88721318 -1.86779013   -0.9370948      NaN
## [976,]      0.46966161  1.06142554   -0.1859883      NaN
## [977,]      1.70318415  0.08502032   -0.9370948      NaN
## [978,]      2.07324091 -1.86779013    2.0673313      NaN
## [979,]     -0.88721318 -1.86779013    0.5651182      NaN
## [980,]      2.44329767  0.08502032    0.5651182      NaN
## [981,]     -0.88721318  0.08502032   -0.9370948      NaN
## [982,]      1.08642288  1.06142554   -0.1859883      NaN
## [983,]     -0.27045191  0.08502032   -0.9370948      NaN
## [984,]     -0.88721318  1.06142554    2.0673313      NaN
## [985,]      2.07324091  0.08502032   -0.9370948      NaN
## [986,]      1.57983189  1.06142554    0.5651182      NaN
## [987,]      1.45647964  1.06142554   -0.9370948      NaN
## [988,]     -0.88721318  0.08502032   -0.1859883      NaN
## [989,]      1.57983189  0.08502032   -0.9370948      NaN
## [990,]     -0.64050868 -1.86779013   -0.9370948      NaN
## [991,]     -0.51715642 -1.86779013   -0.9370948      NaN
## [992,]     -0.88721318 -1.86779013   -0.1859883      NaN
## [993,]      1.94988866 -0.89138490   -0.9370948      NaN
## [994,]      1.08642288 -1.86779013   -0.9370948      NaN
## [995,]      2.31994542 -0.89138490    0.5651182      NaN
```

```
##  [996,]     -0.39380417  0.08502032      0.5651182       NaN
##  [997,]      0.09960485  0.08502032     -0.1859883       NaN
##  [998,]      0.96307062  1.06142554     -0.9370948       NaN
##  [999,]     -0.88721318 -1.86779013      0.5651182       NaN
## [1000,]      0.09960485  0.08502032     -1.6882013       NaN
## [1001,]     -0.14709966  1.06142554      1.3162247       NaN
## [1002,]      0.22295710  0.08502032      0.5651182       NaN
## [1003,]      1.08642288 -0.89138490     -0.9370948       NaN
## [1004,]     -1.01056544  0.08502032      2.0673313       NaN
## [1005,]     -0.27045191  0.08502032      1.3162247       NaN
## [1006,]      0.96307062  0.08502032      1.3162247       NaN
## [1007,]      2.31994542 -0.89138490     -0.9370948       NaN
## [1008,]      0.59301386 -1.86779013      1.3162247       NaN
## [1009,]     -1.01056544  0.08502032      0.5651182       NaN
## [1010,]     -1.01056544  0.08502032      0.5651182       NaN
## [1011,]     -1.01056544  1.06142554      0.5651182       NaN
## [1012,]     -0.76386093  1.06142554     -0.1859883       NaN
## [1013,]     -1.01056544  1.06142554     -0.9370948       NaN
## [1014,]     -0.27045191  1.06142554     -0.1859883       NaN
## [1015,]     -0.14709966  2.03783076     -0.9370948       NaN
## [1016,]     -1.01056544  1.06142554      1.3162247       NaN
## [1017,]     -0.14709966  0.08502032     -0.9370948       NaN
## [1018,]      0.22295710 -1.86779013     -0.9370948       NaN
## [1019,]     -0.64050868  1.06142554     -0.9370948       NaN
## [1020,]      0.83971837  1.06142554     -0.1859883       NaN
## [1021,]     -1.01056544  0.08502032      2.0673313       NaN
## [1022,]     -0.02374741 -0.89138490     -0.9370948       NaN
## [1023,]     -0.51715642 -0.89138490      2.0673313       NaN
## [1024,]     -1.01056544 -0.89138490     -0.9370948       NaN
## [1025,]     -0.88721318  1.06142554      0.5651182       NaN
## [1026,]     -0.64050868 -1.86779013      0.5651182       NaN
## [1027,]     -0.27045191  2.03783076     -0.1859883       NaN
## [1028,]     -1.01056544  0.08502032     -0.9370948       NaN
## [1029,]     -0.51715642  2.03783076      0.5651182       NaN
## [1030,]     -0.02374741  1.06142554      1.3162247       NaN
## [1031,]     -0.14709966 -0.89138490     -0.9370948       NaN
## [1032,]     -0.02374741  0.08502032     -0.1859883       NaN
## [1033,]     -0.88721318  0.08502032     -0.9370948       NaN
## [1034,]     -1.01056544  2.03783076     -0.9370948       NaN
## [1035,]      1.33312739  0.08502032      0.5651182       NaN
## [1036,]     -0.14709966 -0.89138490      0.5651182       NaN
## [1037,]     -0.88721318  0.08502032     -0.9370948       NaN
## [1038,]      2.44329767  0.08502032      2.0673313       NaN
## [1039,]     -0.27045191  0.08502032     -0.1859883       NaN
## [1040,]     -0.02374741  1.06142554      2.0673313       NaN
## [1041,]     -0.14709966 -1.86779013      0.5651182       NaN
## [1042,]     -0.51715642  0.08502032      0.5651182       NaN
## [1043,]     -0.51715642  0.08502032     -0.9370948       NaN
## [1044,]     -0.88721318  0.08502032      0.5651182       NaN
## [1045,]     -0.51715642  1.06142554      2.0673313       NaN
## [1046,]     -0.88721318  0.08502032      0.5651182       NaN
## [1047,]      1.33312739  0.08502032     -0.9370948       NaN
## [1048,]     -0.27045191  0.08502032      0.5651182       NaN
## [1049,]     -0.76386093  0.08502032      1.3162247       NaN
```

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## [1050,]      0.83971837 -1.86779013   -0.9370948      NaN
## [1051,]     -0.02374741 -0.89138490    0.5651182      NaN
## [1052,]     -1.01056544  2.03783076   -0.1859883      NaN
## [1053,]     -0.27045191  0.08502032    2.0673313      NaN
## [1054,]     -1.01056544 -0.89138490   -0.9370948      NaN
## [1055,]     -0.27045191  1.06142554   -0.9370948      NaN
## [1056,]      0.71636612  0.08502032    0.5651182      NaN
## [1057,]     -1.01056544  0.08502032    2.0673313      NaN
## [1058,]      0.46966161  0.08502032    2.0673313      NaN
## [1059,]      1.82653640  1.06142554    0.5651182      NaN
## [1060,]     -0.27045191 -1.86779013   -0.9370948      NaN
## [1061,]     -0.02374741  0.08502032    0.5651182      NaN
## [1062,]      0.46966161 -0.89138490   -0.9370948      NaN
## [1063,]     -0.88721318 -1.86779013    0.5651182      NaN
## [1064,]      1.20977513  0.08502032   -0.9370948      NaN
## [1065,]     -1.01056544  0.08502032   -0.9370948      NaN
## [1066,]     -0.64050868  1.06142554   -0.9370948      NaN
## [1067,]     -0.64050868  1.06142554    0.5651182      NaN
## [1068,]      0.59301386  0.08502032    0.5651182      NaN
## [1069,]     -0.88721318 -0.89138490    0.5651182      NaN
## [1070,]     -1.01056544  0.08502032   -0.9370948      NaN
## [1071,]     -0.27045191  0.08502032   -0.9370948      NaN
## [1072,]     -0.76386093 -0.89138490    0.5651182      NaN
## [1073,]     -0.88721318 -1.86779013   -0.9370948      NaN
## [1074,]      2.44329767 -1.86779013   -0.9370948      NaN
## [1075,]     -0.14709966  2.03783076   -0.9370948      NaN
## [1076,]      0.09960485  0.08502032    0.5651182      NaN
## [1077,]      0.22295710  1.06142554    0.5651182      NaN
## [1078,]     -1.01056544  1.06142554    2.0673313      NaN
## [1079,]      2.31994542  0.08502032   -0.9370948      NaN
## [1080,]     -0.39380417  0.08502032   -0.9370948      NaN
## [1081,]     -0.76386093  0.08502032   -0.9370948      NaN
## [1082,]      0.83971837  0.08502032   -0.9370948      NaN
## [1083,]      1.33312739 -1.86779013   -0.9370948      NaN
## [1084,]     -0.02374741  1.06142554   -0.9370948      NaN
## [1085,]     -1.01056544  0.08502032    2.0673313      NaN
## [1086,]     -0.76386093  0.08502032   -0.9370948      NaN
## [1087,]      1.57983189  2.03783076    0.5651182      NaN
## [1088,]     -0.27045191 -0.89138490    2.0673313      NaN
## [1089,]     -0.88721318  0.08502032    0.5651182      NaN
## [1090,]      0.46966161  0.08502032    0.5651182      NaN
## [1091,]     -0.14709966 -1.86779013    1.3162247      NaN
## [1092,]      1.94988866  0.08502032   -0.9370948      NaN
## [1093,]      2.31994542  0.08502032    2.0673313      NaN
## [1094,]     -0.88721318  0.08502032   -0.9370948      NaN
## [1095,]     -0.02374741 -0.89138490    0.5651182      NaN
## [1096,]      2.31994542  1.06142554   -0.9370948      NaN
## [1097,]     -0.39380417 -0.89138490    0.5651182      NaN
## [1098,]      1.45647964 -0.89138490    2.0673313      NaN
## [1099,]     -0.14709966 -0.89138490   -0.9370948      NaN
## [1100,]     -1.01056544  1.06142554    2.0673313      NaN
## [1101,]      2.31994542  1.06142554   -0.9370948      NaN
## [1102,]     -0.51715642 -0.89138490   -0.9370948      NaN
## [1103,]     -0.88721318  1.06142554   -0.9370948      NaN
```

```
## [1104,]      0.83971837  1.06142554  -0.9370948      NaN
## [1105,]     -0.02374741  0.08502032  -0.9370948      NaN
## [1106,]     -0.14709966  1.06142554  -0.9370948      NaN
## [1107,]     -1.01056544  0.08502032  -0.9370948      NaN
## [1108,]      0.09960485  1.06142554  -1.6882013      NaN
## [1109,]     -1.01056544  0.08502032   0.5651182      NaN
## [1110,]      2.44329767  1.06142554   2.0673313      NaN
## [1111,]     -0.88721318  0.08502032  -0.9370948      NaN
## [1112,]     -0.88721318  2.03783076   2.0673313      NaN
## [1113,]     -0.88721318  0.08502032   0.5651182      NaN
## [1114,]     -1.01056544  1.06142554   2.0673313      NaN
## [1115,]      0.71636612  1.06142554   1.3162247      NaN
## [1116,]     -0.27045191  1.06142554   0.5651182      NaN
## [1117,]      2.07324091  2.03783076  -0.1859883      NaN
## [1118,]     -1.01056544  1.06142554  -0.9370948      NaN
## [1119,]     -0.76386093  0.08502032  -0.9370948      NaN
## [1120,]      0.59301386  0.08502032  -0.9370948      NaN
## [1121,]      0.83971837  0.08502032  -0.9370948      NaN
## [1122,]     -1.01056544  1.06142554  -0.9370948      NaN
## [1123,]     -0.76386093 -1.86779013   0.5651182      NaN
## [1124,]      0.09960485  1.06142554   0.5651182      NaN
## [1125,]     -0.39380417  0.08502032   0.5651182      NaN
## [1126,]     -0.88721318 -1.86779013  -0.9370948      NaN
## [1127,]     -0.02374741  0.08502032  -0.1859883      NaN
## [1128,]      0.09960485  0.08502032   2.0673313      NaN
## [1129,]     -0.39380417  1.06142554  -0.9370948      NaN
## [1130,]     -0.02374741 -0.89138490   1.3162247      NaN
## [1131,]      2.31994542  0.08502032  -0.9370948      NaN
## [1132,]      0.09960485  1.06142554   2.0673313      NaN
## [1133,]      0.59301386 -0.89138490  -0.9370948      NaN
## [1134,]      2.19659316  0.08502032   2.0673313      NaN
## [1135,]     -0.27045191 -0.89138490  -0.9370948      NaN
## [1136,]     -1.01056544  1.06142554  -0.9370948      NaN
## [1137,]      1.82653640  0.08502032   0.5651182      NaN
## [1138,]      2.07324091 -0.89138490   1.3162247      NaN
## [1139,]      1.33312739  2.03783076   0.5651182      NaN
## [1140,]     -0.51715642  1.06142554   1.3162247      NaN
## [1141,]     -0.27045191  0.08502032   0.5651182      NaN
## [1142,]     -0.27045191  0.08502032   0.5651182      NaN
## [1143,]     -0.51715642  2.03783076   0.5651182      NaN
## [1144,]      2.07324091  0.08502032  -0.1859883      NaN
## [1145,]     -0.88721318  1.06142554   1.3162247      NaN
## [1146,]      0.34630935  1.06142554  -0.9370948      NaN
## [1147,]      0.09960485  1.06142554  -0.9370948      NaN
## [1148,]      1.94988866  1.06142554  -0.9370948      NaN
## [1149,]      0.09960485  2.03783076   0.5651182      NaN
## [1150,]      1.20977513  0.08502032   1.3162247      NaN
## [1151,]      1.08642288  2.03783076  -0.9370948      NaN
## [1152,]      2.19659316  0.08502032   0.5651182      NaN
## [1153,]     -0.51715642 -1.86779013   0.5651182      NaN
## [1154,]     -0.76386093 -0.89138490   0.5651182      NaN
## [1155,]      2.07324091  1.06142554  -0.9370948      NaN
## [1156,]     -0.76386093 -0.89138490   0.5651182      NaN
## [1157,]      0.71636612  0.08502032  -0.9370948      NaN
```

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## [1158,]     -0.14709966  1.06142554    -0.9370948        NaN
## [1159,]      1.20977513  0.08502032    -0.9370948        NaN
## [1160,]     -0.64050868  0.08502032     0.5651182        NaN
## [1161,]     -0.88721318 -0.89138490     1.3162247        NaN
## [1162,]     -0.88721318 -0.89138490     0.5651182        NaN
## [1163,]      0.09960485  0.08502032     0.5651182        NaN
## [1164,]      0.09960485  0.08502032     0.5651182        NaN
## [1165,]      0.83971837  0.08502032    -0.9370948        NaN
## [1166,]     -1.01056544  2.03783076    -1.6882013        NaN
## [1167,]     -0.64050868  2.03783076     0.5651182        NaN
## [1168,]      0.71636612 -0.89138490     0.5651182        NaN
## [1169,]     -0.88721318 -1.86779013     2.0673313        NaN
## [1170,]     -0.14709966  0.08502032     0.5651182        NaN
## [1171,]     -0.88721318  0.08502032     0.5651182        NaN
## [1172,]     -0.27045191  0.08502032    -0.9370948        NaN
## [1173,]      0.09960485  0.08502032     0.5651182        NaN
## [1174,]     -0.51715642  1.06142554    -0.9370948        NaN
## [1175,]     -0.88721318 -1.86779013    -0.9370948        NaN
## [1176,]      0.34630935  0.08502032     0.5651182        NaN
## [1177,]      1.57983189  1.06142554     1.3162247        NaN
## [1178,]      0.96307062  2.03783076    -0.9370948        NaN
## [1179,]     -0.88721318  0.08502032     0.5651182        NaN
## [1180,]     -0.76386093  0.08502032    -0.9370948        NaN
## [1181,]     -0.27045191  0.08502032    -0.9370948        NaN
## [1182,]     -0.39380417 -1.86779013    -0.9370948        NaN
## [1183,]     -1.01056544  1.06142554     0.5651182        NaN
## [1184,]     -0.76386093 -0.89138490    -0.9370948        NaN
## [1185,]      1.57983189  2.03783076     0.5651182        NaN
## [1186,]      0.71636612 -0.89138490    -0.9370948        NaN
## [1187,]      0.34630935  1.06142554     1.3162247        NaN
## [1188,]     -1.01056544  0.08502032    -0.9370948        NaN
## [1189,]     -0.51715642  0.08502032     0.5651182        NaN
## [1190,]     -0.88721318  1.06142554     0.5651182        NaN
## [1191,]     -0.88721318  0.08502032     0.5651182        NaN
## [1192,]     -0.51715642  1.06142554    -0.9370948        NaN
## [1193,]      0.83971837  0.08502032     0.5651182        NaN
## [1194,]     -0.88721318  0.08502032     0.5651182        NaN
## [1195,]     -0.88721318  1.06142554    -0.9370948        NaN
## [1196,]     -1.01056544  0.08502032    -0.9370948        NaN
## [1197,]      1.70318415 -0.89138490    -0.9370948        NaN
## [1198,]     -0.02374741 -1.86779013    -0.9370948        NaN
## [1199,]      0.83971837  0.08502032    -0.9370948        NaN
## [1200,]      2.07324091  1.06142554    -0.9370948        NaN
## [1201,]     -1.01056544  0.08502032    -0.9370948        NaN
## [1202,]     -0.14709966 -1.86779013     0.5651182        NaN
## [1203,]     -0.64050868 -0.89138490     0.5651182        NaN
## [1204,]      1.82653640  1.06142554     0.5651182        NaN
## [1205,]     -0.27045191 -0.89138490     0.5651182        NaN
## [1206,]     -0.88721318  1.06142554    -0.9370948        NaN
## [1207,]     -0.27045191  0.08502032     0.5651182        NaN
## [1208,]      1.57983189  0.08502032     2.0673313        NaN
## [1209,]     -0.51715642 -0.89138490     0.5651182        NaN
## [1210,]     -1.01056544  1.06142554     0.5651182        NaN
## [1211,]      1.45647964  0.08502032     0.5651182        NaN
```

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```
## [1212,]    -1.01056544  1.06142554     0.5651182      NaN
## [1213,]     1.20977513  0.08502032    -0.9370948      NaN
## [1214,]    -0.27045191  0.08502032    -0.9370948      NaN
## [1215,]    -0.88721318  0.08502032    -0.9370948      NaN
## [1216,]    -0.88721318  1.06142554     0.5651182      NaN
## [1217,]    -0.88721318  0.08502032     0.5651182      NaN
## [1218,]    -0.02374741  0.08502032     0.5651182      NaN
## [1219,]    -0.39380417  0.08502032    -0.1859883      NaN
## [1220,]    -0.02374741  1.06142554     0.5651182      NaN
## [1221,]    -0.88721318  1.06142554    -0.9370948      NaN
## [1222,]    -1.01056544 -1.86779013    -0.9370948      NaN
## [1223,]     1.57983189 -1.86779013    -1.6882013      NaN
## [1224,]    -0.02374741  0.08502032    -0.9370948      NaN
## [1225,]     0.96307062  1.06142554     0.5651182      NaN
## [1226,]     2.31994542 -0.89138490     2.0673313      NaN
## [1227,]     0.09960485  0.08502032    -0.9370948      NaN
## [1228,]    -0.88721318  1.06142554    -0.9370948      NaN
## [1229,]    -0.64050868  0.08502032    -1.6882013      NaN
## [1230,]    -0.14709966 -0.89138490    -0.9370948      NaN
## [1231,]     2.44329767 -1.86779013     0.5651182      NaN
## [1232,]     0.46966161  1.06142554    -0.9370948      NaN
## [1233,]     2.19659316  1.06142554    -0.9370948      NaN
## [1234,]     0.83971837 -1.86779013    -0.9370948      NaN
## [1235,]    -0.88721318  1.06142554    -0.1859883      NaN
## [1236,]    -0.88721318  0.08502032    -0.9370948      NaN
## [1237,]     0.46966161  2.03783076    -0.1859883      NaN
## [1238,]    -1.01056544 -0.89138490    -0.9370948      NaN
## [1239,]    -0.64050868 -1.86779013     0.5651182      NaN
## [1240,]     1.82653640 -1.86779013     2.0673313      NaN
## [1241,]    -1.01056544  0.08502032    -0.9370948      NaN
## [1242,]     1.20977513  0.08502032    -0.9370948      NaN
## [1243,]    -0.27045191  1.06142554     0.5651182      NaN
## [1244,]    -0.64050868  0.08502032    -0.9370948      NaN
## [1245,]    -0.88721318  1.06142554     2.0673313      NaN
## [1246,]     0.09960485  0.08502032     0.5651182      NaN
## [1247,]    -0.14709966  0.08502032    -1.6882013      NaN
## [1248,]    -0.51715642  0.08502032     2.0673313      NaN
## [1249,]    -0.14709966  0.08502032     0.5651182      NaN
## [1250,]    -0.02374741  0.08502032    -0.1859883      NaN
## [1251,]    -1.01056544  0.08502032    -0.9370948      NaN
## [1252,]     0.71636612 -0.89138490    -0.1859883      NaN
## [1253,]    -0.88721318  1.06142554     0.5651182      NaN
## [1254,]    -0.88721318  0.08502032    -0.1859883      NaN
## [1255,]     0.22295710  1.06142554    -0.1859883      NaN
## [1256,]     0.83971837  0.08502032    -0.9370948      NaN
## [1257,]    -0.88721318 -0.89138490     0.5651182      NaN
## [1258,]     0.83971837  1.06142554    -0.1859883      NaN
## [1259,]    -0.64050868  0.08502032     2.0673313      NaN
## [1260,]     0.83971837  0.08502032    -0.9370948      NaN
## [1261,]    -0.51715642  1.06142554     2.0673313      NaN
## [1262,]     1.08642288  0.08502032     0.5651182      NaN
## [1263,]     0.96307062  0.08502032     2.0673313      NaN
## [1264,]     0.34630935  0.08502032     0.5651182      NaN
## [1265,]    -0.88721318  0.08502032     0.5651182      NaN
```

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## [1266,]     -0.64050868  0.08502032     2.0673313      NaN
## [1267,]     -0.02374741  1.06142554    -0.9370948      NaN
## [1268,]      0.09960485  0.08502032    -0.9370948      NaN
## [1269,]     -1.01056544  1.06142554     0.5651182      NaN
## [1270,]     -0.88721318  0.08502032    -0.9370948      NaN
## [1271,]     -0.76386093 -0.89138490    -0.9370948      NaN
## [1272,]     -0.27045191 -1.86779013    -0.1859883      NaN
## [1273,]     -0.39380417 -0.89138490     1.3162247      NaN
## [1274,]     -0.14709966 -1.86779013     0.5651182      NaN
## [1275,]      2.44329767  1.06142554    -0.1859883      NaN
## [1276,]     -0.76386093  0.08502032     2.0673313      NaN
## [1277,]     -0.02374741 -0.89138490    -0.1859883      NaN
## [1278,]     -0.88721318  1.06142554     0.5651182      NaN
## [1279,]      0.09960485  0.08502032    -0.9370948      NaN
## [1280,]     -1.01056544 -0.89138490     0.5651182      NaN
## [1281,]     -0.14709966 -0.89138490     1.3162247      NaN
## [1282,]      2.19659316  0.08502032    -0.9370948      NaN
## [1283,]     -0.14709966  1.06142554    -0.9370948      NaN
## [1284,]     -1.01056544  0.08502032    -0.9370948      NaN
## [1285,]      0.09960485 -1.86779013     0.5651182      NaN
## [1286,]      2.07324091 -0.89138490    -0.9370948      NaN
## [1287,]     -0.88721318 -0.89138490    -0.9370948      NaN
## [1288,]      0.46966161  0.08502032     0.5651182      NaN
## [1289,]     -0.88721318 -0.89138490     0.5651182      NaN
## [1290,]     -0.88721318  0.08502032    -1.6882013      NaN
## [1291,]     -0.02374741  1.06142554    -0.9370948      NaN
## [1292,]      0.09960485  1.06142554     0.5651182      NaN
## [1293,]      1.33312739  0.08502032    -0.9370948      NaN
## [1294,]     -0.02374741  0.08502032    -0.9370948      NaN
## [1295,]     -0.51715642  0.08502032    -0.9370948      NaN
## [1296,]     -0.64050868 -1.86779013    -0.1859883      NaN
## [1297,]      0.09960485  0.08502032     0.5651182      NaN
## [1298,]      1.33312739 -0.89138490     0.5651182      NaN
## [1299,]      1.45647964 -0.89138490     0.5651182      NaN
## [1300,]     -1.01056544  0.08502032    -0.9370948      NaN
## [1301,]     -0.14709966 -0.89138490     2.0673313      NaN
## [1302,]     -0.88721318  0.08502032     0.5651182      NaN
## [1303,]      1.70318415  1.06142554     0.5651182      NaN
## [1304,]     -0.64050868  0.08502032    -0.9370948      NaN
## [1305,]      0.34630935  0.08502032    -0.9370948      NaN
## [1306,]     -0.27045191  1.06142554     0.5651182      NaN
## [1307,]     -0.27045191  1.06142554    -0.1859883      NaN
## [1308,]     -1.01056544  0.08502032     0.5651182      NaN
## [1309,]     -0.88721318  1.06142554    -0.1859883      NaN
## [1310,]      0.09960485  0.08502032     0.5651182      NaN
## [1311,]      0.71636612  1.06142554    -0.9370948      NaN
## [1312,]      0.59301386  0.08502032     0.5651182      NaN
## [1313,]      1.08642288  2.03783076    -1.6882013      NaN
## [1314,]      0.46966161  0.08502032    -1.6882013      NaN
## [1315,]     -0.88721318  1.06142554    -0.9370948      NaN
## [1316,]     -0.88721318  1.06142554     1.3162247      NaN
## [1317,]     -0.88721318  1.06142554    -0.9370948      NaN
## [1318,]     -0.51715642 -0.89138490    -0.9370948      NaN
## [1319,]      1.33312739 -1.86779013     0.5651182      NaN
```

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## [1320,]      0.09960485  1.06142554    -0.1859883        NaN
## [1321,]      0.09960485  1.06142554     2.0673313        NaN
## [1322,]     -0.02374741  1.06142554    -0.9370948        NaN
## [1323,]     -0.88721318 -0.89138490    -0.9370948        NaN
## [1324,]     -1.01056544 -0.89138490    -0.9370948        NaN
## [1325,]      2.44329767 -1.86779013    -0.9370948        NaN
## [1326,]     -0.14709966  0.08502032    -0.9370948        NaN
## [1327,]     -0.88721318  1.06142554    -0.1859883        NaN
## [1328,]     -0.76386093  0.08502032     2.0673313        NaN
## [1329,]      1.70318415 -1.86779013     0.5651182        NaN
## [1330,]     -0.39380417 -1.86779013     0.5651182        NaN
## [1331,]     -0.39380417  0.08502032     0.5651182        NaN
## [1332,]      0.09960485  0.08502032    -0.9370948        NaN
## [1333,]      1.82653640 -0.89138490    -0.9370948        NaN
## [1334,]      0.09960485  0.08502032    -0.9370948        NaN
## [1335,]      0.71636612  0.08502032    -0.9370948        NaN
## [1336,]      1.20977513  1.06142554     1.3162247        NaN
## [1337,]     -0.88721318  1.06142554     2.0673313        NaN
## [1338,]     -0.76386093  0.08502032     0.5651182        NaN
## [1339,]     -0.02374741  0.08502032     0.5651182        NaN
## [1340,]     -0.27045191 -1.86779013    -0.9370948        NaN
## [1341,]      0.09960485  1.06142554     2.0673313        NaN
## [1342,]      1.33312739  0.08502032    -0.9370948        NaN
## [1343,]     -0.64050868  0.08502032    -0.9370948        NaN
## [1344,]     -0.27045191  0.08502032    -0.9370948        NaN
## [1345,]     -0.27045191  1.06142554     0.5651182        NaN
## [1346,]      0.83971837 -0.89138490     1.3162247        NaN
## [1347,]      1.94988866 -0.89138490    -0.9370948        NaN
## [1348,]     -0.88721318 -1.86779013    -1.6882013        NaN
## [1349,]     -1.01056544  1.06142554    -0.9370948        NaN
## [1350,]     -1.01056544 -0.89138490    -0.9370948        NaN
## [1351,]     -0.88721318 -0.89138490     0.5651182        NaN
## [1352,]      1.57983189  0.08502032     0.5651182        NaN
## [1353,]     -1.01056544  1.06142554    -0.9370948        NaN
## [1354,]      0.83971837  1.06142554     2.0673313        NaN
## [1355,]      1.82653640 -0.89138490    -0.9370948        NaN
## [1356,]      0.96307062 -0.89138490    -0.1859883        NaN
## [1357,]     -0.14709966  0.08502032    -0.1859883        NaN
## [1358,]     -0.39380417  0.08502032     0.5651182        NaN
## [1359,]      0.09960485 -0.89138490     0.5651182        NaN
## [1360,]     -0.76386093 -1.86779013     0.5651182        NaN
## [1361,]     -0.64050868  0.08502032     0.5651182        NaN
## [1362,]     -0.39380417  0.08502032     1.3162247        NaN
## [1363,]     -1.01056544  1.06142554     0.5651182        NaN
## [1364,]      0.09960485  1.06142554    -0.1859883        NaN
## [1365,]     -1.01056544 -0.89138490    -0.9370948        NaN
## [1366,]      1.82653640  0.08502032     2.0673313        NaN
## [1367,]      1.45647964  1.06142554    -0.9370948        NaN
## [1368,]     -0.88721318  1.06142554     2.0673313        NaN
## [1369,]      1.57983189  1.06142554     1.3162247        NaN
## [1370,]      0.46966161 -0.89138490    -0.1859883        NaN
## [1371,]      0.59301386  1.06142554     2.0673313        NaN
## [1372,]      0.22295710  2.03783076    -0.1859883        NaN
## [1373,]     -0.02374741 -0.89138490     0.5651182        NaN
```

```
## [1374,]     -0.14709966  0.08502032    0.5651182    NaN
## [1375,]      1.45647964  0.08502032   -0.9370948    NaN
## [1376,]     -0.51715642 -0.89138490   -0.9370948    NaN
## [1377,]     -0.02374741 -0.89138490   -0.9370948    NaN
## [1378,]     -0.88721318 -1.86779013   -0.9370948    NaN
## [1379,]      0.34630935  1.06142554   -0.1859883    NaN
## [1380,]      1.57983189  0.08502032   -1.6882013    NaN
## [1381,]      1.08642288  1.06142554    0.5651182    NaN
## [1382,]      0.83971837  0.08502032    0.5651182    NaN
## [1383,]     -0.76386093 -0.89138490    0.5651182    NaN
## [1384,]     -0.02374741  1.06142554   -0.9370948    NaN
## [1385,]     -1.01056544  0.08502032   -0.1859883    NaN
## [1386,]      0.46966161  1.06142554    0.5651182    NaN
## [1387,]     -1.01056544  0.08502032    0.5651182    NaN
## [1388,]     -1.01056544  0.08502032   -0.9370948    NaN
## [1389,]      0.71636612  1.06142554    0.5651182    NaN
## [1390,]     -1.01056544  0.08502032   -0.9370948    NaN
## [1391,]      0.96307062  0.08502032    2.0673313    NaN
## [1392,]     -1.01056544  0.08502032   -0.9370948    NaN
## [1393,]     -0.27045191  1.06142554   -0.9370948    NaN
## [1394,]     -0.02374741  0.08502032   -0.1859883    NaN
## [1395,]     -0.51715642  1.06142554   -0.9370948    NaN
## [1396,]      2.07324091  1.06142554   -0.1859883    NaN
## [1397,]      1.82653640  1.06142554   -0.9370948    NaN
## [1398,]     -0.02374741 -0.89138490   -0.9370948    NaN
## [1399,]     -0.27045191 -0.89138490   -0.9370948    NaN
## [1400,]      0.22295710  0.08502032   -0.9370948    NaN
## [1401,]     -1.01056544  1.06142554    1.3162247    NaN
## [1402,]      2.07324091  1.06142554   -1.6882013    NaN
## [1403,]     -0.88721318 -1.86779013    0.5651182    NaN
## [1404,]      0.71636612  1.06142554   -0.1859883    NaN
## [1405,]      1.70318415 -0.89138490   -0.9370948    NaN
## [1406,]      0.09960485  0.08502032    0.5651182    NaN
## [1407,]      0.09960485  0.08502032    0.5651182    NaN
## [1408,]     -1.01056544 -0.89138490   -0.9370948    NaN
## [1409,]      0.34630935 -0.89138490    1.3162247    NaN
## [1410,]      0.22295710  0.08502032    2.0673313    NaN
## [1411,]     -0.88721318 -0.89138490   -0.1859883    NaN
## [1412,]     -0.88721318  0.08502032   -1.6882013    NaN
## [1413,]     -1.01056544 -0.89138490    0.5651182    NaN
## [1414,]     -0.88721318 -1.86779013    1.3162247    NaN
## [1415,]      1.94988866  0.08502032    0.5651182    NaN
## [1416,]     -1.01056544 -0.89138490    0.5651182    NaN
## [1417,]     -1.01056544  1.06142554   -0.9370948    NaN
## [1418,]     -0.88721318 -0.89138490   -0.9370948    NaN
## [1419,]     -0.39380417  1.06142554   -0.9370948    NaN
## [1420,]      1.08642288  1.06142554   -0.9370948    NaN
## [1421,]     -1.01056544  0.08502032   -0.9370948    NaN
## [1422,]     -1.01056544 -1.86779013    0.5651182    NaN
## [1423,]      0.22295710  1.06142554    0.5651182    NaN
## [1424,]     -1.01056544 -0.89138490   -0.9370948    NaN
## [1425,]     -0.02374741  1.06142554    0.5651182    NaN
## [1426,]      0.71636612 -0.89138490    0.5651182    NaN
## [1427,]      2.44329767  1.06142554   -0.9370948    NaN
```

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## [1428,]     -1.01056544  1.06142554     -0.9370948            NaN
## [1429,]     -1.01056544  1.06142554      0.5651182            NaN
## [1430,]      1.82653640 -1.86779013     -0.9370948            NaN
## [1431,]      0.09960485  0.08502032      0.5651182            NaN
## [1432,]     -1.01056544  1.06142554     -0.1859883            NaN
## [1433,]      0.09960485  0.08502032     -0.9370948            NaN
## [1434,]     -0.14709966 -0.89138490      1.3162247            NaN
## [1435,]      2.44329767  1.06142554     -0.9370948            NaN
## [1436,]     -1.01056544  0.08502032      0.5651182            NaN
## [1437,]     -0.51715642 -1.86779013      0.5651182            NaN
## [1438,]     -0.02374741  0.08502032     -0.9370948            NaN
## [1439,]     -0.02374741  0.08502032     -0.1859883            NaN
## [1440,]     -0.76386093  0.08502032      0.5651182            NaN
## [1441,]     -0.64050868 -0.89138490     -0.9370948            NaN
## [1442,]     -1.01056544  1.06142554     -0.9370948            NaN
## [1443,]     -1.01056544  1.06142554      0.5651182            NaN
## [1444,]     -0.88721318  0.08502032     -0.9370948            NaN
## [1445,]     -0.27045191 -0.89138490      2.0673313            NaN
## [1446,]      2.31994542  1.06142554     -0.9370948            NaN
## [1447,]      2.31994542  0.08502032     -0.1859883            NaN
## [1448,]      0.71636612  1.06142554     -0.1859883            NaN
## [1449,]     -0.76386093  0.08502032     -0.9370948            NaN
## [1450,]     -0.88721318  0.08502032      2.0673313            NaN
## [1451,]      2.07324091  1.06142554     -0.9370948            NaN
## [1452,]      0.09960485 -0.89138490     -0.9370948            NaN
## [1453,]     -1.01056544  1.06142554     -0.9370948            NaN
## [1454,]      0.22295710  1.06142554     -0.1859883            NaN
## [1455,]      1.33312739  0.08502032     -0.9370948            NaN
## [1456,]     -0.88721318  1.06142554     -0.9370948            NaN
## [1457,]      1.08642288  1.06142554     -0.9370948            NaN
## [1458,]     -0.88721318  1.06142554      0.5651182            NaN
## [1459,]     -1.01056544  1.06142554     -0.9370948            NaN
## [1460,]      0.46966161 -0.89138490      1.3162247            NaN
## [1461,]      2.31994542  1.06142554      0.5651182            NaN
## [1462,]      2.31994542  0.08502032     -0.1859883            NaN
## [1463,]      1.82653640 -1.86779013     -0.1859883            NaN
## [1464,]     -0.51715642  0.08502032      0.5651182            NaN
## [1465,]     -0.51715642  0.08502032      1.3162247            NaN
## [1466,]      1.70318415 -0.89138490      0.5651182            NaN
## [1467,]     -0.39380417 -1.86779013      0.5651182            NaN
## [1468,]     -0.64050868  0.08502032     -0.9370948            NaN
## [1469,]     -0.88721318  0.08502032      0.5651182            NaN
## [1470,]     -0.14709966  0.08502032      0.5651182            NaN
##         EmployeeNumber EnvironmentSatisfaction    Gender   HourlyRate
##    [1,] -1.7007041856               -0.6603060 -1.2243282  1.382667732
##    [2,] -1.6990431232                0.2545383  0.8162188 -0.240594893
##    [3,] -1.6957209984                1.1693826  0.8162188  1.284288179
##    [4,] -1.6940599359                1.1693826 -1.2243282 -0.486543776
##    [5,] -1.6907378111               -1.5751502  0.8162188 -1.273580200
##    [6,] -1.6890767487                1.1693826  0.8162188  0.644821084
##    [7,] -1.6857546238                0.2545383 -1.2243282  0.743200637
##    [8,] -1.6840935614                1.1693826  0.8162188  0.054543766
##    [9,] -1.6824324990                1.1693826  0.8162188 -1.076821094
##   [10,] -1.6807714366                0.2545383  0.8162188  1.382667732
```

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##  [11,]  -1.6791103741            -1.5751502  0.8162188   0.890769967
##  [12,]  -1.6774493117             1.1693826 -1.2243282  -0.830872211
##  [13,]  -1.6757882493            -1.5751502  0.8162188  -1.716288189
##  [14,]  -1.6724661244            -0.6603060  0.8162188   1.333477955
##  [15,]  -1.6708050620             0.2545383  0.8162188  -0.781682435
##  [16,]  -1.6691439996            -0.6603060 -1.2243282  -0.732492658
##  [17,]  -1.6674829372            -1.5751502  0.8162188   0.694010860
##  [18,]  -1.6658218748             1.1693826  0.8162188   1.481047285
##  [19,]  -1.6641608123            -1.5751502 -1.2243282   0.595631307
##  [20,]  -1.6624997499             1.1693826  0.8162188  -1.027631318
##  [21,]  -1.6591776251            -1.5751502 -1.2243282   1.481047285
##  [22,]  -1.6575165626             0.2545383  0.8162188   0.792390413
##  [23,]  -1.6558555002            -1.5751502 -1.2243282  -0.634113105
##  [24,]  -1.6525333754             0.2545383  0.8162188   1.481047285
##  [25,]  -1.6508723130            -0.6603060  0.8162188   0.841580190
##  [26,]  -1.6492112505             0.2545383 -1.2243282  -0.388164223
##  [27,]  -1.6475501881            -0.6603060 -1.2243282   0.300492648
##  [28,]  -1.6442280633             0.2545383  0.8162188  -0.880061988
##  [29,]  -1.6425670008            -1.5751502 -1.2243282  -1.175200647
##  [30,]  -1.6392448760            -0.6603060 -1.2243282   0.841580190
##  [31,]  -1.6375838136             0.2545383  0.8162188   0.595631307
##  [32,]  -1.6359227511             1.1693826  0.8162188  -1.224390424
##  [33,]  -1.6342616887             1.1693826  0.8162188   0.841580190
##  [34,]  -1.6326006263             1.1693826  0.8162188  -0.486543776
##  [35,]  -1.6276174390            -0.6603060  0.8162188  -0.240594893
##  [36,]  -1.6259563766             1.1693826 -1.2243282   0.300492648
##  [37,]  -1.6242953142            -1.5751502  0.8162188   0.989149520
##  [38,]  -1.6209731893             1.1693826 -1.2243282   1.530237061
##  [39,]  -1.6176510645            -0.6603060 -1.2243282   0.792390413
##  [40,]  -1.6159900021             0.2545383 -1.2243282  -1.175200647
##  [41,]  -1.6143289397             0.2545383  0.8162188   0.448061978
##  [42,]  -1.6126678772             1.1693826 -1.2243282  -1.617908636
##  [43,]  -1.6110068148            -1.5751502  0.8162188  -0.880061988
##  [44,]  -1.6093457524             1.1693826  0.8162188  -1.421149530
##  [45,]  -1.6076846900             0.2545383 -1.2243282  -0.388164223
##  [46,]  -1.6060236275            -0.6603060 -1.2243282  -0.830872211
##  [47,]  -1.6027015027            -0.6603060  0.8162188   0.300492648
##  [48,]  -1.6010404403            -0.6603060  0.8162188   0.349682425
##  [49,]  -1.5993793779            -1.5751502  0.8162188   1.579426838
##  [50,]  -1.5977183154             1.1693826  0.8162188  -1.470339306
##  [51,]  -1.5960572530            -1.5751502  0.8162188   1.579426838
##  [52,]  -1.5943961906             0.2545383  0.8162188  -0.781682435
##  [53,]  -1.5894130033            -0.6603060 -1.2243282   0.448061978
##  [54,]  -1.5860908785             0.2545383  0.8162188   0.644821084
##  [55,]  -1.5827687536             0.2545383 -1.2243282  -0.929251764
##  [56,]  -1.5811076912            -1.5751502 -1.2243282   1.579426838
##  [57,]  -1.5794466288            -0.6603060  0.8162188   0.251302872
##  [58,]  -1.5777855664             0.2545383 -1.2243282  -1.765477965
##  [59,]  -1.5761245039             1.1693826  0.8162188  -0.880061988
##  [60,]  -1.5744634415            -1.5751502  0.8162188  -0.732492658
##  [61,]  -1.5728023791            -1.5751502  0.8162188  -1.617908636
##  [62,]  -1.5711413167             1.1693826 -1.2243282  -0.781682435
##  [63,]  -1.5694802543            -0.6603060 -1.2243282  -1.126010871
##  [64,]  -1.5678191918            -1.5751502 -1.2243282   1.628616614
```

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##  [65,]  -1.5644970670                     0.2545383 -1.2243282 -0.338974446
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##  [67,]  -1.5611749421                    -0.6603060  0.8162188  1.431857508
##  [68,]  -1.5595138797                    -0.6603060  0.8162188 -0.338974446
##  [69,]  -1.5561917549                    -0.6603060  0.8162188  0.644821084
##  [70,]  -1.5528696300                     1.1693826  0.8162188  0.644821084
##  [71,]  -1.5512085676                    -1.5751502 -1.2243282 -0.437353999
##  [72,]  -1.5462253803                     0.2545383  0.8162188  0.497251754
##  [73,]  -1.5445643179                     0.2545383  0.8162188  1.038339296
##  [74,]  -1.5429032555                    -0.6603060  0.8162188  0.005353989
##  [75,]  -1.5412421931                    -0.6603060 -1.2243282 -0.535733552
##  [76,]  -1.5395811306                     0.2545383 -1.2243282 -0.240594893
##  [77,]  -1.5362590058                     0.2545383  0.8162188 -1.667098412
##  [78,]  -1.5345979434                     1.1693826  0.8162188 -0.683302882
##  [79,]  -1.5329368810                    -1.5751502  0.8162188 -1.765477965
##  [80,]  -1.5312758185                    -0.6603060  0.8162188  0.694010860
##  [81,]  -1.5296147561                     1.1693826  0.8162188 -0.535733552
##  [82,]  -1.5279536937                    -0.6603060  0.8162188 -1.765477965
##  [83,]  -1.5262926313                    -1.5751502  0.8162188  0.202113095
##  [84,]  -1.5246315688                    -0.6603060 -1.2243282  0.644821084
##  [85,]  -1.5196483816                    -1.5751502  0.8162188  1.382667732
##  [86,]  -1.5163262567                     1.1693826  0.8162188 -0.830872211
##  [87,]  -1.5146651943                     0.2545383  0.8162188 -0.191405117
##  [88,]  -1.5096820070                     1.1693826  0.8162188  1.481047285
##  [89,]  -1.5080209446                     0.2545383  0.8162188  1.628616614
##  [90,]  -1.5063598822                     0.2545383  0.8162188 -0.093025564
##  [91,]  -1.5046988198                     0.2545383  0.8162188  0.595631307
##  [92,]  -1.5030377574                     0.2545383  0.8162188  0.251302872
##  [93,]  -1.5013766949                     0.2545383 -1.2243282 -0.142215340
##  [94,]  -1.4963935077                     0.2545383  0.8162188 -1.273580200
##  [95,]  -1.4947324452                    -0.6603060  0.8162188  1.038339296
##  [96,]  -1.4930713828                    -1.5751502 -1.2243282 -0.289784670
##  [97,]  -1.4897492580                    -1.5751502 -1.2243282 -1.617908636
##  [98,]  -1.4880881956                    -0.6603060  0.8162188 -1.126010871
##  [99,]  -1.4847660707                     1.1693826  0.8162188 -1.421149530
## [100,]  -1.4831050083                    -0.6603060  0.8162188  0.054543766
## [101,]  -1.4814439459                     0.2545383  0.8162188 -0.142215340
## [102,]  -1.4797828834                     1.1693826  0.8162188  0.251302872
## [103,]  -1.4747996962                     1.1693826 -1.2243282  0.005353989
## [104,]  -1.4731386338                    -1.5751502 -1.2243282 -1.224390424
## [105,]  -1.4714775713                     0.2545383  0.8162188  1.677806391
## [106,]  -1.4698165089                     0.2545383 -1.2243282 -1.667098412
## [107,]  -1.4681554465                    -1.5751502 -1.2243282  0.349682425
## [108,]  -1.4664943841                     0.2545383  0.8162188 -0.978441541
## [109,]  -1.4648333216                     1.1693826  0.8162188 -0.093025564
## [110,]  -1.4631722592                    -0.6603060 -1.2243282 -0.338974446
## [111,]  -1.4615111968                    -1.5751502 -1.2243282 -1.765477965
## [112,]  -1.4581890719                    -1.5751502  0.8162188  0.005353989
## [113,]  -1.4565280095                     1.1693826 -1.2243282 -1.765477965
## [114,]  -1.4532058847                    -0.6603060  0.8162188 -0.683302882
## [115,]  -1.4515448223                     0.2545383 -1.2243282 -1.027631318
## [116,]  -1.4498837598                     0.2545383  0.8162188  1.038339296
## [117,]  -1.4482226974                     0.2545383 -1.2243282 -1.027631318
## [118,]  -1.4465616350                    -0.6603060 -1.2243282  1.284288179
```

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## [119,]  -1.4449005726       -1.5751502 -1.2243282 -1.322769977
## [120,]  -1.4399173853        0.2545383  0.8162188  1.284288179
## [121,]  -1.4382563229       -1.5751502  0.8162188  1.481047285
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## [123,]  -1.4349341980       -0.6603060 -1.2243282  0.300492648
## [124,]  -1.4332731356       -1.5751502  0.8162188 -0.732492658
## [125,]  -1.4316120732       -0.6603060  0.8162188  0.497251754
## [126,]  -1.4299510108        0.2545383 -1.2243282 -0.978441541
## [127,]  -1.4282899483        1.1693826 -1.2243282  1.382667732
## [128,]  -1.4249678235        1.1693826  0.8162188 -0.781682435
## [129,]  -1.4216456987        0.2545383  0.8162188  1.677806391
## [130,]  -1.4199846362        0.2545383 -1.2243282  1.481047285
## [131,]  -1.4183235738       -0.6603060 -1.2243282  0.300492648
## [132,]  -1.4133403865        0.2545383 -1.2243282  0.546441531
## [133,]  -1.4116793241       -0.6603060 -1.2243282  0.251302872
## [134,]  -1.4100182617        0.2545383  0.8162188  1.481047285
## [135,]  -1.4083571993        0.2545383 -1.2243282 -0.240594893
## [136,]  -1.4066961369       -0.6603060  0.8162188  0.890769967
## [137,]  -1.4050350744       -1.5751502  0.8162188 -0.634113105
## [138,]  -1.4000518872        1.1693826 -1.2243282 -0.929251764
## [139,]  -1.3983908247       -1.5751502  0.8162188 -1.224390424
## [140,]  -1.3967297623        0.2545383  0.8162188 -0.880061988
## [141,]  -1.3867633878       -1.5751502 -1.2243282 -1.224390424
## [142,]  -1.3834412629        0.2545383  0.8162188  0.841580190
## [143,]  -1.3817802005        1.1693826 -1.2243282 -1.667098412
## [144,]  -1.3801191381       -1.5751502 -1.2243282  0.448061978
## [145,]  -1.3784580757        1.1693826  0.8162188 -1.519529083
## [146,]  -1.3751359508        1.1693826 -1.2243282  0.890769967
## [147,]  -1.3734748884       -0.6603060  0.8162188 -1.519529083
## [148,]  -1.3718138260        1.1693826  0.8162188  1.235098402
## [149,]  -1.3701527636        0.2545383  0.8162188  1.382667732
## [150,]  -1.3684917011       -0.6603060 -1.2243282  0.644821084
## [151,]  -1.3668306387       -0.6603060 -1.2243282 -0.584923329
## [152,]  -1.3635085139        0.2545383  0.8162188  1.382667732
## [153,]  -1.3618474514       -0.6603060  0.8162188 -1.568718859
## [154,]  -1.3601863890       -0.6603060  0.8162188 -0.289784670
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## [156,]  -1.3568642642        1.1693826  0.8162188 -1.224390424
## [157,]  -1.3518810769       -0.6603060  0.8162188 -1.568718859
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## [160,]  -1.3435757648        0.2545383 -1.2243282  0.448061978
## [161,]  -1.3419147024        0.2545383  0.8162188  0.694010860
## [162,]  -1.3402536400        1.1693826  0.8162188 -0.437353999
## [163,]  -1.3352704527        0.2545383  0.8162188 -1.175200647
## [164,]  -1.3319483278        0.2545383  0.8162188  0.841580190
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## [168,]  -1.3236430157       -0.6603060 -1.2243282 -1.224390424
## [169,]  -1.3203208909       -1.5751502 -1.2243282 -0.338974446
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## [172,]  -1.3120155788        0.2545383 -1.2243282  1.677806391
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## [177,]  -1.3003881418      0.2545383   0.8162188   1.185908626
## [178,]  -1.2987270794     -0.6603060   0.8162188  -0.929251764
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## [180,]  -1.2954049546      0.2545383  -1.2243282   0.448061978
## [181,]  -1.2937438921      0.2545383  -1.2243282   1.431857508
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## [183,]  -1.2904217673     -0.6603060  -1.2243282   0.202113095
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## [185,]  -1.2870996424      1.1693826  -1.2243282  -0.437353999
## [186,]  -1.2837775176      1.1693826  -1.2243282   0.300492648
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## [225,]  -1.1907580219      0.2545383   0.8162188   1.185908626
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## [229,]  -1.1807916474     0.2545383 -1.2243282  1.284288179
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## [393,]  -0.8352906635      -1.5751502  0.8162188  0.989149520
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## [395,]  -0.8319685387      -0.6603060 -1.2243282 -1.716288189
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## [625,]  -0.2705294399          -1.5751502 -1.2243282  0.595631307
## [626,]  -0.2672073151           1.1693826  0.8162188  0.398872201
## [627,]  -0.2655462526           0.2545383 -1.2243282  1.235098402
## [628,]  -0.2622241278           0.2545383 -1.2243282  0.743200637
## [629,]  -0.2605630654           1.1693826  0.8162188  0.005353989
## [630,]  -0.2589020030          -0.6603060  0.8162188 -0.142215340
## [631,]  -0.2539188157           1.1693826  0.8162188 -1.617908636
## [632,]  -0.2505966908          -1.5751502  0.8162188 -0.191405117
## [633,]  -0.2489356284          -0.6603060  0.8162188 -1.519529083
## [634,]  -0.2439524412          -1.5751502  0.8162188  0.546441531
## [635,]  -0.2422913787           0.2545383  0.8162188  1.579426838
## [636,]  -0.2406303163           1.1693826 -1.2243282  0.005353989
## [637,]  -0.2389692539           1.1693826 -1.2243282  1.481047285
## [638,]  -0.2373081915           1.1693826  0.8162188 -0.240594893
## [639,]  -0.2323250042           0.2545383  0.8162188  1.038339296
## [640,]  -0.2290028794           0.2545383 -1.2243282 -1.470339306
## [641,]  -0.2273418169          -1.5751502  0.8162188 -0.978441541
## [642,]  -0.2256807545          -0.6603060  0.8162188 -0.880061988
## [643,]  -0.2190365048          -0.6603060  0.8162188  1.579426838
## [644,]  -0.2173754424           0.2545383 -1.2243282  1.431857508
## [645,]  -0.2157143800           1.1693826  0.8162188 -0.880061988
## [646,]  -0.2140533176          -0.6603060 -1.2243282 -0.880061988
## [647,]  -0.2123922551          -1.5751502  0.8162188  0.349682425
## [648,]  -0.2090701303           1.1693826  0.8162188  0.595631307
## [649,]  -0.2074090679           0.2545383 -1.2243282 -0.584923329
## [650,]  -0.2057480054           1.1693826 -1.2243282  0.300492648
## [651,]  -0.2040869430           1.1693826 -1.2243282 -1.617908636
## [652,]  -0.2024258806           0.2545383 -1.2243282 -1.519529083
## [653,]  -0.2007648182          -1.5751502  0.8162188 -1.667098412
## [654,]  -0.1991037558          -1.5751502  0.8162188  1.579426838
## [655,]  -0.1924595061           1.1693826 -1.2243282 -1.175200647
## [656,]  -0.1907984436           1.1693826  0.8162188 -0.437353999
## [657,]  -0.1891373812          -1.5751502  0.8162188  1.038339296
## [658,]  -0.1874763188          -1.5751502 -1.2243282 -0.191405117
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## [659,]  -0.1858152564           -0.6603060  0.8162188 -0.240594893
## [660,]  -0.1808320691           -1.5751502  0.8162188  1.579426838
## [661,]  -0.1775099443            1.1693826  0.8162188 -0.437353999
## [662,]  -0.1741878194           -1.5751502 -1.2243282 -0.535733552
## [663,]  -0.1708656946            0.2545383 -1.2243282 -0.830872211
## [664,]  -0.1692046321            1.1693826 -1.2243282 -0.043835787
## [665,]  -0.1675435697            0.2545383  0.8162188  0.103733542
## [666,]  -0.1658825073            1.1693826 -1.2243282 -0.043835787
## [667,]  -0.1642214449           -0.6603060 -1.2243282 -1.568718859
## [668,]  -0.1625603825           -0.6603060 -1.2243282 -0.437353999
## [669,]  -0.1575771952            0.2545383 -1.2243282  0.546441531
## [670,]  -0.1542550703            1.1693826  0.8162188  0.202113095
## [671,]  -0.1525940079           -0.6603060 -1.2243282  0.497251754
## [672,]  -0.1509329455           -0.6603060  0.8162188  0.841580190
## [673,]  -0.1476108207            0.2545383 -1.2243282  0.103733542
## [674,]  -0.1426276334            0.2545383  0.8162188  1.677806391
## [675,]  -0.1409665710            0.2545383 -1.2243282 -1.421149530
## [676,]  -0.1393055085           -0.6603060  0.8162188 -1.224390424
## [677,]  -0.1376444461            1.1693826 -1.2243282 -0.732492658
## [678,]  -0.1343223213           -1.5751502 -1.2243282 -0.732492658
## [679,]  -0.1326612589            1.1693826  0.8162188 -0.732492658
## [680,]  -0.1293391340            1.1693826 -1.2243282 -1.027631318
## [681,]  -0.1260170092           -0.6603060  0.8162188 -0.043835787
## [682,]  -0.1243559467            1.1693826 -1.2243282  0.694010860
## [683,]  -0.1226948843            0.2545383 -1.2243282  0.202113095
## [684,]  -0.1210338219            0.2545383  0.8162188 -1.470339306
## [685,]  -0.1177116971           -1.5751502  0.8162188  0.054543766
## [686,]  -0.1143895722            0.2545383  0.8162188 -0.683302882
## [687,]  -0.1127285098            1.1693826  0.8162188 -0.338974446
## [688,]  -0.1110674474            0.2545383  0.8162188  0.644821084
## [689,]  -0.1094063849            1.1693826  0.8162188 -1.421149530
## [690,]  -0.1077453225           -1.5751502  0.8162188  0.890769967
## [691,]  -0.1060842601            1.1693826 -1.2243282 -1.224390424
## [692,]  -0.1011010728            1.1693826  0.8162188 -1.519529083
## [693,]  -0.0977789480            0.2545383 -1.2243282  1.333477955
## [694,]  -0.0961178856            0.2545383  0.8162188 -0.732492658
## [695,]  -0.0927957607           -0.6603060 -1.2243282 -1.175200647
## [696,]  -0.0911346983           -1.5751502  0.8162188 -0.978441541
## [697,]  -0.0878125734            0.2545383  0.8162188 -0.437353999
## [698,]  -0.0844904486            0.2545383 -1.2243282  0.890769967
## [699,]  -0.0828293862            0.2545383 -1.2243282  0.989149520
## [700,]  -0.0811683238            1.1693826  0.8162188  0.202113095
## [701,]  -0.0795072613            1.1693826  0.8162188 -0.732492658
## [702,]  -0.0728630116            0.2545383  0.8162188 -1.027631318
## [703,]  -0.0712019492            0.2545383  0.8162188 -0.191405117
## [704,]  -0.0695408868            0.2545383 -1.2243282  0.939959743
## [705,]  -0.0678798244            1.1693826  0.8162188  1.284288179
## [706,]  -0.0662187620           -1.5751502  0.8162188 -1.224390424
## [707,]  -0.0645576995           -0.6603060 -1.2243282  1.677806391
## [708,]  -0.0628966371            0.2545383  0.8162188 -0.093025564
## [709,]  -0.0579134498           -1.5751502  0.8162188  0.890769967
## [710,]  -0.0562523874            0.2545383  0.8162188 -0.978441541
## [711,]  -0.0545913250            1.1693826  0.8162188 -1.371959753
## [712,]  -0.0512692002            1.1693826 -1.2243282  1.284288179
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## [713,]  -0.0496081377       -0.6603060 -1.2243282 -0.634113105
## [714,]  -0.0479470753        1.1693826 -1.2243282  1.235098402
## [715,]  -0.0462860129        1.1693826  0.8162188  0.005353989
## [716,]  -0.0446249505        0.2545383 -1.2243282  0.890769967
## [717,]  -0.0429638880       -1.5751502  0.8162188 -0.093025564
## [718,]  -0.0396417632        0.2545383 -1.2243282 -1.421149530
## [719,]  -0.0379807008        1.1693826  0.8162188 -1.175200647
## [720,]  -0.0363196384        1.1693826 -1.2243282  0.841580190
## [721,]  -0.0346585759       -1.5751502 -1.2243282 -0.880061988
## [722,]  -0.0329975135        1.1693826  0.8162188  1.431857508
## [723,]  -0.0313364511        0.2545383  0.8162188  0.005353989
## [724,]  -0.0296753887        1.1693826  0.8162188  0.448061978
## [725,]  -0.0263532638        1.1693826 -1.2243282 -1.224390424
## [726,]  -0.0246922014        0.2545383  0.8162188 -1.322769977
## [727,]  -0.0230311390        0.2545383 -1.2243282  1.481047285
## [728,]  -0.0213700766       -0.6603060  0.8162188  0.349682425
## [729,]  -0.0197090141        0.2545383 -1.2243282 -0.486543776
## [730,]  -0.0180479517        0.2545383 -1.2243282 -0.437353999
## [731,]  -0.0163868893       -0.6603060 -1.2243282  0.349682425
## [732,]  -0.0147258269        1.1693826 -1.2243282  1.579426838
## [733,]  -0.0130647644       -0.6603060 -1.2243282 -0.289784670
## [734,]  -0.0114037020        1.1693826  0.8162188 -1.667098412
## [735,]  -0.0097426396       -0.6603060  0.8162188  1.382667732
## [736,]  -0.0047594523       -1.5751502  0.8162188  1.530237061
## [737,]  -0.0014373275        0.2545383  0.8162188  0.595631307
## [738,]   0.0002237349        1.1693826 -1.2243282 -1.175200647
## [739,]   0.0018847974        1.1693826 -1.2243282 -0.043835787
## [740,]   0.0035458598       -1.5751502 -1.2243282 -0.929251764
## [741,]   0.0052069222       -0.6603060  0.8162188 -1.027631318
## [742,]   0.0068679846        1.1693826  0.8162188  1.185908626
## [743,]   0.0085290471       -1.5751502  0.8162188 -0.093025564
## [744,]   0.0118511719        0.2545383 -1.2243282  0.152923319
## [745,]   0.0135122343       -1.5751502 -1.2243282 -0.240594893
## [746,]   0.0151732967        0.2545383  0.8162188 -0.191405117
## [747,]   0.0168343592       -0.6603060 -1.2243282 -0.535733552
## [748,]   0.0184954216       -0.6603060  0.8162188 -1.175200647
## [749,]   0.0201564840       -0.6603060  0.8162188  0.644821084
## [750,]   0.0218175464       -1.5751502 -1.2243282 -0.437353999
## [751,]   0.0234786089        1.1693826 -1.2243282 -0.634113105
## [752,]   0.0251396713        1.1693826 -1.2243282  1.431857508
## [753,]   0.0284617961        0.2545383 -1.2243282 -1.126010871
## [754,]   0.0301228585        1.1693826 -1.2243282  0.792390413
## [755,]   0.0317839210       -0.6603060 -1.2243282  1.087529073
## [756,]   0.0334449834        1.1693826 -1.2243282  1.185908626
## [757,]   0.0351060458        1.1693826 -1.2243282  0.152923319
## [758,]   0.0367671082       -0.6603060  0.8162188  0.448061978
## [759,]   0.0384281707       -0.6603060  0.8162188  0.005353989
## [760,]   0.0400892331       -0.6603060  0.8162188 -1.470339306
## [761,]   0.0417502955        0.2545383 -1.2243282 -1.371959753
## [762,]   0.0450724203       -1.5751502  0.8162188  0.743200637
## [763,]   0.0467334828       -1.5751502  0.8162188 -0.437353999
## [764,]   0.0500556076        0.2545383 -1.2243282  1.038339296
## [765,]   0.0517166700        1.1693826  0.8162188  0.398872201
## [766,]   0.0583609197        0.2545383  0.8162188 -1.076821094
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##   [767,]   0.0600219821          -0.6603060  0.8162188 -0.191405117
##   [768,]   0.0616830446           1.1693826 -1.2243282 -1.519529083
##   [769,]   0.0683272943           0.2545383  0.8162188  0.398872201
##   [770,]   0.0716494191          -1.5751502 -1.2243282  0.005353989
##   [771,]   0.0733104815           1.1693826  0.8162188 -1.273580200
##   [772,]   0.0749715439           0.2545383 -1.2243282 -1.224390424
##   [773,]   0.0766326064          -1.5751502 -1.2243282 -0.142215340
##   [774,]   0.0799547312           1.1693826 -1.2243282 -0.732492658
##   [775,]   0.0816157936           0.2545383  0.8162188 -1.273580200
##   [776,]   0.0849379185           0.2545383  0.8162188  0.644821084
##   [777,]   0.0865989809           1.1693826 -1.2243282 -0.584923329
##   [778,]   0.0899211057           0.2545383 -1.2243282 -1.470339306
##   [779,]   0.0915821682           1.1693826 -1.2243282  0.398872201
##   [780,]   0.0932432306          -1.5751502  0.8162188 -1.568718859
##   [781,]   0.0949042930          -0.6603060  0.8162188  0.300492648
##   [782,]   0.0965653554          -1.5751502  0.8162188 -0.338974446
##   [783,]   0.0982264179           0.2545383  0.8162188  0.939959743
##   [784,]   0.0998874803          -0.6603060 -1.2243282 -1.126010871
##   [785,]   0.1048706676           0.2545383 -1.2243282 -0.043835787
##   [786,]   0.1115149172          -1.5751502  0.8162188 -0.240594893
##   [787,]   0.1148370421          -1.5751502  0.8162188  1.038339296
##   [788,]   0.1181591669           1.1693826  0.8162188 -0.043835787
##   [789,]   0.1198202294           0.2545383 -1.2243282 -0.338974446
##   [790,]   0.1214812918          -0.6603060  0.8162188  1.235098402
##   [791,]   0.1231423542           1.1693826  0.8162188 -1.568718859
##   [792,]   0.1248034166           1.1693826  0.8162188  0.989149520
##   [793,]   0.1264644790          -1.5751502 -1.2243282 -0.584923329
##   [794,]   0.1281255415          -1.5751502  0.8162188 -0.781682435
##   [795,]   0.1297866039          -1.5751502  0.8162188 -1.027631318
##   [796,]   0.1331087287           1.1693826 -1.2243282  1.087529073
##   [797,]   0.1347697912           1.1693826  0.8162188 -1.667098412
##   [798,]   0.1364308536          -1.5751502  0.8162188 -1.421149530
##   [799,]   0.1380919160          -1.5751502  0.8162188 -0.535733552
##   [800,]   0.1397529784           1.1693826  0.8162188 -1.519529083
##   [801,]   0.1430751033          -1.5751502  0.8162188 -1.027631318
##   [802,]   0.1463972281           1.1693826  0.8162188  0.743200637
##   [803,]   0.1480582905           1.1693826 -1.2243282 -1.765477965
##   [804,]   0.1497193530           0.2545383  0.8162188 -1.273580200
##   [805,]   0.1513804154          -1.5751502  0.8162188 -1.519529083
##   [806,]   0.1530414778          -0.6603060 -1.2243282 -0.043835787
##   [807,]   0.1547025402          -0.6603060  0.8162188  1.038339296
##   [808,]   0.1563636026           0.2545383  0.8162188  0.349682425
##   [809,]   0.1580246651           0.2545383 -1.2243282  1.333477955
##   [810,]   0.1596857275           1.1693826 -1.2243282  1.333477955
##   [811,]   0.1646689148          -1.5751502  0.8162188 -0.683302882
##   [812,]   0.1663299772           1.1693826  0.8162188 -1.667098412
##   [813,]   0.1679910396           0.2545383 -1.2243282  0.841580190
##   [814,]   0.1696521020          -1.5751502  0.8162188  0.890769967
##   [815,]   0.1713131644           0.2545383  0.8162188 -1.076821094
##   [816,]   0.1762963517           1.1693826 -1.2243282  0.202113095
##   [817,]   0.1779574141           0.2545383  0.8162188  0.202113095
##   [818,]   0.1796184766          -1.5751502  0.8162188  0.595631307
##   [819,]   0.1829406014           0.2545383  0.8162188  0.054543766
##   [820,]   0.1846016638          -1.5751502  0.8162188  0.054543766
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## [821,]  0.1862627263           1.1693826  0.8162188 -0.584923329
## [822,]  0.1879237887           1.1693826  0.8162188 -0.486543776
## [823,]  0.1912459135           1.1693826  0.8162188  1.431857508
## [824,]  0.1962291008           1.1693826 -1.2243282 -0.240594893
## [825,]  0.2045344129          -0.6603060  0.8162188 -0.486543776
## [826,]  0.2078565377          -0.6603060  0.8162188  0.644821084
## [827,]  0.2111786626           0.2545383  0.8162188 -1.421149530
## [828,]  0.2145007874           0.2545383  0.8162188 -1.322769977
## [829,]  0.2178229123           0.2545383  0.8162188  0.694010860
## [830,]  0.2194839747          -1.5751502 -1.2243282  0.546441531
## [831,]  0.2211450371          -0.6603060  0.8162188 -0.978441541
## [832,]  0.2244671620           0.2545383  0.8162188  0.300492648
## [833,]  0.2261282244           0.2545383 -1.2243282 -0.683302882
## [834,]  0.2277892868           1.1693826  0.8162188 -0.535733552
## [835,]  0.2294503492          -0.6603060 -1.2243282  0.202113095
## [836,]  0.2311114117           0.2545383  0.8162188  1.677806391
## [837,]  0.2327724741           1.1693826 -1.2243282 -1.027631318
## [838,]  0.2344335365          -0.6603060 -1.2243282  1.087529073
## [839,]  0.2360945989           0.2545383  0.8162188 -1.076821094
## [840,]  0.2427388486          -0.6603060  0.8162188 -1.027631318
## [841,]  0.2443999110           1.1693826  0.8162188 -0.388164223
## [842,]  0.2460609735           1.1693826  0.8162188 -0.830872211
## [843,]  0.2493830983           0.2545383 -1.2243282  0.644821084
## [844,]  0.2527052231          -1.5751502  0.8162188  0.792390413
## [845,]  0.2560273480           0.2545383  0.8162188  0.300492648
## [846,]  0.2576884104           0.2545383 -1.2243282  1.284288179
## [847,]  0.2610105353           0.2545383  0.8162188 -1.076821094
## [848,]  0.2643326601           1.1693826  0.8162188  1.530237061
## [849,]  0.2659937225           1.1693826  0.8162188 -0.929251764
## [850,]  0.2709769098          -1.5751502 -1.2243282  0.939959743
## [851,]  0.2742990346           0.2545383 -1.2243282  0.497251754
## [852,]  0.2759600971           1.1693826 -1.2243282  1.284288179
## [853,]  0.2776211595          -0.6603060 -1.2243282 -0.584923329
## [854,]  0.2792822219           0.2545383  0.8162188 -0.584923329
## [855,]  0.2826043468          -1.5751502 -1.2243282  0.841580190
## [856,]  0.2842654092           1.1693826 -1.2243282 -0.486543776
## [857,]  0.2875875340          -1.5751502  0.8162188  1.038339296
## [858,]  0.2909096589           0.2545383  0.8162188  1.481047285
## [859,]  0.2925707213           1.1693826 -1.2243282 -0.781682435
## [860,]  0.2942317837          -0.6603060 -1.2243282  0.152923319
## [861,]  0.2958928461           0.2545383  0.8162188 -0.880061988
## [862,]  0.2975539086           0.2545383 -1.2243282  0.152923319
## [863,]  0.3008760334           1.1693826  0.8162188  0.398872201
## [864,]  0.3025370958          -0.6603060  0.8162188  1.628616614
## [865,]  0.3075202831          -1.5751502  0.8162188  1.431857508
## [866,]  0.3091813455           0.2545383  0.8162188 -0.240594893
## [867,]  0.3108424079          -0.6603060  0.8162188 -0.191405117
## [868,]  0.3158255952           1.1693826 -1.2243282 -1.765477965
## [869,]  0.3174866576           1.1693826  0.8162188  0.595631307
## [870,]  0.3191477200           1.1693826  0.8162188 -0.683302882
## [871,]  0.3208087825           0.2545383  0.8162188  1.382667732
## [872,]  0.3224698449           1.1693826 -1.2243282  1.530237061
## [873,]  0.3241309073          -0.6603060 -1.2243282  0.792390413
## [874,]  0.3257919697           0.2545383  0.8162188 -0.289784670
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## [875,]  0.3307751570         0.2545383  0.8162188 -0.830872211
## [876,]  0.3324362194         1.1693826  0.8162188 -1.667098412
## [877,]  0.3340972818         0.2545383  0.8162188 -1.126010871
## [878,]  0.3374194067         1.1693826  0.8162188 -0.289784670
## [879,]  0.3424025940         1.1693826  0.8162188  0.644821084
## [880,]  0.3457247188        -0.6603060  0.8162188 -0.683302882
## [881,]  0.3473857812         0.2545383 -1.2243282  0.546441531
## [882,]  0.3490468436         1.1693826 -1.2243282 -1.371959753
## [883,]  0.3523689685         0.2545383 -1.2243282  0.546441531
## [884,]  0.3540300309        -1.5751502  0.8162188 -0.289784670
## [885,]  0.3556910933        -0.6603060 -1.2243282  0.890769967
## [886,]  0.3573521558         0.2545383  0.8162188 -0.437353999
## [887,]  0.3590132182         1.1693826  0.8162188 -0.142215340
## [888,]  0.3606742806        -1.5751502 -1.2243282 -0.289784670
## [889,]  0.3623353430         0.2545383 -1.2243282  0.595631307
## [890,]  0.3639964054        -1.5751502  0.8162188 -1.175200647
## [891,]  0.3656574679         1.1693826 -1.2243282 -0.634113105
## [892,]  0.3673185303        -1.5751502 -1.2243282  0.300492648
## [893,]  0.3706406551        -1.5751502 -1.2243282  1.481047285
## [894,]  0.3723017176        -1.5751502 -1.2243282  1.530237061
## [895,]  0.3739627800         1.1693826  0.8162188  0.939959743
## [896,]  0.3756238424         0.2545383  0.8162188  0.694010860
## [897,]  0.3772849048         0.2545383 -1.2243282  1.481047285
## [898,]  0.3806070297         0.2545383 -1.2243282 -0.880061988
## [899,]  0.3822680921         0.2545383  0.8162188  1.481047285
## [900,]  0.3839291545        -1.5751502  0.8162188  0.939959743
## [901,]  0.3855902169         0.2545383  0.8162188 -0.978441541
## [902,]  0.3872512794         1.1693826  0.8162188  0.497251754
## [903,]  0.3889123418        -1.5751502  0.8162188  0.497251754
## [904,]  0.3905734042         0.2545383  0.8162188  0.792390413
## [905,]  0.3955565915         1.1693826  0.8162188  0.497251754
## [906,]  0.3972176539         1.1693826 -1.2243282  1.038339296
## [907,]  0.3988787163         0.2545383 -1.2243282  1.136718849
## [908,]  0.4022008412        -0.6603060  0.8162188  1.087529073
## [909,]  0.4038619036         1.1693826  0.8162188  0.792390413
## [910,]  0.4055229660        -0.6603060 -1.2243282 -0.437353999
## [911,]  0.4071840284         1.1693826  0.8162188 -0.929251764
## [912,]  0.4121672157         0.2545383  0.8162188  0.349682425
## [913,]  0.4154893405         0.2545383  0.8162188 -0.634113105
## [914,]  0.4188114654        -1.5751502 -1.2243282  1.382667732
## [915,]  0.4204725278         1.1693826  0.8162188 -1.421149530
## [916,]  0.4221335902        -1.5751502 -1.2243282 -1.027631318
## [917,]  0.4237946527         1.1693826 -1.2243282 -1.617908636
## [918,]  0.4254557151         0.2545383 -1.2243282  0.989149520
## [919,]  0.4271167775         1.1693826  0.8162188  0.841580190
## [920,]  0.4287778399         1.1693826  0.8162188  0.054543766
## [921,]  0.4320999648         0.2545383 -1.2243282 -0.978441541
## [922,]  0.4337610272         1.1693826  0.8162188 -1.076821094
## [923,]  0.4370831520         0.2545383  0.8162188  1.284288179
## [924,]  0.4387442145         0.2545383  0.8162188 -0.486543776
## [925,]  0.4420663393         0.2545383  0.8162188  0.005353989
## [926,]  0.4437274017        -0.6603060 -1.2243282  0.595631307
## [927,]  0.4453884641         1.1693826 -1.2243282 -0.486543776
## [928,]  0.4470495266         0.2545383 -1.2243282 -0.634113105
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## [929,]   0.4487105890          -1.5751502 -1.2243282  0.349682425
## [930,]   0.4503716514           1.1693826  0.8162188 -0.683302882
## [931,]   0.4520327138          -0.6603060 -1.2243282 -1.273580200
## [932,]   0.4536937763           0.2545383 -1.2243282  0.300492648
## [933,]   0.4553548387          -0.6603060 -1.2243282 -1.322769977
## [934,]   0.4586769635           1.1693826  0.8162188  0.890769967
## [935,]   0.4619990884           1.1693826 -1.2243282 -1.273580200
## [936,]   0.4636601508           0.2545383  0.8162188 -0.486543776
## [937,]   0.4669822756          -0.6603060 -1.2243282  0.841580190
## [938,]   0.4686433381           0.2545383 -1.2243282  1.382667732
## [939,]   0.4703044005          -1.5751502  0.8162188  1.087529073
## [940,]   0.4719654629           1.1693826  0.8162188  0.644821084
## [941,]   0.4736265253           0.2545383  0.8162188  1.333477955
## [942,]   0.4752875878          -1.5751502 -1.2243282 -0.880061988
## [943,]   0.4769486502           1.1693826 -1.2243282 -0.142215340
## [944,]   0.4802707750           1.1693826 -1.2243282 -1.076821094
## [945,]   0.4819318374           0.2545383 -1.2243282 -0.535733552
## [946,]   0.4852539623           1.1693826 -1.2243282 -1.126010871
## [947,]   0.4869150247           1.1693826  0.8162188 -0.437353999
## [948,]   0.4885760871          -0.6603060  0.8162188 -0.093025564
## [949,]   0.4918982120          -0.6603060 -1.2243282  1.431857508
## [950,]   0.4935592744          -1.5751502  0.8162188 -1.667098412
## [951,]   0.4968813992           1.1693826 -1.2243282 -0.437353999
## [952,]   0.5051867114           0.2545383  0.8162188 -1.273580200
## [953,]   0.5085088362           1.1693826 -1.2243282 -0.584923329
## [954,]   0.5118309610          -1.5751502  0.8162188  1.136718849
## [955,]   0.5134920235           0.2545383  0.8162188 -1.421149530
## [956,]   0.5168141483           1.1693826 -1.2243282 -0.388164223
## [957,]   0.5201362732           1.1693826  0.8162188  1.628616614
## [958,]   0.5234583980           0.2545383  0.8162188  0.398872201
## [959,]   0.5301026477           1.1693826  0.8162188  0.989149520
## [960,]   0.5334247725           0.2545383  0.8162188  1.579426838
## [961,]   0.5384079598           0.2545383 -1.2243282  0.005353989
## [962,]   0.5400690222           0.2545383  0.8162188  1.038339296
## [963,]   0.5433911471           0.2545383  0.8162188  0.890769967
## [964,]   0.5483743343          -0.6603060 -1.2243282 -1.716288189
## [965,]   0.5500353968           0.2545383 -1.2243282  0.005353989
## [966,]   0.5533575216           1.1693826  0.8162188  0.054543766
## [967,]   0.5566796465           0.2545383 -1.2243282 -0.634113105
## [968,]   0.5583407089          -0.6603060  0.8162188  1.087529073
## [969,]   0.5600017713          -1.5751502 -1.2243282  0.841580190
## [970,]   0.5616628337           1.1693826  0.8162188 -0.584923329
## [971,]   0.5633238961           0.2545383 -1.2243282  1.579426838
## [972,]   0.5683070834           1.1693826 -1.2243282  0.792390413
## [973,]   0.5699681458           1.1693826 -1.2243282  1.530237061
## [974,]   0.5716292083           1.1693826 -1.2243282 -0.289784670
## [975,]   0.5749513331           1.1693826  0.8162188 -1.126010871
## [976,]   0.5766123955          -1.5751502  0.8162188  0.939959743
## [977,]   0.5782734579           1.1693826  0.8162188  0.103733542
## [978,]   0.5799345204          -1.5751502 -1.2243282  1.284288179
## [979,]   0.5815955828          -0.6603060 -1.2243282  1.136718849
## [980,]   0.5849177076          -0.6603060  0.8162188  0.989149520
## [981,]   0.5882398325           0.2545383 -1.2243282  1.185908626
## [982,]   0.5899008949           1.1693826 -1.2243282  0.054543766
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## [983,]  0.5932230197          1.1693826  0.8162188 -0.437353999
## [984,]  0.5948840822          0.2545383 -1.2243282  1.579426838
## [985,]  0.6015283319          0.2545383  0.8162188 -0.880061988
## [986,]  0.6048504567          1.1693826  0.8162188  1.579426838
## [987,]  0.6065115191         -1.5751502  0.8162188 -1.076821094
## [988,]  0.6081725815         -0.6603060  0.8162188 -0.683302882
## [989,]  0.6098336440          1.1693826 -1.2243282  0.448061978
## [990,]  0.6131557688          0.2545383  0.8162188 -0.584923329
## [991,]  0.6148168312         -0.6603060  0.8162188 -0.240594893
## [992,]  0.6164778937          0.2545383  0.8162188 -1.470339306
## [993,]  0.6181389561          0.2545383  0.8162188  0.251302872
## [994,]  0.6214610809         -1.5751502  0.8162188  1.333477955
## [995,]  0.6247832058          1.1693826 -1.2243282 -0.338974446
## [996,]  0.6264442682         -1.5751502 -1.2243282  0.349682425
## [997,]  0.6281053306          1.1693826 -1.2243282  1.579426838
## [998,]  0.6314274555          1.1693826 -1.2243282 -0.732492658
## [999,]  0.6347495803         -1.5751502  0.8162188 -1.470339306
## [1000,] 0.6364106427          0.2545383 -1.2243282 -1.716288189
## [1001,] 0.6380717051          0.2545383 -1.2243282 -0.584923329
## [1002,] 0.6413938300         -1.5751502 -1.2243282  1.382667732
## [1003,] 0.6430548924          0.2545383  0.8162188 -0.289784670
## [1004,] 0.6480380797         -1.5751502  0.8162188  0.743200637
## [1005,] 0.6513602045          0.2545383  0.8162188  1.677806391
## [1006,] 0.6546823294         -0.6603060  0.8162188 -0.732492658
## [1007,] 0.6563433918         -1.5751502  0.8162188  1.530237061
## [1008,] 0.6580044542          0.2545383 -1.2243282  0.890769967
## [1009,] 0.6596655166          1.1693826 -1.2243282 -0.584923329
## [1010,] 0.6613265791          1.1693826 -1.2243282  0.497251754
## [1011,] 0.6629876415         -0.6603060  0.8162188  0.743200637
## [1012,] 0.6646487039         -1.5751502 -1.2243282  1.628616614
## [1013,] 0.6679708288         -0.6603060 -1.2243282 -0.781682435
## [1014,] 0.6696318912          1.1693826 -1.2243282  0.349682425
## [1015,] 0.6729540160         -1.5751502 -1.2243282  1.333477955
## [1016,] 0.6746150784          1.1693826  0.8162188  1.235098402
## [1017,] 0.6779372033         -1.5751502 -1.2243282 -1.568718859
## [1018,] 0.6795982657         -0.6603060  0.8162188  1.235098402
## [1019,] 0.6812593281         -1.5751502  0.8162188 -1.421149530
## [1020,] 0.6829203906          0.2545383 -1.2243282  1.579426838
## [1021,] 0.6862425154         -1.5751502  0.8162188  0.398872201
## [1022,] 0.6879035778         -1.5751502  0.8162188  0.103733542
## [1023,] 0.6895646402          0.2545383  0.8162188  0.890769967
## [1024,] 0.6912257027         -1.5751502 -1.2243282  1.185908626
## [1025,] 0.6945478275         -1.5751502 -1.2243282  0.792390413
## [1026,] 0.6978699524          1.1693826 -1.2243282 -1.175200647
## [1027,] 0.6995310148          1.1693826  0.8162188  1.530237061
## [1028,] 0.7011920772          1.1693826 -1.2243282  0.989149520
## [1029,] 0.7028531396         -0.6603060  0.8162188  1.185908626
## [1030,] 0.7045142020          0.2545383  0.8162188  0.743200637
## [1031,] 0.7111584517         -1.5751502  0.8162188 -1.716288189
## [1032,] 0.7178027014         -1.5751502  0.8162188 -0.683302882
## [1033,] 0.7194637638         -1.5751502 -1.2243282 -0.584923329
## [1034,] 0.7211248263          0.2545383 -1.2243282  1.677806391
## [1035,] 0.7227858887         -0.6603060  0.8162188  1.431857508
## [1036,] 0.7244469511          1.1693826 -1.2243282  1.481047285
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## [1037,]   0.7294301384        -0.6603060   0.8162188   1.382667732
## [1038,]   0.7310912008        -0.6603060   0.8162188  -0.535733552
## [1039,]   0.7327522632         0.2545383   0.8162188   1.481047285
## [1040,]   0.7344133256        -1.5751502  -1.2243282  -0.683302882
## [1041,]   0.7360743881         1.1693826   0.8162188  -0.535733552
## [1042,]   0.7377354505         1.1693826   0.8162188   0.890769967
## [1043,]   0.7410575753         0.2545383   0.8162188   1.185908626
## [1044,]   0.7427186378         1.1693826   0.8162188  -1.322769977
## [1045,]   0.7443797002        -1.5751502   0.8162188   1.481047285
## [1046,]   0.7460407626         0.2545383   0.8162188   0.103733542
## [1047,]   0.7477018250         1.1693826   0.8162188  -0.830872211
## [1048,]   0.7510239499         1.1693826   0.8162188  -0.584923329
## [1049,]   0.7526850123         1.1693826   0.8162188   0.743200637
## [1050,]   0.7543460747         1.1693826   0.8162188   1.481047285
## [1051,]   0.7560071371        -1.5751502  -1.2243282   0.398872201
## [1052,]   0.7576681996        -1.5751502  -1.2243282   0.644821084
## [1053,]   0.7593292620         0.2545383   0.8162188  -0.093025564
## [1054,]   0.7609903244        -0.6603060   0.8162188   1.333477955
## [1055,]   0.7626513868         0.2545383   0.8162188  -1.519529083
## [1056,]   0.7643124493        -0.6603060   0.8162188   0.251302872
## [1057,]   0.7659735117        -1.5751502   0.8162188   1.284288179
## [1058,]   0.7676345741        -1.5751502  -1.2243282  -0.732492658
## [1059,]   0.7709566989        -1.5751502  -1.2243282  -1.273580200
## [1060,]   0.7759398862         1.1693826   0.8162188   0.497251754
## [1061,]   0.7792620111        -0.6603060   0.8162188   1.136718849
## [1062,]   0.7809230735         1.1693826  -1.2243282   0.595631307
## [1063,]   0.7825841359        -0.6603060   0.8162188   0.989149520
## [1064,]   0.7842451983         0.2545383   0.8162188   0.546441531
## [1065,]   0.7875673232         0.2545383   0.8162188  -0.978441541
## [1066,]   0.7908894480         1.1693826   0.8162188  -1.765477965
## [1067,]   0.7925505104        -1.5751502  -1.2243282   0.792390413
## [1068,]   0.7942115729         0.2545383  -1.2243282   0.595631307
## [1069,]   0.7958726353         0.2545383   0.8162188  -1.371959753
## [1070,]   0.7991947601        -1.5751502   0.8162188   0.300492648
## [1071,]   0.8008558225         0.2545383   0.8162188  -0.535733552
## [1072,]   0.8041779474         0.2545383  -1.2243282  -1.126010871
## [1073,]   0.8108221971         1.1693826  -1.2243282   1.530237061
## [1074,]   0.8124832595         0.2545383   0.8162188   1.481047285
## [1075,]   0.8141443219         1.1693826   0.8162188   0.152923319
## [1076,]   0.8158053843         0.2545383   0.8162188  -0.093025564
## [1077,]   0.8224496340        -0.6603060  -1.2243282   1.038339296
## [1078,]   0.8257717589        -1.5751502   0.8162188   1.677806391
## [1079,]   0.8274328213         1.1693826   0.8162188  -1.667098412
## [1080,]   0.8307549462        -0.6603060  -1.2243282  -1.667098412
## [1081,]   0.8340770710         0.2545383  -1.2243282  -0.732492658
## [1082,]   0.8373991958         1.1693826  -1.2243282   1.235098402
## [1083,]   0.8440434455        -1.5751502   0.8162188   1.530237061
## [1084,]   0.8457045080         1.1693826   0.8162188   0.989149520
## [1085,]   0.8473655704         1.1693826   0.8162188  -0.093025564
## [1086,]   0.8506876952         1.1693826  -1.2243282  -1.617908636
## [1087,]   0.8540098201         0.2545383   0.8162188   1.087529073
## [1088,]   0.8573319449        -0.6603060   0.8162188  -0.535733552
## [1089,]   0.8589930073         0.2545383   0.8162188   0.103733542
## [1090,]   0.8606540698        -1.5751502   0.8162188  -0.929251764
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## [1091,]   0.8623151322        0.2545383 -1.2243282 -1.322769977
## [1092,]   0.8639761946        1.1693826  0.8162188 -1.076821094
## [1093,]   0.8656372570        1.1693826  0.8162188  1.530237061
## [1094,]   0.8672983194        1.1693826  0.8162188 -1.273580200
## [1095,]   0.8689593819       -1.5751502  0.8162188 -0.929251764
## [1096,]   0.8706204443       -0.6603060  0.8162188  0.644821084
## [1097,]   0.8722815067        0.2545383  0.8162188 -1.371959753
## [1098,]   0.8739425691        0.2545383  0.8162188 -0.437353999
## [1099,]   0.8756036316        1.1693826  0.8162188  0.300492648
## [1100,]   0.8772646940       -1.5751502  0.8162188  0.005353989
## [1101,]   0.8789257564       -0.6603060 -1.2243282  1.579426838
## [1102,]   0.8805868188        1.1693826 -1.2243282  0.054543766
## [1103,]   0.8822478812        0.2545383  0.8162188  0.202113095
## [1104,]   0.8839089437        0.2545383 -1.2243282  1.481047285
## [1105,]   0.8855700061        0.2545383  0.8162188  1.235098402
## [1106,]   0.8888921309       -1.5751502  0.8162188 -0.978441541
## [1107,]   0.8922142558       -0.6603060  0.8162188 -0.093025564
## [1108,]   0.8938753182        0.2545383  0.8162188  0.251302872
## [1109,]   0.8955363806        1.1693826  0.8162188  0.103733542
## [1110,]   0.9021806303        0.2545383  0.8162188 -1.617908636
## [1111,]   0.9038416927       -1.5751502 -1.2243282  0.152923319
## [1112,]   0.9088248800        0.2545383 -1.2243282  0.595631307
## [1113,]   0.9104859424        0.2545383  0.8162188  0.743200637
## [1114,]   0.9121470048        1.1693826  0.8162188 -0.191405117
## [1115,]   0.9154691297        0.2545383 -1.2243282 -0.043835787
## [1116,]   0.9171301921       -1.5751502  0.8162188 -1.519529083
## [1117,]   0.9187912545        0.2545383  0.8162188 -0.289784670
## [1118,]   0.9221133794       -0.6603060  0.8162188 -1.027631318
## [1119,]   0.9237744418       -1.5751502 -1.2243282  1.136718849
## [1120,]   0.9254355042        0.2545383  0.8162188  0.694010860
## [1121,]   0.9270965667       -0.6603060 -1.2243282  1.185908626
## [1122,]   0.9304186915       -0.6603060 -1.2243282  0.349682425
## [1123,]   0.9320797539       -0.6603060  0.8162188  1.038339296
## [1124,]   0.9337408163       -1.5751502 -1.2243282 -0.732492658
## [1125,]   0.9354018788        1.1693826  0.8162188 -1.371959753
## [1126,]   0.9387240036       -1.5751502  0.8162188  1.038339296
## [1127,]   0.9403850660        0.2545383  0.8162188 -0.338974446
## [1128,]   0.9420461285        1.1693826  0.8162188 -1.027631318
## [1129,]   0.9453682533       -1.5751502  0.8162188  0.694010860
## [1130,]   0.9470293157        1.1693826  0.8162188  1.333477955
## [1131,]   0.9486903781       -0.6603060  0.8162188 -0.978441541
## [1132,]   0.9503514406        1.1693826  0.8162188  1.284288179
## [1133,]   0.9520125030        1.1693826 -1.2243282  0.890769967
## [1134,]   0.9536735654        1.1693826  0.8162188  1.038339296
## [1135,]   0.9569956903        0.2545383  0.8162188 -0.142215340
## [1136,]   0.9586567527        1.1693826  0.8162188 -0.486543776
## [1137,]   0.9619788775        0.2545383  0.8162188 -0.732492658
## [1138,]   0.9636399399       -0.6603060 -1.2243282  0.939959743
## [1139,]   0.9653010024       -0.6603060  0.8162188 -1.224390424
## [1140,]   0.9669620648       -0.6603060 -1.2243282 -1.519529083
## [1141,]   0.9686231272       -0.6603060 -1.2243282 -1.716288189
## [1142,]   0.9702841896       -0.6603060  0.8162188 -0.880061988
## [1143,]   0.9736063145        0.2545383 -1.2243282 -0.781682435
## [1144,]   0.9752673769       -1.5751502  0.8162188 -0.683302882
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## [1145,]  0.9769284393        1.1693826  0.8162188 -0.584923329
## [1146,]  0.9785895017        0.2545383 -1.2243282  0.497251754
## [1147,]  0.9802505642        0.2545383  0.8162188 -1.175200647
## [1148,]  0.9835726890        0.2545383 -1.2243282  0.890769967
## [1149,]  0.9852337514       -0.6603060  0.8162188  0.497251754
## [1150,]  0.9868948139        1.1693826  0.8162188  0.054543766
## [1151,]  0.9902169387       -0.6603060  0.8162188 -0.880061988
## [1152,]  0.9918780011       -0.6603060 -1.2243282 -1.322769977
## [1153,]  0.9935390635        0.2545383  0.8162188  1.530237061
## [1154,]  0.9952001260       -0.6603060 -1.2243282  0.202113095
## [1155,]  0.9968611884        1.1693826 -1.2243282  1.579426838
## [1156,]  1.0001833132        0.2545383  0.8162188  0.497251754
## [1157,]  1.0018443757       -1.5751502 -1.2243282  0.694010860
## [1158,]  1.0051665005        0.2545383 -1.2243282 -0.683302882
## [1159,]  1.0068275629        0.2545383  0.8162188  0.939959743
## [1160,]  1.0101496878       -1.5751502 -1.2243282  0.743200637
## [1161,]  1.0134718126        1.1693826 -1.2243282 -0.338974446
## [1162,]  1.0184549999        1.1693826 -1.2243282 -0.584923329
## [1163,]  1.0201160623        1.1693826  0.8162188 -0.535733552
## [1164,]  1.0217771247       -0.6603060 -1.2243282  0.251302872
## [1165,]  1.0234381872        0.2545383 -1.2243282  0.890769967
## [1166,]  1.0250992496       -1.5751502  0.8162188 -1.421149530
## [1167,]  1.0284213744        0.2545383  0.8162188  1.136718849
## [1168,]  1.0300824368       -1.5751502  0.8162188 -0.338974446
## [1169,]  1.0317434993       -1.5751502 -1.2243282 -1.667098412
## [1170,]  1.0334045617       -0.6603060 -1.2243282  0.989149520
## [1171,]  1.0350656241        1.1693826  0.8162188  1.038339296
## [1172,]  1.0367266865       -1.5751502  0.8162188  0.349682425
## [1173,]  1.0383877490        0.2545383  0.8162188 -1.175200647
## [1174,]  1.0400488114       -0.6603060 -1.2243282 -1.175200647
## [1175,]  1.0433709362        1.1693826  0.8162188  0.546441531
## [1176,]  1.0450319986        1.1693826  0.8162188  0.005353989
## [1177,]  1.0466930611       -1.5751502 -1.2243282  0.300492648
## [1178,]  1.0483541235        1.1693826 -1.2243282 -0.781682435
## [1179,]  1.0500151859        0.2545383 -1.2243282 -1.716288189
## [1180,]  1.0516762483        1.1693826 -1.2243282  0.005353989
## [1181,]  1.0533373108       -1.5751502  0.8162188  0.546441531
## [1182,]  1.0566594356        0.2545383 -1.2243282 -1.224390424
## [1183,]  1.0583204980        1.1693826 -1.2243282 -1.617908636
## [1184,]  1.0616426229        1.1693826  0.8162188  0.644821084
## [1185,]  1.0633036853       -0.6603060 -1.2243282  1.235098402
## [1186,]  1.0649647477        0.2545383  0.8162188 -0.043835787
## [1187,]  1.0666258101        1.1693826  0.8162188 -1.470339306
## [1188,]  1.0682868726        1.1693826  0.8162188  1.185908626
## [1189,]  1.0699479350       -1.5751502  0.8162188 -1.126010871
## [1190,]  1.0716089974        1.1693826  0.8162188  1.333477955
## [1191,]  1.0732700598        1.1693826  0.8162188 -1.027631318
## [1192,]  1.0765921847       -1.5751502 -1.2243282  0.054543766
## [1193,]  1.0782532471        1.1693826 -1.2243282  0.398872201
## [1194,]  1.0799143095        1.1693826 -1.2243282 -1.175200647
## [1195,]  1.0815753719       -0.6603060 -1.2243282 -0.929251764
## [1196,]  1.0832364344        0.2545383  0.8162188 -1.470339306
## [1197,]  1.0848974968        1.1693826  0.8162188  0.694010860
## [1198,]  1.0882196216        1.1693826  0.8162188 -0.584923329
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## [1199,]   1.0898806840           0.2545383 -1.2243282 -1.470339306
## [1200,]   1.0915417465          -1.5751502  0.8162188  0.694010860
## [1201,]   1.0932028089           0.2545383 -1.2243282 -1.076821094
## [1202,]   1.0948638713           1.1693826  0.8162188  1.333477955
## [1203,]   1.0998470586           1.1693826 -1.2243282  1.038339296
## [1204,]   1.1031691834          -0.6603060  0.8162188 -0.880061988
## [1205,]   1.1064913083           1.1693826 -1.2243282  1.431857508
## [1206,]   1.1081523707           1.1693826  0.8162188  1.431857508
## [1207,]   1.1098134331           1.1693826  0.8162188  0.497251754
## [1208,]   1.1114744955          -1.5751502  0.8162188  1.382667732
## [1209,]   1.1147966204          -0.6603060  0.8162188 -0.437353999
## [1210,]   1.1164576828           0.2545383  0.8162188  1.284288179
## [1211,]   1.1181187452          -0.6603060  0.8162188  0.644821084
## [1212,]   1.1214408701           0.2545383  0.8162188 -1.716288189
## [1213,]   1.1231019325          -0.6603060 -1.2243282 -1.519529083
## [1214,]   1.1247629949           0.2545383  0.8162188  1.628616614
## [1215,]   1.1264240573           0.2545383 -1.2243282  1.481047285
## [1216,]   1.1280851198          -1.5751502  0.8162188  0.644821084
## [1217,]   1.1314072446           1.1693826  0.8162188  0.349682425
## [1218,]   1.1330683070           0.2545383  0.8162188 -0.191405117
## [1219,]   1.1347293695           1.1693826  0.8162188 -1.519529083
## [1220,]   1.1363904319           1.1693826 -1.2243282 -1.126010871
## [1221,]   1.1380514943           0.2545383 -1.2243282 -0.732492658
## [1222,]   1.1413736191           0.2545383  0.8162188  0.398872201
## [1223,]   1.1446957440           1.1693826  0.8162188 -0.388164223
## [1224,]   1.1480178688           0.2545383  0.8162188  0.792390413
## [1225,]   1.1513399937           1.1693826  0.8162188 -0.191405117
## [1226,]   1.1530010561           1.1693826 -1.2243282 -0.880061988
## [1227,]   1.1546621185          -1.5751502  0.8162188 -0.486543776
## [1228,]   1.1563231809          -0.6603060  0.8162188  0.152923319
## [1229,]   1.1579842434           0.2545383  0.8162188 -0.289784670
## [1230,]   1.1613063682          -0.6603060 -1.2243282  1.284288179
## [1231,]   1.1629674306          -0.6603060  0.8162188  1.235098402
## [1232,]   1.1662895555           0.2545383  0.8162188 -1.568718859
## [1233,]   1.1679506179           1.1693826  0.8162188 -0.830872211
## [1234,]   1.1696116803          -0.6603060  0.8162188 -1.617908636
## [1235,]   1.1729338052           0.2545383  0.8162188  1.038339296
## [1236,]   1.1745948676           0.2545383  0.8162188  0.398872201
## [1237,]   1.1762559300          -0.6603060  0.8162188  1.481047285
## [1238,]   1.1779169924          -1.5751502  0.8162188 -1.568718859
## [1239,]   1.1795780549           0.2545383 -1.2243282 -0.732492658
## [1240,]   1.1812391173           1.1693826 -1.2243282 -1.765477965
## [1241,]   1.1829001797           1.1693826  0.8162188  0.546441531
## [1242,]   1.1862223045           1.1693826  0.8162188  0.694010860
## [1243,]   1.1878833670          -0.6603060  0.8162188  1.087529073
## [1244,]   1.1945276167           0.2545383 -1.2243282 -0.486543776
## [1245,]   1.1961886791           1.1693826 -1.2243282  0.595631307
## [1246,]   1.1978497415          -1.5751502  0.8162188 -0.338974446
## [1247,]   1.1995108039           0.2545383 -1.2243282  0.005353989
## [1248,]   1.2028329288          -1.5751502  0.8162188 -0.732492658
## [1249,]   1.2061550536           0.2545383 -1.2243282  0.054543766
## [1250,]   1.2078161160          -0.6603060 -1.2243282 -0.683302882
## [1251,]   1.2094771785           1.1693826  0.8162188  0.202113095
## [1252,]   1.2111382409           0.2545383  0.8162188  1.382667732
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## [1253,]   1.2127993033           1.1693826  0.8162188   1.530237061
## [1254,]   1.2144603657           1.1693826 -1.2243282  -0.191405117
## [1255,]   1.2161214282           1.1693826 -1.2243282   0.694010860
## [1256,]   1.2177824906          -1.5751502 -1.2243282   0.398872201
## [1257,]   1.2211046154           0.2545383 -1.2243282   0.448061978
## [1258,]   1.2227656778          -1.5751502  0.8162188   0.202113095
## [1259,]   1.2244267403           1.1693826 -1.2243282   1.235098402
## [1260,]   1.2260878027           0.2545383  0.8162188  -0.388164223
## [1261,]   1.2277488651          -0.6603060  0.8162188  -0.043835787
## [1262,]   1.2310709900          -0.6603060  0.8162188  -0.289784670
## [1263,]   1.2327320524           0.2545383  0.8162188  -1.371959753
## [1264,]   1.2343931148          -0.6603060  0.8162188  -0.437353999
## [1265,]   1.2377152396           0.2545383  0.8162188  -0.289784670
## [1266,]   1.2393763021           1.1693826  0.8162188   1.185908626
## [1267,]   1.2410373645           0.2545383  0.8162188   1.382667732
## [1268,]   1.2443594893           1.1693826  0.8162188   1.038339296
## [1269,]   1.2460205518          -1.5751502 -1.2243282  -0.289784670
## [1270,]   1.2510037390          -0.6603060  0.8162188   1.530237061
## [1271,]   1.2526648014           1.1693826 -1.2243282  -1.667098412
## [1272,]   1.2543258639          -0.6603060  0.8162188  -1.716288189
## [1273,]   1.2576479887           1.1693826 -1.2243282  -1.273580200
## [1274,]   1.2593090511           0.2545383 -1.2243282   0.644821084
## [1275,]   1.2609701136          -1.5751502 -1.2243282   1.235098402
## [1276,]   1.2642922384          -1.5751502 -1.2243282  -0.634113105
## [1277,]   1.2659533008          -0.6603060  0.8162188  -0.978441541
## [1278,]   1.2692754257           0.2545383  0.8162188  -0.978441541
## [1279,]   1.2709364881           1.1693826  0.8162188   1.185908626
## [1280,]   1.2742586129           0.2545383  0.8162188   1.628616614
## [1281,]   1.2775807378           0.2545383  0.8162188   1.136718849
## [1282,]   1.2825639250           0.2545383  0.8162188   0.890769967
## [1283,]   1.2842249875           1.1693826  0.8162188   1.185908626
## [1284,]   1.2858860499           0.2545383  0.8162188   0.792390413
## [1285,]   1.2875471123           0.2545383  0.8162188  -0.043835787
## [1286,]   1.2892081747          -0.6603060  0.8162188   1.579426838
## [1287,]   1.2908692372           0.2545383 -1.2243282   1.628616614
## [1288,]   1.2925302996          -0.6603060  0.8162188   1.431857508
## [1289,]   1.2941913620          -0.6603060  0.8162188   1.185908626
## [1290,]   1.2958524244          -1.5751502  0.8162188   1.677806391
## [1291,]   1.2991745493           1.1693826  0.8162188   1.333477955
## [1292,]   1.3024966741           1.1693826  0.8162188  -0.388164223
## [1293,]   1.3074798614           0.2545383  0.8162188   0.841580190
## [1294,]   1.3091409238          -1.5751502  0.8162188  -0.683302882
## [1295,]   1.3108019862          -0.6603060  0.8162188   0.939959743
## [1296,]   1.3124630487           0.2545383 -1.2243282   0.743200637
## [1297,]   1.3141241111          -1.5751502 -1.2243282  -0.093025564
## [1298,]   1.3174462359           1.1693826 -1.2243282   0.152923319
## [1299,]   1.3224294232           1.1693826 -1.2243282   0.005353989
## [1300,]   1.3240904856           0.2545383 -1.2243282  -0.683302882
## [1301,]   1.3257515480          -0.6603060  0.8162188   1.284288179
## [1302,]   1.3274126105          -0.6603060  0.8162188  -0.683302882
## [1303,]   1.3307347353          -0.6603060  0.8162188   1.235098402
## [1304,]   1.3323957977           0.2545383 -1.2243282   1.284288179
## [1305,]   1.3357179226          -0.6603060 -1.2243282  -0.929251764
## [1306,]   1.3373789850           1.1693826 -1.2243282   0.103733542
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## [1307,]   1.3423621723            -1.5751502 -1.2243282  0.103733542
## [1308,]   1.3440232347             0.2545383 -1.2243282  0.054543766
## [1309,]   1.3456842971            -0.6603060 -1.2243282  0.546441531
## [1310,]   1.3473453595             0.2545383  0.8162188 -0.978441541
## [1311,]   1.3490064219            -1.5751502  0.8162188  1.038339296
## [1312,]   1.3523285468            -0.6603060 -1.2243282 -1.617908636
## [1313,]   1.3573117341             1.1693826  0.8162188  1.136718849
## [1314,]   1.3606338589            -1.5751502  0.8162188 -0.486543776
## [1315,]   1.3622949213             0.2545383 -1.2243282  0.054543766
## [1316,]   1.3656170462             1.1693826 -1.2243282  0.349682425
## [1317,]   1.3689391710            -1.5751502  0.8162188  1.284288179
## [1318,]   1.3706002334             1.1693826 -1.2243282 -0.634113105
## [1319,]   1.3739223583             1.1693826  0.8162188 -1.273580200
## [1320,]   1.3755834207             1.1693826  0.8162188  0.644821084
## [1321,]   1.3772444831             0.2545383  0.8162188 -1.371959753
## [1322,]   1.3805666080            -0.6603060 -1.2243282 -0.093025564
## [1323,]   1.3822276704             1.1693826  0.8162188  0.792390413
## [1324,]   1.3838887328             0.2545383  0.8162188 -1.126010871
## [1325,]   1.3855497952             1.1693826  0.8162188  1.333477955
## [1326,]   1.3872108577             1.1693826  0.8162188  0.743200637
## [1327,]   1.3905329825             0.2545383  0.8162188  0.792390413
## [1328,]   1.3921940449            -1.5751502 -1.2243282 -1.027631318
## [1329,]   1.3938551074            -0.6603060 -1.2243282 -1.470339306
## [1330,]   1.3955161698             1.1693826  0.8162188  1.038339296
## [1331,]   1.3971772322            -1.5751502 -1.2243282  0.743200637
## [1332,]   1.3988382946             1.1693826  0.8162188  1.235098402
## [1333,]   1.4004993570             1.1693826  0.8162188  0.349682425
## [1334,]   1.4021604195             0.2545383 -1.2243282 -0.093025564
## [1335,]   1.4038214819             1.1693826 -1.2243282  0.546441531
## [1336,]   1.4054825443             1.1693826  0.8162188 -1.224390424
## [1337,]   1.4088046692            -0.6603060  0.8162188  1.579426838
## [1338,]   1.4121267940            -0.6603060 -1.2243282  0.595631307
## [1339,]   1.4137878564            -0.6603060  0.8162188  1.136718849
## [1340,]   1.4171099813             1.1693826  0.8162188  0.448061978
## [1341,]   1.4204321061            -0.6603060 -1.2243282 -0.142215340
## [1342,]   1.4220931685            -0.6603060  0.8162188  1.136718849
## [1343,]   1.4237542310             0.2545383  0.8162188 -0.093025564
## [1344,]   1.4254152934             1.1693826  0.8162188 -0.338974446
## [1345,]   1.4287374182             1.1693826  0.8162188  0.595631307
## [1346,]   1.4303984806             1.1693826 -1.2243282 -1.076821094
## [1347,]   1.4337206055            -0.6603060 -1.2243282  1.333477955
## [1348,]   1.4370427303            -0.6603060  0.8162188  1.382667732
## [1349,]   1.4403648552            -1.5751502  0.8162188  1.579426838
## [1350,]   1.4420259176            -0.6603060 -1.2243282  1.185908626
## [1351,]   1.4503312297            -1.5751502 -1.2243282  1.136718849
## [1352,]   1.4536533546             1.1693826 -1.2243282 -0.388164223
## [1353,]   1.4586365418            -0.6603060  0.8162188  0.595631307
## [1354,]   1.4619586667             1.1693826  0.8162188  0.939959743
## [1355,]   1.4652807915            -1.5751502  0.8162188  1.530237061
## [1356,]   1.4669418539             0.2545383  0.8162188 -1.617908636
## [1357,]   1.4686029164             0.2545383 -1.2243282 -0.584923329
## [1358,]   1.4719250412             0.2545383  0.8162188  0.841580190
## [1359,]   1.4735861036             0.2545383 -1.2243282  0.989149520
## [1360,]   1.4785692909             1.1693826 -1.2243282  0.448061978
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## [1361,]   1.4802303533           -1.5751502 -1.2243282 -0.191405117
## [1362,]   1.4835524782            0.2545383  0.8162188 -0.240594893
## [1363,]   1.4901967279           -0.6603060  0.8162188 -1.076821094
## [1364,]   1.4935188527           -0.6603060  0.8162188 -1.126010871
## [1365,]   1.4985020400            0.2545383  0.8162188 -1.175200647
## [1366,]   1.5001631024            0.2545383  0.8162188 -1.027631318
## [1367,]   1.5018241648           -1.5751502 -1.2243282 -1.667098412
## [1368,]   1.5051462897           -0.6603060  0.8162188 -1.224390424
## [1369,]   1.5068073521            0.2545383  0.8162188  0.989149520
## [1370,]   1.5084684145            1.1693826 -1.2243282  0.890769967
## [1371,]   1.5101294769            0.2545383  0.8162188 -0.093025564
## [1372,]   1.5117905393            1.1693826 -1.2243282  1.136718849
## [1373,]   1.5134516018           -1.5751502  0.8162188  1.038339296
## [1374,]   1.5151126642            1.1693826 -1.2243282 -0.388164223
## [1375,]   1.5167737266            1.1693826 -1.2243282  0.300492648
## [1376,]   1.5184347890           -1.5751502 -1.2243282 -0.929251764
## [1377,]   1.5200958515           -0.6603060  0.8162188  0.251302872
## [1378,]   1.5217569139           -0.6603060  0.8162188 -1.175200647
## [1379,]   1.5250790387           -0.6603060  0.8162188  0.546441531
## [1380,]   1.5267401011           -1.5751502 -1.2243282 -0.388164223
## [1381,]   1.5284011636           -0.6603060  0.8162188  0.251302872
## [1382,]   1.5317232884            0.2545383  0.8162188 -0.830872211
## [1383,]   1.5333843508            0.2545383  0.8162188 -0.880061988
## [1384,]   1.5350454133           -1.5751502  0.8162188  0.005353989
## [1385,]   1.5367064757           -1.5751502  0.8162188 -1.667098412
## [1386,]   1.5383675381            1.1693826  0.8162188 -1.322769977
## [1387,]   1.5400286005            0.2545383  0.8162188  1.431857508
## [1388,]   1.5433507254           -1.5751502  0.8162188  1.136718849
## [1389,]   1.5450117878            0.2545383 -1.2243282 -1.568718859
## [1390,]   1.5466728502            1.1693826  0.8162188 -0.880061988
## [1391,]   1.5533170999            0.2545383  0.8162188 -1.667098412
## [1392,]   1.5549781623           -1.5751502  0.8162188 -0.338974446
## [1393,]   1.5566392247            0.2545383 -1.2243282 -0.535733552
## [1394,]   1.5616224120            1.1693826  0.8162188 -1.076821094
## [1395,]   1.5632834744            1.1693826  0.8162188 -0.486543776
## [1396,]   1.5649445369           -1.5751502  0.8162188 -0.142215340
## [1397,]   1.5666055993           -1.5751502  0.8162188  0.005353989
## [1398,]   1.5682666617           -1.5751502 -1.2243282  0.054543766
## [1399,]   1.5699277241            1.1693826  0.8162188 -1.470339306
## [1400,]   1.5715887866           -1.5751502  0.8162188 -1.765477965
## [1401,]   1.5732498490            1.1693826  0.8162188  1.087529073
## [1402,]   1.5749109114            0.2545383  0.8162188  0.251302872
## [1403,]   1.5765719738            1.1693826 -1.2243282 -0.338974446
## [1404,]   1.5782330362           -0.6603060  0.8162188  0.546441531
## [1405,]   1.5798940987            1.1693826  0.8162188 -1.421149530
## [1406,]   1.5848772859            0.2545383 -1.2243282 -1.273580200
## [1407,]   1.5865383484            0.2545383 -1.2243282  0.546441531
## [1408,]   1.5881994108           -0.6603060  0.8162188 -1.027631318
## [1409,]   1.5898604732            1.1693826  0.8162188  0.595631307
## [1410,]   1.5948436605            1.1693826 -1.2243282  0.349682425
## [1411,]   1.5965047229           -0.6603060 -1.2243282  1.284288179
## [1412,]   1.5981657853            0.2545383 -1.2243282  0.792390413
## [1413,]   1.6014879102            1.1693826  0.8162188  0.497251754
## [1414,]   1.6064710974            1.1693826  0.8162188 -0.437353999
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## [1415,]   1.6081321598        -1.5751502  0.8162188  0.890769967
## [1416,]   1.6097932223        -0.6603060  0.8162188 -0.338974446
## [1417,]   1.6114542847         1.1693826  0.8162188  0.989149520
## [1418,]   1.6131153471        -1.5751502  0.8162188 -0.584923329
## [1419,]   1.6147764095        -1.5751502  0.8162188  0.300492648
## [1420,]   1.6164374720         1.1693826  0.8162188 -1.519529083
## [1421,]   1.6180985344         1.1693826  0.8162188  0.497251754
## [1422,]   1.6197595968         0.2545383 -1.2243282  1.579426838
## [1423,]   1.6247427841         1.1693826  0.8162188 -1.126010871
## [1424,]   1.6313870338         1.1693826  0.8162188 -0.142215340
## [1425,]   1.6330480962        -0.6603060  0.8162188 -0.880061988
## [1426,]   1.6347091586        -0.6603060 -1.2243282  1.431857508
## [1427,]   1.6363702210         0.2545383 -1.2243282 -0.830872211
## [1428,]   1.6396923459        -1.5751502  0.8162188  0.841580190
## [1429,]   1.6413534083        -0.6603060  0.8162188  0.103733542
## [1430,]   1.6430144707        -1.5751502  0.8162188 -0.683302882
## [1431,]   1.6446755331        -0.6603060 -1.2243282  1.628616614
## [1432,]   1.6463365956         0.2545383 -1.2243282 -0.880061988
## [1433,]   1.6479976580         0.2545383 -1.2243282 -1.175200647
## [1434,]   1.6496587204        -1.5751502 -1.2243282  0.939959743
## [1435,]   1.6513197828        -1.5751502  0.8162188 -1.273580200
## [1436,]   1.6529808453        -0.6603060  0.8162188 -1.175200647
## [1437,]   1.6546419077         0.2545383  0.8162188 -0.388164223
## [1438,]   1.6563029701         1.1693826  0.8162188  1.038339296
## [1439,]   1.6579640325         1.1693826  0.8162188 -1.617908636
## [1440,]   1.6596250949        -1.5751502 -1.2243282  1.382667732
## [1441,]   1.6612861574         1.1693826 -1.2243282  1.530237061
## [1442,]   1.6629472198         0.2545383  0.8162188 -0.437353999
## [1443,]   1.6646082822        -1.5751502  0.8162188 -1.470339306
## [1444,]   1.6712525319        -1.5751502  0.8162188 -0.486543776
## [1445,]   1.6729135943         1.1693826  0.8162188  0.300492648
## [1446,]   1.6762357192        -1.5751502 -1.2243282 -0.289784670
## [1447,]   1.6778967816         1.1693826 -1.2243282  1.431857508
## [1448,]   1.6795578440         1.1693826  0.8162188  1.087529073
## [1449,]   1.6812189064         0.2545383  0.8162188 -0.437353999
## [1450,]   1.6828799689         1.1693826  0.8162188  0.595631307
## [1451,]   1.6862020937         0.2545383 -1.2243282 -1.716288189
## [1452,]   1.6878631561        -1.5751502 -1.2243282  1.677806391
## [1453,]   1.6928463434        -0.6603060  0.8162188  1.382667732
## [1454,]   1.6945074058        -0.6603060 -1.2243282  1.677806391
## [1455,]   1.6961684682         1.1693826 -1.2243282 -0.781682435
## [1456,]   1.6994905931         0.2545383  0.8162188 -0.683302882
## [1457,]   1.7011516555         0.2545383  0.8162188  0.694010860
## [1458,]   1.7044737803         0.2545383 -1.2243282  1.579426838
## [1459,]   1.7061348428         0.2545383 -1.2243282 -0.191405117
## [1460,]   1.7077959052         1.1693826  0.8162188 -0.978441541
## [1461,]   1.7094569676         1.1693826 -1.2243282  0.349682425
## [1462,]   1.7111180300         1.1693826  0.8162188 -1.322769977
## [1463,]   1.7127790925        -0.6603060 -1.2243282 -0.289784670
## [1464,]   1.7144401549        -0.6603060  0.8162188  0.398872201
## [1465,]   1.7194233421         1.1693826 -1.2243282 -1.765477965
## [1466,]   1.7210844046         0.2545383  0.8162188 -1.224390424
## [1467,]   1.7227454670         1.1693826  0.8162188 -1.175200647
## [1468,]   1.7260675918        -0.6603060  0.8162188  1.038339296
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## [1469,]   1.7277286543                   1.1693826  0.8162188 -0.142215340
## [1470,]   1.7327118415                  -0.6603060  0.8162188  0.792390413
##          JobInvolvement    JobLevel     JobRole JobSatisfaction MaritalStatus
##    [1,]       0.379543 -0.05776789  1.0323644        1.1528613     1.2363997
##    [2,]      -1.025818 -0.05776789  0.6261610       -0.6606284    -0.1332367
##    [3,]      -1.025818 -0.96115930 -0.9986523        0.2461164     1.2363997
##    [4,]       0.379543 -0.96115930  0.6261610        0.2461164    -0.1332367
##    [5,]       0.379543 -0.96115930 -0.9986523       -0.6606284    -0.1332367
##    [6,]       0.379543 -0.96115930 -0.9986523        1.1528613     1.2363997
##    [7,]       1.784904 -0.96115930 -0.9986523       -1.5673732    -0.1332367
##    [8,]       0.379543 -0.96115930 -0.9986523        0.2461164    -1.5028732
##    [9,]      -1.025818  0.84562353 -0.1862456        0.2461164     1.2363997
##   [10,]       0.379543 -0.05776789 -1.8110589        0.2461164    -0.1332367
##   [11,]       1.784904 -0.96115930 -0.9986523       -0.6606284    -0.1332367
##   [12,]      -1.025818 -0.05776789 -0.9986523        0.2461164     1.2363997
##   [13,]       0.379543 -0.96115930  0.6261610        0.2461164    -1.5028732
##   [14,]       0.379543 -0.96115930 -0.9986523        1.1528613    -1.5028732
##   [15,]      -1.025818 -0.96115930 -0.9986523        0.2461164     1.2363997
##   [16,]       1.784904  0.84562353 -0.1862456       -1.5673732    -1.5028732
##   [17,]       1.784904 -0.96115930  0.6261610       -0.6606284    -1.5028732
##   [18,]       1.784904 -0.96115930 -0.9986523        1.1528613    -1.5028732
##   [19,]      -1.025818  1.74901494 -0.5924489        1.1528613    -0.1332367
##   [20,]       0.379543 -0.96115930  0.6261610        1.1528613     1.2363997
##   [21,]       1.784904 -0.05776789 -0.1862456        0.2461164    -1.5028732
##   [22,]      -1.025818 -0.96115930  1.4385677       -1.5673732     1.2363997
##   [23,]       0.379543  0.84562353  0.2199577       -0.6606284     1.2363997
##   [24,]       0.379543 -0.96115930  0.6261610        1.1528613     1.2363997
##   [25,]       0.379543 -0.96115930  0.6261610       -1.5673732     1.2363997
##   [26,]       0.379543  2.65240635 -0.5924489        0.2461164    -1.5028732
##   [27,]      -2.431178 -0.96115930  0.6261610       -1.5673732     1.2363997
##   [28,]       0.379543 -0.05776789  1.0323644       -0.6606284    -0.1332367
##   [29,]      -1.025818  0.84562353 -1.8110589        1.1528613    -0.1332367
##   [30,]       0.379543  2.65240635 -0.5924489       -1.5673732     1.2363997
##   [31,]       0.379543 -0.96115930 -0.9986523        1.1528613     1.2363997
##   [32,]       0.379543 -0.05776789 -1.8110589        1.1528613    -0.1332367
##   [33,]      -1.025818 -0.96115930 -0.9986523        0.2461164     1.2363997
##   [34,]       0.379543 -0.05776789  1.4385677        1.1528613    -0.1332367
##   [35,]       0.379543 -0.96115930  0.6261610        1.1528613    -0.1332367
##   [36,]       1.784904 -0.96115930  0.6261610        0.2461164    -1.5028732
##   [37,]      -1.025818 -0.96115930  1.4385677        0.2461164    -0.1332367
##   [38,]       0.379543 -0.96115930  1.4385677        1.1528613    -0.1332367
##   [39,]      -1.025818 -0.96115930  0.6261610       -1.5673732    -0.1332367
##   [40,]       1.784904 -0.05776789  1.0323644       -1.5673732    -0.1332367
##   [41,]       0.379543 -0.96115930 -0.9986523        1.1528613    -1.5028732
##   [42,]       0.379543 -0.96115930 -0.9986523       -1.5673732    -1.5028732
##   [43,]      -2.431178 -0.96115930 -0.9986523        0.2461164     1.2363997
##   [44,]       0.379543  0.84562353  1.0323644        0.2461164     1.2363997
##   [45,]       0.379543 -0.05776789 -0.9986523        1.1528613     1.2363997
##   [46,]       0.379543  2.65240635  0.2199577        0.2461164    -0.1332367
##   [47,]       0.379543 -0.05776789  1.0323644        0.2461164     1.2363997
##   [48,]       0.379543 -0.96115930  0.6261610       -0.6606284    -0.1332367
##   [49,]       0.379543 -0.05776789  1.0323644        1.1528613     1.2363997
##   [50,]       1.784904 -0.96115930 -0.9986523        1.1528613    -0.1332367
##   [51,]      -1.025818  0.84562353 -0.9986523        0.2461164     1.2363997
```

```
##    [52,]     0.379543 -0.96115930 -0.9986523     0.2461164     1.2363997
##    [53,]     0.379543 -0.05776789  1.0323644    -1.5673732    -1.5028732
##    [54,]    -1.025818  0.84562353 -1.8110589    -1.5673732    -0.1332367
##    [55,]    -1.025818 -0.05776789  1.0323644     1.1528613    -0.1332367
##    [56,]     0.379543  0.84562353  0.2199577     1.1528613     1.2363997
##    [57,]     0.379543  0.84562353  1.0323644    -1.5673732    -0.1332367
##    [58,]     0.379543 -0.96115930 -0.9986523    -1.5673732    -0.1332367
##    [59,]     0.379543 -0.05776789 -0.9986523     1.1528613    -1.5028732
##    [60,]    -1.025818 -0.05776789 -0.1862456     0.2461164    -1.5028732
##    [61,]     0.379543 -0.05776789 -0.1862456     1.1528613    -0.1332367
##    [62,]     0.379543 -0.05776789 -0.9986523     1.1528613     1.2363997
##    [63,]    -1.025818  2.65240635  0.2199577     0.2461164    -1.5028732
##    [64,]     0.379543  0.84562353  1.0323644    -1.5673732     1.2363997
##    [65,]     0.379543  0.84562353 -1.8110589     0.2461164    -1.5028732
##    [66,]     0.379543  1.74901494 -0.5924489     0.2461164    -1.5028732
##    [67,]    -1.025818 -0.05776789 -0.1862456    -0.6606284     1.2363997
##    [68,]     0.379543  0.84562353  0.6261610    -1.5673732    -1.5028732
##    [69,]     0.379543 -0.96115930  0.6261610    -1.5673732    -0.1332367
##    [70,]    -1.025818 -0.96115930  0.6261610     0.2461164    -0.1332367
##    [71,]    -1.025818 -0.05776789  1.0323644     0.2461164     1.2363997
##    [72,]     0.379543 -0.96115930  0.6261610    -0.6606284    -0.1332367
##    [73,]     0.379543 -0.96115930  0.6261610    -0.6606284     1.2363997
##    [74,]     0.379543 -0.05776789  0.6261610    -0.6606284    -0.1332367
##    [75,]     1.784904 -0.96115930 -0.9986523     1.1528613    -0.1332367
##    [76,]     0.379543 -0.05776789 -0.1862456     1.1528613     1.2363997
##    [77,]    -1.025818 -0.05776789  1.0323644    -1.5673732     1.2363997
##    [78,]     0.379543  0.84562353  0.2199577    -1.5673732    -0.1332367
##    [79,]     0.379543  0.84562353  0.2199577     0.2461164     1.2363997
##    [80,]     0.379543 -0.05776789 -1.4048556    -0.6606284    -1.5028732
##    [81,]    -1.025818 -0.05776789 -0.9986523     1.1528613    -0.1332367
##    [82,]    -1.025818 -0.96115930  0.6261610     0.2461164     1.2363997
##    [83,]     0.379543  0.84562353  1.0323644     1.1528613    -0.1332367
##    [84,]    -2.431178 -0.05776789  0.6261610     1.1528613    -1.5028732
##    [85,]     0.379543 -0.05776789 -0.1862456    -0.6606284    -0.1332367
##    [86,]    -2.431178  0.84562353 -0.1862456     1.1528613     1.2363997
##    [87,]     0.379543 -0.96115930  1.4385677    -1.5673732    -1.5028732
##    [88,]     0.379543 -0.96115930 -0.9986523     1.1528613    -0.1332367
##    [89,]    -1.025818 -0.05776789 -1.8110589     1.1528613    -0.1332367
##    [90,]    -1.025818  0.84562353  1.0323644     1.1528613     1.2363997
##    [91,]    -1.025818  1.74901494 -1.8110589    -0.6606284    -0.1332367
##    [92,]     0.379543 -0.05776789  1.0323644     1.1528613     1.2363997
##    [93,]    -1.025818 -0.05776789  1.0323644    -0.6606284    -1.5028732
##    [94,]    -1.025818  0.84562353 -1.8110589    -1.5673732    -0.1332367
##    [95,]     0.379543 -0.05776789  1.0323644     0.2461164     1.2363997
##    [96,]     0.379543  0.84562353  0.2199577     0.2461164    -0.1332367
##    [97,]     0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
##    [98,]     0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
##    [99,]     0.379543  1.74901494  1.0323644     0.2461164     1.2363997
##   [100,]     0.379543 -0.05776789 -0.9986523    -0.6606284    -0.1332367
##   [101,]     0.379543 -0.96115930 -1.4048556    -1.5673732    -1.5028732
##   [102,]     0.379543 -0.96115930  0.6261610    -1.5673732     1.2363997
##   [103,]    -1.025818 -0.96115930 -0.9986523     1.1528613     1.2363997
##   [104,]     0.379543 -0.05776789  0.6261610     0.2461164     1.2363997
##   [105,]    -1.025818 -0.05776789 -1.8110589     1.1528613    -1.5028732
```

```
## [106,]      -1.025818  2.65240635 -0.5924489       1.1528613     -0.1332367
## [107,]       0.379543  2.65240635  0.2199577      -0.6606284     -0.1332367
## [108,]      -1.025818 -0.05776789  1.0323644       0.2461164      1.2363997
## [109,]      -1.025818 -0.96115930  0.6261610       1.1528613     -0.1332367
## [110,]       0.379543 -0.96115930 -0.9986523       1.1528613      1.2363997
## [111,]      -1.025818  0.84562353 -1.8110589      -1.5673732      1.2363997
## [112,]      -2.431178 -0.05776789 -0.9986523       0.2461164      1.2363997
## [113,]       1.784904  1.74901494 -0.5924489       1.1528613      1.2363997
## [114,]       0.379543 -0.96115930 -0.9986523       0.2461164     -0.1332367
## [115,]      -1.025818 -0.05776789  0.6261610      -0.6606284     -1.5028732
## [116,]       0.379543  0.84562353  1.0323644       1.1528613      1.2363997
## [117,]      -1.025818  0.84562353 -0.5924489      -1.5673732      1.2363997
## [118,]       0.379543  0.84562353  1.0323644       1.1528613     -0.1332367
## [119,]       0.379543 -0.96115930 -0.9986523       1.1528613     -1.5028732
## [120,]       0.379543  1.74901494 -0.5924489       1.1528613     -0.1332367
## [121,]      -2.431178 -0.96115930  0.6261610       0.2461164     -1.5028732
## [122,]       0.379543 -0.05776789  1.0323644      -0.6606284     -0.1332367
## [123,]       0.379543 -0.96115930  0.6261610      -0.6606284     -0.1332367
## [124,]       0.379543  2.65240635  0.2199577       0.2461164      1.2363997
## [125,]      -2.431178 -0.05776789  1.0323644       0.2461164     -0.1332367
## [126,]      -1.025818 -0.96115930  0.6261610      -0.6606284     -0.1332367
## [127,]       0.379543  0.84562353 -1.8110589       1.1528613     -0.1332367
## [128,]       0.379543 -0.96115930  1.4385677       0.2461164      1.2363997
## [129,]       0.379543 -0.96115930 -0.9986523       1.1528613     -0.1332367
## [130,]       0.379543 -0.05776789 -0.1862456      -1.5673732     -0.1332367
## [131,]       1.784904 -0.96115930  0.6261610       0.2461164      1.2363997
## [132,]       0.379543  0.84562353  1.0323644       1.1528613      1.2363997
## [133,]      -2.431178 -0.05776789  1.0323644       0.2461164     -0.1332367
## [134,]       0.379543  0.84562353  1.0323644       0.2461164     -1.5028732
## [135,]       0.379543 -0.96115930 -1.4048556       0.2461164     -0.1332367
## [136,]       0.379543 -0.05776789 -0.1862456      -0.6606284     -1.5028732
## [137,]      -2.431178  0.84562353 -0.1862456       1.1528613      1.2363997
## [138,]      -1.025818 -0.05776789  1.0323644       0.2461164     -0.1332367
## [139,]      -1.025818 -0.05776789  1.0323644       0.2461164     -0.1332367
## [140,]       0.379543 -0.05776789 -1.4048556       1.1528613     -0.1332367
## [141,]       0.379543 -0.96115930 -0.9986523      -1.5673732      1.2363997
## [142,]       0.379543 -0.96115930  0.6261610       1.1528613      1.2363997
## [143,]       0.379543 -0.05776789  0.6261610       0.2461164      1.2363997
## [144,]       0.379543 -0.96115930  0.6261610       0.2461164      1.2363997
## [145,]      -2.431178 -0.05776789  1.0323644       1.1528613     -1.5028732
## [146,]       0.379543 -0.96115930  0.6261610      -1.5673732     -1.5028732
## [147,]      -1.025818 -0.96115930 -0.9986523       1.1528613      1.2363997
## [148,]      -1.025818  1.74901494 -0.5924489      -1.5673732     -1.5028732
## [149,]       0.379543 -0.96115930 -0.9986523      -1.5673732     -0.1332367
## [150,]       0.379543 -0.96115930 -0.9986523      -0.6606284      1.2363997
## [151,]       0.379543 -0.05776789  0.6261610      -0.6606284     -1.5028732
## [152,]       0.379543  0.84562353  1.0323644      -0.6606284     -0.1332367
## [153,]       0.379543 -0.05776789  1.4385677       0.2461164     -0.1332367
## [154,]       0.379543 -0.05776789 -0.9986523      -0.6606284     -1.5028732
## [155,]       0.379543  0.84562353  1.0323644       1.1528613      1.2363997
## [156,]       0.379543 -0.05776789 -0.1862456       0.2461164     -0.1332367
## [157,]      -1.025818 -0.05776789 -0.1862456       0.2461164     -0.1332367
## [158,]      -1.025818 -0.96115930  0.6261610      -0.6606284     -0.1332367
## [159,]      -1.025818  0.84562353  1.0323644       1.1528613     -0.1332367
```

```
##  [160,]      0.379543 -0.96115930  1.4385677      0.2461164   -0.1332367
##  [161,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
##  [162,]      0.379543 -0.96115930  0.6261610     -0.6606284   -1.5028732
##  [163,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
##  [164,]      1.784904  0.84562353 -1.8110589      1.1528613   -1.5028732
##  [165,]     -1.025818 -0.96115930  0.6261610      0.2461164   -1.5028732
##  [166,]      0.379543  2.65240635 -0.5924489     -0.6606284    1.2363997
##  [167,]      0.379543 -0.96115930  0.6261610      0.2461164   -1.5028732
##  [168,]      0.379543  0.84562353  1.0323644      1.1528613   -0.1332367
##  [169,]     -1.025818 -0.05776789  1.0323644      1.1528613    1.2363997
##  [170,]      0.379543 -0.96115930  0.6261610      0.2461164    1.2363997
##  [171,]      0.379543 -0.96115930  0.6261610     -0.6606284   -0.1332367
##  [172,]     -2.431178 -0.96115930  1.4385677     -1.5673732    1.2363997
##  [173,]      0.379543 -0.96115930 -0.9986523     -0.6606284    1.2363997
##  [174,]      0.379543 -0.05776789 -0.9986523     -1.5673732   -1.5028732
##  [175,]      0.379543 -0.05776789  1.0323644     -1.5673732   -1.5028732
##  [176,]      0.379543 -0.96115930  0.6261610     -1.5673732   -1.5028732
##  [177,]      0.379543 -0.96115930  0.6261610      1.1528613    1.2363997
##  [178,]     -1.025818 -0.96115930 -0.9986523      1.1528613    1.2363997
##  [179,]      0.379543  0.84562353  1.0323644     -1.5673732   -1.5028732
##  [180,]      0.379543 -0.96115930 -0.9986523      1.1528613    1.2363997
##  [181,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
##  [182,]      0.379543 -0.96115930  0.6261610     -0.6606284    1.2363997
##  [183,]      0.379543 -0.96115930  1.4385677     -0.6606284    1.2363997
##  [184,]     -1.025818 -0.96115930 -0.9986523      0.2461164   -0.1332367
##  [185,]      1.784904 -0.05776789 -0.1862456     -1.5673732   -1.5028732
##  [186,]      0.379543 -0.96115930  0.6261610     -0.6606284   -0.1332367
##  [187,]      0.379543  2.65240635 -0.5924489      0.2461164   -0.1332367
##  [188,]      1.784904  2.65240635  0.2199577     -0.6606284    1.2363997
##  [189,]     -1.025818 -0.05776789 -0.1862456      0.2461164   -0.1332367
##  [190,]      0.379543  1.74901494 -1.8110589     -0.6606284    1.2363997
##  [191,]     -1.025818  2.65240635 -0.5924489      0.2461164   -0.1332367
##  [192,]      0.379543 -0.96115930  0.6261610     -0.6606284    1.2363997
##  [193,]     -1.025818 -0.05776789 -0.1862456      0.2461164   -0.1332367
##  [194,]      1.784904 -0.96115930  0.6261610      1.1528613   -1.5028732
##  [195,]     -1.025818  1.74901494 -0.5924489      1.1528613   -0.1332367
##  [196,]      1.784904 -0.96115930  0.6261610     -1.5673732   -0.1332367
##  [197,]      0.379543 -0.05776789 -0.9986523     -0.6606284    1.2363997
##  [198,]      0.379543 -0.05776789 -0.1862456      0.2461164   -1.5028732
##  [199,]      0.379543 -0.05776789 -0.1862456      0.2461164   -0.1332367
##  [200,]      0.379543 -0.05776789 -0.1862456      1.1528613   -0.1332367
##  [201,]     -1.025818 -0.05776789 -0.1862456     -1.5673732   -0.1332367
##  [202,]      0.379543 -0.05776789 -0.1862456      1.1528613   -1.5028732
##  [203,]      0.379543 -0.96115930  0.6261610      0.2461164   -1.5028732
##  [204,]      0.379543 -0.05776789 -0.9986523      1.1528613   -0.1332367
##  [205,]      0.379543 -0.05776789 -1.8110589     -1.5673732   -0.1332367
##  [206,]      0.379543  0.84562353  1.0323644      1.1528613   -0.1332367
##  [207,]      1.784904 -0.96115930  0.6261610     -0.6606284   -1.5028732
##  [208,]      0.379543 -0.96115930 -0.9986523      1.1528613    1.2363997
##  [209,]     -1.025818 -0.05776789 -1.8110589      1.1528613   -0.1332367
##  [210,]      0.379543  0.84562353 -1.8110589     -1.5673732   -1.5028732
##  [211,]     -2.431178  0.84562353  1.0323644      1.1528613   -0.1332367
##  [212,]     -1.025818  0.84562353 -0.1862456      0.2461164    1.2363997
##  [213,]      0.379543 -0.05776789  1.0323644      0.2461164    1.2363997
```

```
## [214,]       -1.025818  0.84562353  0.2199577      -0.6606284      -0.1332367
## [215,]        0.379543 -0.96115930  0.6261610      -1.5673732       1.2363997
## [216,]        0.379543  0.84562353 -0.5924489       1.1528613       1.2363997
## [217,]       -1.025818 -0.05776789  1.0323644      -1.5673732       1.2363997
## [218,]        0.379543 -0.96115930  0.6261610       0.2461164       1.2363997
## [219,]       -1.025818  0.84562353  1.0323644       1.1528613       1.2363997
## [220,]        0.379543 -0.05776789  1.0323644      -1.5673732      -0.1332367
## [221,]        0.379543 -0.05776789 -0.9986523      -0.6606284       1.2363997
## [222,]       -1.025818 -0.96115930  0.6261610      -0.6606284      -0.1332367
## [223,]        0.379543  0.84562353  0.2199577       1.1528613      -1.5028732
## [224,]        0.379543  0.84562353  1.0323644       0.2461164      -1.5028732
## [225,]       -2.431178 -0.05776789 -0.1862456       0.2461164      -0.1332367
## [226,]       -1.025818 -0.96115930  0.6261610       1.1528613      -0.1332367
## [227,]        0.379543 -0.96115930  1.4385677       1.1528613      -1.5028732
## [228,]        0.379543  0.84562353  1.0323644       1.1528613      -0.1332367
## [229,]        0.379543  0.84562353  1.0323644       0.2461164       1.2363997
## [230,]       -1.025818 -0.96115930  0.6261610       1.1528613       1.2363997
## [231,]       -1.025818 -0.96115930 -0.9986523       1.1528613       1.2363997
## [232,]        0.379543  2.65240635 -0.5924489       1.1528613      -0.1332367
## [233,]        0.379543 -0.96115930 -1.4048556       0.2461164      -0.1332367
## [234,]        0.379543  2.65240635 -0.5924489       1.1528613      -1.5028732
## [235,]        0.379543 -0.96115930 -0.9986523       1.1528613      -0.1332367
## [236,]        0.379543  1.74901494 -0.5924489       1.1528613      -0.1332367
## [237,]        0.379543 -0.96115930 -0.9986523      -1.5673732      -0.1332367
## [238,]       -1.025818  2.65240635 -0.5924489       0.2461164       1.2363997
## [239,]        0.379543 -0.96115930  1.4385677      -0.6606284      -0.1332367
## [240,]       -1.025818 -0.96115930 -0.9986523       0.2461164       1.2363997
## [241,]        0.379543 -0.96115930 -0.9986523       0.2461164      -1.5028732
## [242,]        0.379543 -0.05776789  1.0323644       1.1528613      -0.1332367
## [243,]        0.379543 -0.05776789  0.6261610      -1.5673732      -1.5028732
## [244,]        0.379543 -0.05776789  0.6261610       1.1528613      -1.5028732
## [245,]        1.784904  2.65240635 -0.5924489       1.1528613      -0.1332367
## [246,]        0.379543  0.84562353  0.2199577       0.2461164      -1.5028732
## [247,]       -1.025818 -0.96115930  0.6261610       1.1528613      -0.1332367
## [248,]       -1.025818 -0.05776789 -0.1862456      -1.5673732      -0.1332367
## [249,]       -1.025818 -0.96115930  0.6261610      -1.5673732      -0.1332367
## [250,]        1.784904 -0.05776789 -0.1862456       0.2461164      -0.1332367
## [251,]        0.379543  0.84562353 -0.1862456       0.2461164      -1.5028732
## [252,]        0.379543  0.84562353 -1.8110589       0.2461164       1.2363997
## [253,]        0.379543 -0.96115930  0.6261610       1.1528613       1.2363997
## [254,]        1.784904 -0.05776789  0.6261610      -1.5673732       1.2363997
## [255,]        0.379543 -0.05776789  1.0323644       1.1528613      -1.5028732
## [256,]        0.379543 -0.05776789 -0.1862456       0.2461164      -0.1332367
## [257,]       -1.025818 -0.96115930 -0.9986523      -1.5673732      -1.5028732
## [258,]        0.379543  2.65240635  0.2199577       0.2461164      -1.5028732
## [259,]        0.379543 -0.96115930  0.6261610       1.1528613      -0.1332367
## [260,]       -1.025818 -0.96115930 -0.9986523      -0.6606284       1.2363997
## [261,]        1.784904 -0.96115930 -0.9986523      -0.6606284      -0.1332367
## [262,]       -1.025818 -0.05776789  1.0323644       1.1528613      -0.1332367
## [263,]       -1.025818 -0.05776789 -0.9986523      -1.5673732       1.2363997
## [264,]       -2.431178  1.74901494 -0.5924489      -0.6606284      -0.1332367
## [265,]        0.379543 -0.96115930 -0.9986523       0.2461164       1.2363997
## [266,]       -1.025818 -0.05776789  1.0323644      -0.6606284      -0.1332367
## [267,]       -1.025818 -0.05776789 -1.8110589       1.1528613      -0.1332367
```

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## [268,]      1.784904 -0.05776789 -1.8110589     -1.5673732    -1.5028732
## [269,]      0.379543  1.74901494 -1.8110589      1.1528613    -0.1332367
## [270,]      0.379543 -0.96115930 -0.9986523      1.1528613    -0.1332367
## [271,]      0.379543  2.65240635 -0.5924489     -1.5673732     1.2363997
## [272,]      0.379543  0.84562353 -0.5924489     -0.6606284    -0.1332367
## [273,]      0.379543 -0.96115930  0.6261610      1.1528613    -0.1332367
## [274,]      0.379543 -0.05776789  1.0323644      1.1528613    -0.1332367
## [275,]     -1.025818 -0.96115930  0.6261610      0.2461164     1.2363997
## [276,]      0.379543  0.84562353  0.2199577      1.1528613    -1.5028732
## [277,]      1.784904  0.84562353 -0.5924489     -0.6606284    -1.5028732
## [278,]      1.784904 -0.05776789  1.0323644     -1.5673732    -1.5028732
## [279,]      0.379543 -0.05776789 -0.1862456     -0.6606284    -1.5028732
## [280,]      0.379543  2.65240635  0.2199577     -0.6606284    -1.5028732
## [281,]      0.379543  1.74901494  0.2199577      0.2461164    -0.1332367
## [282,]      0.379543 -0.05776789  1.0323644      0.2461164    -0.1332367
## [283,]      0.379543 -0.05776789  1.0323644      1.1528613     1.2363997
## [284,]      0.379543 -0.05776789 -0.9986523      1.1528613    -0.1332367
## [285,]      0.379543 -0.05776789 -1.8110589     -1.5673732    -0.1332367
## [286,]      0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [287,]      0.379543 -0.96115930 -0.9986523      0.2461164    -1.5028732
## [288,]      0.379543 -0.05776789 -1.8110589      1.1528613    -1.5028732
## [289,]      0.379543 -0.96115930 -0.9986523     -0.6606284    -1.5028732
## [290,]      0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [291,]      0.379543  2.65240635  0.2199577     -1.5673732     1.2363997
## [292,]      0.379543 -0.05776789  0.6261610     -0.6606284     1.2363997
## [293,]      0.379543 -0.96115930  1.4385677     -0.6606284    -1.5028732
## [294,]     -1.025818 -0.05776789  1.0323644      1.1528613     1.2363997
## [295,]      0.379543 -0.96115930  0.6261610      1.1528613    -0.1332367
## [296,]      0.379543  1.74901494  1.0323644     -0.6606284    -0.1332367
## [297,]      0.379543 -0.96115930 -0.9986523      0.2461164     1.2363997
## [298,]      0.379543  0.84562353  1.0323644     -0.6606284    -0.1332367
## [299,]      1.784904 -0.96115930 -0.9986523      1.1528613    -0.1332367
## [300,]     -2.431178 -0.05776789 -0.1862456     -0.6606284    -1.5028732
## [301,]      0.379543  1.74901494 -0.5924489     -0.6606284     1.2363997
## [302,]     -1.025818 -0.96115930  1.4385677      0.2461164     1.2363997
## [303,]      1.784904 -0.05776789 -1.8110589     -1.5673732     1.2363997
## [304,]      1.784904 -0.05776789  1.0323644      1.1528613    -0.1332367
## [305,]      1.784904  0.84562353 -1.8110589      1.1528613    -1.5028732
## [306,]      0.379543 -0.05776789 -0.9986523     -0.6606284    -0.1332367
## [307,]     -1.025818 -0.05776789  1.0323644      0.2461164    -0.1332367
## [308,]     -1.025818  0.84562353  0.2199577     -0.6606284    -0.1332367
## [309,]     -2.431178 -0.05776789 -1.8110589      0.2461164    -1.5028732
## [310,]      0.379543 -0.96115930  0.6261610      1.1528613    -0.1332367
## [311,]     -1.025818 -0.05776789 -1.4048556     -1.5673732    -0.1332367
## [312,]      0.379543  0.84562353 -0.9986523     -1.5673732    -1.5028732
## [313,]      0.379543 -0.96115930  0.6261610      1.1528613    -1.5028732
## [314,]      0.379543  0.84562353 -0.5924489     -0.6606284    -0.1332367
## [315,]      0.379543  1.74901494 -0.5924489     -1.5673732    -0.1332367
## [316,]      0.379543 -0.96115930 -0.9986523      1.1528613     1.2363997
## [317,]     -1.025818  1.74901494 -1.8110589      0.2461164     1.2363997
## [318,]     -1.025818 -0.05776789  0.6261610     -0.6606284    -0.1332367
## [319,]      0.379543 -0.96115930  0.6261610     -0.6606284     1.2363997
## [320,]     -1.025818 -0.05776789  1.0323644     -0.6606284    -0.1332367
## [321,]      0.379543 -0.05776789  1.0323644      0.2461164     1.2363997
```

```
## [322,]    0.379543 -0.05776789  1.0323644    1.1528613 -1.5028732
## [323,]    1.784904 -0.05776789  0.6261610    1.1528613  1.2363997
## [324,]   -2.431178 -0.96115930  0.6261610    1.1528613 -0.1332367
## [325,]    0.379543 -0.05776789  0.6261610    1.1528613 -0.1332367
## [326,]   -1.025818  0.84562353 -0.1862456    0.2461164 -0.1332367
## [327,]   -1.025818  2.65240635 -0.5924489    1.1528613 -0.1332367
## [328,]    0.379543 -0.05776789  1.0323644    0.2461164 -0.1332367
## [329,]   -1.025818 -0.05776789  1.0323644    1.1528613  1.2363997
## [330,]    0.379543  2.65240635  0.2199577    0.2461164 -0.1332367
## [331,]   -1.025818 -0.05776789 -0.9986523    0.2461164 -1.5028732
## [332,]    0.379543 -0.05776789  1.0323644   -0.6606284 -0.1332367
## [333,]    0.379543 -0.05776789  0.6261610    0.2461164  1.2363997
## [334,]    0.379543  0.84562353 -1.8110589   -1.5673732 -0.1332367
## [335,]    0.379543 -0.05776789  0.6261610    1.1528613 -0.1332367
## [336,]   -2.431178 -0.05776789  1.0323644    1.1528613 -0.1332367
## [337,]   -2.431178 -0.05776789 -0.9986523   -1.5673732 -0.1332367
## [338,]   -1.025818 -0.96115930 -0.9986523    1.1528613  1.2363997
## [339,]   -1.025818 -0.05776789  1.0323644    0.2461164 -1.5028732
## [340,]    0.379543 -0.05776789  1.0323644   -0.6606284 -0.1332367
## [341,]    0.379543 -0.05776789 -0.1862456    1.1528613 -1.5028732
## [342,]   -1.025818  0.84562353  0.2199577    1.1528613 -1.5028732
## [343,]    0.379543  0.84562353 -0.1862456    1.1528613  1.2363997
## [344,]   -1.025818 -0.05776789  1.0323644   -0.6606284 -1.5028732
## [345,]    0.379543  0.84562353 -0.1862456   -0.6606284  1.2363997
## [346,]    0.379543 -0.96115930  0.6261610    1.1528613 -1.5028732
## [347,]   -1.025818 -0.05776789 -0.1862456   -0.6606284  1.2363997
## [348,]    0.379543 -0.05776789  1.4385677    0.2461164  1.2363997
## [349,]    0.379543  1.74901494  0.2199577    1.1528613  1.2363997
## [350,]    0.379543 -0.05776789  1.0323644    0.2461164 -0.1332367
## [351,]    0.379543 -0.96115930 -1.4048556    0.2461164 -1.5028732
## [352,]    0.379543 -0.96115930 -0.9986523   -0.6606284 -0.1332367
## [353,]    0.379543  0.84562353 -0.5924489    0.2461164 -0.1332367
## [354,]    1.784904 -0.05776789  0.6261610   -1.5673732 -1.5028732
## [355,]    0.379543 -0.05776789  1.0323644    0.2461164 -0.1332367
## [356,]    0.379543 -0.05776789  1.0323644    0.2461164 -0.1332367
## [357,]   -1.025818 -0.05776789 -1.8110589    1.1528613  1.2363997
## [358,]   -1.025818 -0.96115930  1.4385677   -0.6606284  1.2363997
## [359,]    0.379543 -0.05776789  1.0323644    1.1528613  1.2363997
## [360,]   -1.025818  0.84562353  1.0323644    1.1528613 -0.1332367
## [361,]    0.379543 -0.05776789 -1.8110589    0.2461164 -0.1332367
## [362,]    1.784904 -0.96115930 -0.9986523    0.2461164 -0.1332367
## [363,]    0.379543 -0.96115930  1.4385677    1.1528613  1.2363997
## [364,]    0.379543 -0.96115930  1.4385677    0.2461164  1.2363997
## [365,]    0.379543 -0.96115930 -0.9986523   -1.5673732 -0.1332367
## [366,]    0.379543 -0.05776789 -0.1862456    0.2461164 -0.1332367
## [367,]    0.379543 -0.05776789  1.0323644   -0.6606284  1.2363997
## [368,]   -1.025818  0.84562353 -1.8110589    1.1528613  1.2363997
## [369,]   -1.025818 -0.05776789  1.0323644    0.2461164 -0.1332367
## [370,]   -1.025818 -0.96115930  0.6261610   -0.6606284  1.2363997
## [371,]    1.784904 -0.96115930  1.4385677   -0.6606284  1.2363997
## [372,]    0.379543 -0.96115930  0.6261610    1.1528613  1.2363997
## [373,]   -1.025818 -0.05776789 -1.8110589   -0.6606284  1.2363997
## [374,]    0.379543 -0.96115930 -0.9986523   -0.6606284 -1.5028732
## [375,]    0.379543 -0.05776789  1.0323644    1.1528613  1.2363997
```

```
## [376,]     -1.025818  0.84562353 -1.8110589      0.2461164     1.2363997
## [377,]      0.379543 -0.05776789  1.0323644      1.1528613    -0.1332367
## [378,]      0.379543 -0.96115930  0.6261610      0.2461164    -0.1332367
## [379,]      1.784904 -0.05776789  1.0323644      1.1528613     1.2363997
## [380,]      0.379543  1.74901494 -0.5924489      1.1528613     1.2363997
## [381,]      0.379543 -0.05776789  1.0323644      0.2461164    -1.5028732
## [382,]      0.379543 -0.96115930  1.4385677     -0.6606284    -0.1332367
## [383,]      0.379543 -0.96115930  0.6261610     -1.5673732     1.2363997
## [384,]      0.379543 -0.96115930  0.6261610     -0.6606284    -0.1332367
## [385,]     -1.025818  0.84562353  1.0323644      0.2461164    -0.1332367
## [386,]      0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [387,]      0.379543 -0.96115930 -0.9986523     -1.5673732    -1.5028732
## [388,]      0.379543 -0.05776789  1.0323644     -0.6606284    -1.5028732
## [389,]      0.379543 -0.96115930 -0.9986523     -1.5673732    -1.5028732
## [390,]      0.379543 -0.05776789 -0.1862456     -0.6606284     1.2363997
## [391,]     -1.025818  1.74901494  0.2199577     -0.6606284    -1.5028732
## [392,]     -1.025818 -0.05776789 -0.9986523      0.2461164    -0.1332367
## [393,]      0.379543  2.65240635  0.2199577     -1.5673732    -0.1332367
## [394,]      0.379543 -0.05776789  1.0323644      0.2461164    -0.1332367
## [395,]      0.379543 -0.05776789 -0.1862456     -1.5673732    -0.1332367
## [396,]      0.379543 -0.96115930 -0.9986523      1.1528613    -0.1332367
## [397,]      0.379543 -0.05776789 -1.8110589      0.2461164    -1.5028732
## [398,]     -1.025818 -0.05776789  1.0323644      1.1528613     1.2363997
## [399,]      0.379543 -0.05776789  0.6261610      0.2461164    -0.1332367
## [400,]     -1.025818 -0.96115930 -0.9986523     -1.5673732    -0.1332367
## [401,]      0.379543  2.65240635 -0.5924489      0.2461164    -1.5028732
## [402,]      1.784904  1.74901494  1.0323644     -1.5673732    -0.1332367
## [403,]      0.379543 -0.05776789  1.0323644      0.2461164     1.2363997
## [404,]      1.784904  0.84562353  1.0323644     -1.5673732    -0.1332367
## [405,]      0.379543 -0.05776789 -0.9986523     -1.5673732    -1.5028732
## [406,]      0.379543 -0.96115930 -0.9986523     -1.5673732    -0.1332367
## [407,]     -1.025818  0.84562353 -0.1862456      0.2461164    -0.1332367
## [408,]      0.379543 -0.96115930  0.6261610      1.1528613    -0.1332367
## [409,]      0.379543  1.74901494 -0.5924489      1.1528613    -0.1332367
## [410,]      0.379543 -0.05776789  0.6261610      0.2461164    -1.5028732
## [411,]     -2.431178 -0.05776789 -0.1862456      1.1528613     1.2363997
## [412,]      0.379543  2.65240635 -0.5924489     -1.5673732    -0.1332367
## [413,]      0.379543 -0.05776789 -0.1862456      0.2461164    -1.5028732
## [414,]     -1.025818 -0.05776789 -1.8110589      1.1528613    -0.1332367
## [415,]      0.379543 -0.96115930  1.4385677     -0.6606284     1.2363997
## [416,]     -2.431178 -0.96115930  1.4385677      0.2461164    -1.5028732
## [417,]      0.379543 -0.96115930 -0.9986523      1.1528613    -0.1332367
## [418,]      0.379543  2.65240635 -0.5924489      0.2461164    -0.1332367
## [419,]      0.379543 -0.96115930  0.6261610      1.1528613    -1.5028732
## [420,]      0.379543 -0.96115930 -0.9986523      1.1528613    -0.1332367
## [421,]     -1.025818  0.84562353  0.2199577      0.2461164    -0.1332367
## [422,]     -1.025818 -0.96115930  0.6261610     -0.6606284    -0.1332367
## [423,]     -1.025818 -0.96115930 -1.4048556      1.1528613     1.2363997
## [424,]      0.379543  0.84562353  1.0323644     -1.5673732    -0.1332367
## [425,]     -1.025818  1.74901494 -0.5924489      1.1528613    -1.5028732
## [426,]     -1.025818  1.74901494 -0.5924489      0.2461164    -0.1332367
## [427,]      0.379543 -0.96115930 -0.9986523      1.1528613     1.2363997
## [428,]     -1.025818  0.84562353  1.0323644     -1.5673732    -0.1332367
## [429,]      0.379543 -0.05776789 -0.1862456      1.1528613    -1.5028732
```

```
## [430,]    0.379543  1.74901494  0.2199577     0.2461164   -0.1332367
## [431,]   -2.431178 -0.96115930 -0.9986523     0.2461164    1.2363997
## [432,]    0.379543 -0.05776789 -0.9986523     0.2461164    1.2363997
## [433,]   -1.025818 -0.96115930  0.6261610     0.2461164   -1.5028732
## [434,]   -1.025818  0.84562353  1.0323644     1.1528613   -0.1332367
## [435,]    0.379543  0.84562353 -0.1862456    -0.6606284   -1.5028732
## [436,]    0.379543  0.84562353 -0.5924489     0.2461164   -0.1332367
## [437,]   -2.431178 -0.96115930 -0.9986523     1.1528613   -1.5028732
## [438,]    0.379543 -0.96115930  1.4385677    -0.6606284    1.2363997
## [439,]    0.379543  0.84562353 -1.8110589     0.2461164   -0.1332367
## [440,]    0.379543  0.84562353 -1.8110589     0.2461164   -0.1332367
## [441,]    0.379543  0.84562353 -1.4048556    -1.5673732   -1.5028732
## [442,]    0.379543 -0.96115930 -0.9986523     0.2461164   -0.1332367
## [443,]    0.379543  0.84562353  1.0323644     1.1528613    1.2363997
## [444,]   -1.025818 -0.96115930 -0.9986523     0.2461164    1.2363997
## [445,]    0.379543 -0.05776789  1.0323644     1.1528613   -0.1332367
## [446,]    0.379543  1.74901494 -0.5924489    -0.6606284    1.2363997
## [447,]    0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [448,]    0.379543 -0.05776789  1.0323644     0.2461164   -0.1332367
## [449,]    0.379543  1.74901494 -0.1862456     0.2461164    1.2363997
## [450,]    0.379543 -0.96115930 -0.9986523     0.2461164   -0.1332367
## [451,]    0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [452,]    0.379543  0.84562353 -0.1862456    -1.5673732   -0.1332367
## [453,]    0.379543 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [454,]    0.379543 -0.96115930 -1.4048556     0.2461164   -1.5028732
## [455,]    0.379543 -0.05776789 -0.1862456     1.1528613   -1.5028732
## [456,]    1.784904  1.74901494  0.2199577     0.2461164   -1.5028732
## [457,]   -1.025818  0.84562353 -0.5924489     1.1528613   -1.5028732
## [458,]    0.379543 -0.96115930  1.4385677    -0.6606284    1.2363997
## [459,]   -2.431178  0.84562353  1.0323644    -1.5673732   -1.5028732
## [460,]   -1.025818 -0.05776789 -1.8110589     0.2461164    1.2363997
## [461,]    0.379543 -0.05776789  1.0323644     0.2461164   -1.5028732
## [462,]    0.379543 -0.05776789  1.0323644     0.2461164    1.2363997
## [463,]    1.784904 -0.05776789  1.0323644     1.1528613    1.2363997
## [464,]   -2.431178 -0.96115930 -0.9986523     1.1528613    1.2363997
## [465,]    0.379543  0.84562353 -0.1862456     1.1528613    1.2363997
## [466,]    0.379543  0.84562353 -1.8110589     0.2461164   -0.1332367
## [467,]    0.379543  1.74901494 -0.5924489    -1.5673732   -0.1332367
## [468,]    0.379543  0.84562353  1.0323644    -0.6606284   -1.5028732
## [469,]    0.379543 -0.05776789  0.6261610    -1.5673732   -1.5028732
## [470,]    1.784904 -0.05776789  1.0323644     0.2461164   -0.1332367
## [471,]    0.379543 -0.96115930  1.4385677     1.1528613   -0.1332367
## [472,]    0.379543 -0.05776789 -1.8110589     0.2461164   -0.1332367
## [473,]    0.379543 -0.05776789 -0.1862456    -0.6606284   -0.1332367
## [474,]   -1.025818  2.65240635  0.2199577     0.2461164   -1.5028732
## [475,]    1.784904 -0.96115930  0.6261610     1.1528613   -0.1332367
## [476,]    0.379543 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [477,]   -1.025818 -0.96115930 -0.9986523    -0.6606284   -0.1332367
## [478,]    0.379543  2.65240635 -0.5924489    -0.6606284   -0.1332367
## [479,]    0.379543 -0.96115930  1.4385677     0.2461164   -0.1332367
## [480,]    0.379543 -0.96115930 -0.9986523     0.2461164   -0.1332367
## [481,]   -1.025818 -0.96115930  1.4385677    -1.5673732   -0.1332367
## [482,]   -1.025818 -0.96115930  0.6261610     1.1528613   -0.1332367
## [483,]    0.379543 -0.05776789  1.0323644    -1.5673732   -1.5028732
```

```
## [484,]     -1.025818 -0.05776789 -0.9986523      1.1528613      1.2363997
## [485,]      1.784904 -0.05776789  1.0323644      1.1528613     -1.5028732
## [486,]     -1.025818 -0.96115930  0.6261610      0.2461164     -1.5028732
## [487,]      0.379543 -0.05776789  1.0323644      0.2461164     -0.1332367
## [488,]     -1.025818 -0.96115930  0.6261610     -0.6606284      1.2363997
## [489,]      0.379543 -0.05776789 -1.8110589      1.1528613     -0.1332367
## [490,]     -1.025818  1.74901494  0.2199577      1.1528613     -1.5028732
## [491,]      0.379543 -0.96115930  0.6261610     -1.5673732      1.2363997
## [492,]      0.379543 -0.05776789 -0.9986523      0.2461164     -1.5028732
## [493,]     -1.025818  1.74901494 -0.5924489     -1.5673732     -0.1332367
## [494,]     -1.025818 -0.05776789 -1.4048556      0.2461164      1.2363997
## [495,]      0.379543 -0.96115930  1.4385677      0.2461164     -1.5028732
## [496,]      0.379543 -0.96115930  1.4385677     -1.5673732     -1.5028732
## [497,]      0.379543 -0.96115930  1.4385677      0.2461164      1.2363997
## [498,]      0.379543  2.65240635 -0.5924489      1.1528613     -0.1332367
## [499,]      0.379543 -0.96115930  0.6261610      0.2461164     -0.1332367
## [500,]      0.379543 -0.05776789  1.0323644      0.2461164     -1.5028732
## [501,]      0.379543 -0.05776789  0.6261610      1.1528613     -0.1332367
## [502,]      0.379543 -0.96115930  0.6261610      0.2461164     -1.5028732
## [503,]      0.379543 -0.05776789  1.0323644     -1.5673732      1.2363997
## [504,]      0.379543 -0.96115930  0.6261610      1.1528613     -0.1332367
## [505,]      0.379543 -0.05776789  1.0323644     -1.5673732     -0.1332367
## [506,]      0.379543 -0.96115930 -0.9986523      1.1528613     -0.1332367
## [507,]      0.379543  0.84562353 -0.1862456      0.2461164     -0.1332367
## [508,]      0.379543 -0.05776789  1.0323644      0.2461164     -0.1332367
## [509,]     -2.431178 -0.05776789  0.6261610      1.1528613      1.2363997
## [510,]      0.379543 -0.05776789 -1.8110589      1.1528613     -1.5028732
## [511,]      0.379543  0.84562353 -1.4048556     -0.6606284     -0.1332367
## [512,]     -1.025818 -0.05776789 -0.1862456     -0.6606284     -1.5028732
## [513,]     -1.025818 -0.96115930  0.6261610      1.1528613      1.2363997
## [514,]      0.379543 -0.96115930  0.6261610      0.2461164      1.2363997
## [515,]      0.379543 -0.96115930  0.6261610     -1.5673732      1.2363997
## [516,]     -1.025818 -0.96115930 -0.9986523      0.2461164     -0.1332367
## [517,]      1.784904 -0.96115930  0.6261610     -1.5673732     -0.1332367
## [518,]      1.784904 -0.05776789  1.0323644     -0.6606284     -0.1332367
## [519,]     -1.025818 -0.05776789  1.0323644      1.1528613      1.2363997
## [520,]     -2.431178 -0.96115930  0.6261610      1.1528613     -1.5028732
## [521,]      1.784904 -0.05776789  1.0323644     -0.6606284     -0.1332367
## [522,]      1.784904 -0.05776789  1.0323644      1.1528613     -1.5028732
## [523,]      1.784904 -0.96115930  0.6261610      1.1528613      1.2363997
## [524,]      1.784904 -0.96115930 -0.9986523      0.2461164     -0.1332367
## [525,]     -1.025818  0.84562353 -1.8110589     -0.6606284      1.2363997
## [526,]      0.379543 -0.05776789  1.0323644      0.2461164      1.2363997
## [527,]     -1.025818 -0.05776789 -1.8110589      0.2461164      1.2363997
## [528,]      0.379543 -0.05776789  1.0323644      1.1528613      1.2363997
## [529,]      0.379543 -0.05776789  1.0323644      0.2461164     -0.1332367
## [530,]      1.784904 -0.05776789 -1.8110589      1.1528613      1.2363997
## [531,]      0.379543  0.84562353 -0.1862456     -1.5673732     -0.1332367
## [532,]      0.379543  0.84562353  0.2199577      1.1528613      1.2363997
## [533,]      0.379543 -0.05776789  1.0323644     -1.5673732      1.2363997
## [534,]     -1.025818  0.84562353  1.0323644     -1.5673732     -0.1332367
## [535,]      1.784904  1.74901494  0.2199577      0.2461164     -0.1332367
## [536,]     -1.025818  2.65240635 -0.5924489      1.1528613     -1.5028732
## [537,]      0.379543 -0.05776789  1.0323644     -1.5673732      1.2363997
```

```
## [538,]      0.379543  0.84562353 -0.1862456     -1.5673732     -1.5028732
## [539,]     -1.025818  2.65240635 -0.5924489      0.2461164     -0.1332367
## [540,]      0.379543 -0.96115930  1.4385677     -0.6606284     -0.1332367
## [541,]     -2.431178 -0.96115930  0.6261610     -0.6606284      1.2363997
## [542,]      1.784904  0.84562353  0.2199577     -1.5673732     -0.1332367
## [543,]      0.379543  0.84562353 -0.1862456      0.2461164      1.2363997
## [544,]     -2.431178 -0.96115930 -0.9986523      0.2461164      1.2363997
## [545,]      0.379543  1.74901494  1.0323644      0.2461164     -1.5028732
## [546,]      0.379543 -0.05776789  1.0323644      1.1528613     -1.5028732
## [547,]      0.379543 -0.96115930  1.4385677      0.2461164      1.2363997
## [548,]      1.784904 -0.96115930  0.6261610      0.2461164     -1.5028732
## [549,]     -1.025818 -0.05776789  1.0323644      1.1528613     -0.1332367
## [550,]      0.379543 -0.05776789 -1.8110589      0.2461164      1.2363997
## [551,]      0.379543 -0.96115930 -0.9986523     -1.5673732     -0.1332367
## [552,]      1.784904 -0.05776789 -1.4048556     -0.6606284     -0.1332367
## [553,]      0.379543  1.74901494 -1.8110589      1.1528613     -0.1332367
## [554,]     -1.025818 -0.96115930  0.6261610      1.1528613      1.2363997
## [555,]     -1.025818 -0.05776789 -1.8110589     -1.5673732      1.2363997
## [556,]      0.379543 -0.96115930  1.4385677     -0.6606284     -1.5028732
## [557,]      0.379543 -0.05776789 -0.9986523      1.1528613      1.2363997
## [558,]      0.379543 -0.05776789 -1.8110589     -1.5673732     -1.5028732
## [559,]      0.379543 -0.05776789 -0.9986523      1.1528613     -0.1332367
## [560,]      0.379543 -0.96115930  0.6261610      0.2461164     -0.1332367
## [561,]      0.379543 -0.05776789 -0.1862456     -1.5673732     -1.5028732
## [562,]     -1.025818  1.74901494 -0.5924489     -1.5673732     -0.1332367
## [563,]      0.379543 -0.96115930  0.6261610      1.1528613      1.2363997
## [564,]      0.379543 -0.05776789  1.0323644      1.1528613      1.2363997
## [565,]     -2.431178 -0.05776789  1.4385677      0.2461164      1.2363997
## [566,]      1.784904 -0.96115930  0.6261610      0.2461164      1.2363997
## [567,]      1.784904 -0.05776789  1.0323644      0.2461164      1.2363997
## [568,]      0.379543 -0.05776789  1.0323644      1.1528613      1.2363997
## [569,]      0.379543  2.65240635 -0.5924489     -1.5673732     -0.1332367
## [570,]     -1.025818  0.84562353  1.0323644     -1.5673732      1.2363997
## [571,]      0.379543 -0.96115930  0.6261610      1.1528613     -0.1332367
## [572,]     -2.431178 -0.96115930 -0.9986523      1.1528613     -1.5028732
## [573,]      0.379543 -0.05776789 -1.8110589      0.2461164     -0.1332367
## [574,]     -1.025818 -0.05776789  1.0323644     -1.5673732      1.2363997
## [575,]      1.784904 -0.96115930  0.6261610      1.1528613      1.2363997
## [576,]      0.379543 -0.05776789 -0.1862456     -1.5673732     -1.5028732
## [577,]      0.379543 -0.05776789  1.0323644      1.1528613     -0.1332367
## [578,]      0.379543 -0.96115930  0.6261610     -1.5673732     -1.5028732
## [579,]      1.784904 -0.05776789 -0.1862456     -1.5673732      1.2363997
## [580,]     -1.025818 -0.96115930  0.6261610     -1.5673732      1.2363997
## [581,]      0.379543 -0.96115930  1.4385677      1.1528613     -0.1332367
## [582,]     -2.431178 -0.96115930 -0.9986523      0.2461164     -0.1332367
## [583,]      1.784904 -0.05776789 -1.8110589     -0.6606284     -0.1332367
## [584,]      0.379543 -0.05776789  1.0323644     -1.5673732     -0.1332367
## [585,]      0.379543  2.65240635 -0.5924489      1.1528613     -1.5028732
## [586,]      1.784904 -0.96115930 -0.9986523     -1.5673732     -0.1332367
## [587,]     -1.025818 -0.96115930 -0.9986523     -0.6606284     -1.5028732
## [588,]      0.379543 -0.05776789 -0.9986523      0.2461164     -0.1332367
## [589,]      0.379543  1.74901494  0.2199577      0.2461164     -0.1332367
## [590,]     -1.025818 -0.96115930 -0.9986523     -1.5673732     -0.1332367
## [591,]      0.379543  0.84562353  0.2199577      0.2461164     -0.1332367
```

```
## [592,]      0.379543 -0.05776789  1.0323644      -1.5673732      1.2363997
## [593,]      0.379543  1.74901494 -0.5924489       1.1528613     -0.1332367
## [594,]      0.379543 -0.05776789 -0.1862456      -0.6606284     -0.1332367
## [595,]      1.784904 -0.96115930  0.6261610       0.2461164     -0.1332367
## [596,]      0.379543  2.65240635  0.2199577      -0.6606284      1.2363997
## [597,]      1.784904 -0.96115930  0.6261610       0.2461164      1.2363997
## [598,]     -1.025818 -0.05776789 -0.1862456       1.1528613     -0.1332367
## [599,]      0.379543 -0.96115930  0.6261610       0.2461164      1.2363997
## [600,]      0.379543 -0.96115930 -1.4048556      -0.6606284     -0.1332367
## [601,]     -1.025818 -0.05776789 -0.1862456       0.2461164     -0.1332367
## [602,]     -1.025818 -0.05776789 -0.9986523       0.2461164      1.2363997
## [603,]     -1.025818 -0.05776789 -0.1862456       1.1528613      1.2363997
## [604,]     -1.025818 -0.96115930  0.6261610       0.2461164      1.2363997
## [605,]      0.379543 -0.05776789 -0.1862456      -0.6606284     -0.1332367
## [606,]     -1.025818 -0.05776789 -1.8110589      -1.5673732     -1.5028732
## [607,]     -1.025818 -0.96115930  0.6261610       1.1528613      1.2363997
## [608,]      0.379543  0.84562353  1.0323644       1.1528613     -0.1332367
## [609,]      0.379543 -0.05776789  1.0323644       1.1528613      1.2363997
## [610,]      0.379543  1.74901494  0.2199577      -1.5673732     -0.1332367
## [611,]     -1.025818  0.84562353  0.2199577       1.1528613     -1.5028732
## [612,]      0.379543  0.84562353 -0.1862456       0.2461164      1.2363997
## [613,]      0.379543 -0.05776789  1.0323644      -0.6606284     -0.1332367
## [614,]      0.379543 -0.96115930 -1.4048556       1.1528613     -0.1332367
## [615,]     -1.025818 -0.96115930  0.6261610       0.2461164     -0.1332367
## [616,]      0.379543 -0.96115930  0.6261610       1.1528613     -0.1332367
## [617,]      0.379543  1.74901494 -0.5924489       0.2461164     -0.1332367
## [618,]      0.379543 -0.05776789 -1.8110589      -0.6606284      1.2363997
## [619,]      1.784904 -0.96115930  0.6261610      -1.5673732      1.2363997
## [620,]      1.784904 -0.05776789  1.0323644      -1.5673732     -1.5028732
## [621,]     -1.025818 -0.96115930  0.6261610      -1.5673732      1.2363997
## [622,]      0.379543 -0.05776789  1.0323644       1.1528613     -0.1332367
## [623,]      0.379543 -0.05776789  1.0323644       1.1528613     -1.5028732
## [624,]     -1.025818 -0.96115930  0.6261610       1.1528613     -1.5028732
## [625,]     -1.025818  0.84562353  1.0323644       1.1528613     -0.1332367
## [626,]      0.379543  0.84562353  1.0323644      -1.5673732     -1.5028732
## [627,]      1.784904 -0.05776789  0.6261610       0.2461164     -0.1332367
## [628,]     -1.025818  1.74901494 -0.1862456       1.1528613     -0.1332367
## [629,]     -1.025818 -0.05776789  1.0323644       0.2461164     -1.5028732
## [630,]     -1.025818 -0.96115930 -1.4048556       1.1528613     -1.5028732
## [631,]     -1.025818 -0.05776789 -0.1862456       1.1528613     -0.1332367
## [632,]      1.784904 -0.96115930 -0.9986523       1.1528613     -0.1332367
## [633,]      0.379543 -0.96115930  0.6261610       1.1528613      1.2363997
## [634,]     -1.025818 -0.96115930 -1.4048556      -1.5673732     -0.1332367
## [635,]      0.379543 -0.05776789  1.0323644      -1.5673732     -0.1332367
## [636,]     -1.025818  0.84562353 -0.1862456       0.2461164     -0.1332367
## [637,]      0.379543 -0.96115930  0.6261610      -0.6606284     -1.5028732
## [638,]      0.379543 -0.96115930 -0.9986523       1.1528613     -1.5028732
## [639,]     -1.025818 -0.05776789  1.0323644      -1.5673732     -0.1332367
## [640,]      0.379543 -0.96115930  0.6261610      -1.5673732     -0.1332367
## [641,]     -1.025818 -0.96115930 -0.9986523       1.1528613     -0.1332367
## [642,]      0.379543 -0.05776789  1.0323644      -0.6606284     -0.1332367
## [643,]     -1.025818 -0.96115930  1.4385677      -0.6606284     -0.1332367
## [644,]      1.784904 -0.05776789 -0.9986523       1.1528613     -0.1332367
## [645,]      0.379543 -0.96115930  0.6261610       1.1528613     -0.1332367
```

```
## [646,]    -1.025818 -0.96115930  1.4385677      0.2461164    -1.5028732
## [647,]     0.379543  1.74901494  1.0323644      1.1528613    -0.1332367
## [648,]    -1.025818  0.84562353 -0.1862456     -0.6606284    -0.1332367
## [649,]     0.379543 -0.96115930  1.4385677      1.1528613    -0.1332367
## [650,]     0.379543  1.74901494  0.2199577      1.1528613     1.2363997
## [651,]     0.379543 -0.05776789 -1.8110589      1.1528613    -0.1332367
## [652,]     0.379543 -0.05776789  1.0323644      1.1528613    -0.1332367
## [653,]     0.379543  0.84562353  1.0323644     -0.6606284     1.2363997
## [654,]     0.379543  1.74901494 -0.5924489     -1.5673732    -1.5028732
## [655,]    -1.025818 -0.05776789 -1.4048556      1.1528613    -0.1332367
## [656,]     0.379543 -0.96115930 -1.4048556     -0.6606284    -1.5028732
## [657,]     0.379543 -0.96115930 -0.9986523      1.1528613     1.2363997
## [658,]    -1.025818 -0.96115930 -0.9986523      1.1528613    -1.5028732
## [659,]     0.379543 -0.96115930  0.6261610     -1.5673732    -0.1332367
## [660,]     0.379543 -0.05776789  1.0323644      1.1528613     1.2363997
## [661,]    -1.025818 -0.96115930 -0.9986523      1.1528613    -1.5028732
## [662,]     0.379543 -0.05776789 -0.1862456     -0.6606284    -1.5028732
## [663,]    -1.025818 -0.96115930  1.4385677      0.2461164     1.2363997
## [664,]     0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [665,]     0.379543 -0.05776789 -1.8110589      1.1528613    -0.1332367
## [666,]    -1.025818 -0.96115930  1.4385677      1.1528613     1.2363997
## [667,]     0.379543 -0.05776789 -0.1862456      0.2461164    -0.1332367
## [668,]    -2.431178 -0.96115930 -0.9986523      1.1528613    -1.5028732
## [669,]     0.379543 -0.96115930  0.6261610      0.2461164    -1.5028732
## [670,]     0.379543 -0.96115930 -0.9986523     -1.5673732    -0.1332367
## [671,]     0.379543 -0.96115930  0.6261610      0.2461164     1.2363997
## [672,]     0.379543 -0.96115930 -0.9986523     -0.6606284    -1.5028732
## [673,]    -1.025818 -0.05776789  1.0323644      0.2461164     1.2363997
## [674,]    -1.025818 -0.96115930  0.6261610     -1.5673732     1.2363997
## [675,]    -1.025818  0.84562353 -1.8110589     -0.6606284    -1.5028732
## [676,]    -1.025818 -0.96115930  1.4385677      0.2461164    -0.1332367
## [677,]     0.379543 -0.05776789 -1.8110589      1.1528613    -0.1332367
## [678,]     0.379543  0.84562353 -0.9986523     -0.6606284    -0.1332367
## [679,]     0.379543 -0.96115930  0.6261610      0.2461164    -0.1332367
## [680,]     0.379543 -0.05776789  1.0323644      0.2461164    -0.1332367
## [681,]     0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [682,]     0.379543  0.84562353  0.2199577     -1.5673732    -0.1332367
## [683,]    -1.025818 -0.96115930 -0.9986523     -0.6606284    -0.1332367
## [684,]    -1.025818 -0.96115930  1.4385677     -0.6606284    -0.1332367
## [685,]    -1.025818  0.84562353  1.0323644     -0.6606284    -1.5028732
## [686,]    -1.025818 -0.05776789  1.0323644     -1.5673732     1.2363997
## [687,]     0.379543 -0.96115930 -0.9986523     -1.5673732     1.2363997
## [688,]     0.379543 -0.96115930 -0.9986523      0.2461164     1.2363997
## [689,]    -1.025818 -0.96115930  1.4385677     -0.6606284     1.2363997
## [690,]     0.379543 -0.96115930 -0.9986523     -1.5673732     1.2363997
## [691,]     0.379543 -0.05776789 -1.8110589      1.1528613    -0.1332367
## [692,]     0.379543 -0.96115930  0.6261610     -0.6606284    -1.5028732
## [693,]     0.379543 -0.05776789 -0.1862456     -1.5673732    -0.1332367
## [694,]    -1.025818  0.84562353  1.0323644      1.1528613    -0.1332367
## [695,]    -1.025818 -0.05776789 -1.8110589      1.1528613     1.2363997
## [696,]    -1.025818  0.84562353  1.0323644      0.2461164    -0.1332367
## [697,]     0.379543 -0.05776789 -0.9986523     -0.6606284    -0.1332367
## [698,]     0.379543 -0.96115930  1.4385677      1.1528613    -0.1332367
## [699,]     0.379543 -0.05776789  1.0323644      0.2461164    -0.1332367
```

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## [700,]      0.379543  1.74901494 -0.5924489      1.1528613  -0.1332367
## [701,]      0.379543 -0.96115930  0.6261610      0.2461164   1.2363997
## [702,]      0.379543  1.74901494 -0.5924489      0.2461164  -1.5028732
## [703,]      0.379543  0.84562353  1.0323644      0.2461164  -1.5028732
## [704,]      0.379543 -0.05776789  1.0323644      1.1528613   1.2363997
## [705,]      0.379543  0.84562353  1.0323644      1.1528613  -1.5028732
## [706,]      1.784904  0.84562353  1.0323644      0.2461164   1.2363997
## [707,]      1.784904  1.74901494  1.0323644     -0.6606284   1.2363997
## [708,]      1.784904 -0.05776789 -0.1862456      0.2461164  -1.5028732
## [709,]      0.379543 -0.05776789  1.0323644      1.1528613  -1.5028732
## [710,]     -1.025818 -0.96115930  0.6261610     -1.5673732   1.2363997
## [711,]      0.379543  1.74901494 -0.5924489      0.2461164   1.2363997
## [712,]     -1.025818 -0.96115930  0.6261610     -1.5673732   1.2363997
## [713,]      0.379543 -0.96115930  0.6261610      1.1528613   1.2363997
## [714,]      0.379543 -0.96115930 -0.9986523      1.1528613  -1.5028732
## [715,]      0.379543  1.74901494  0.2199577      1.1528613  -1.5028732
## [716,]      1.784904 -0.05776789 -1.8110589     -0.6606284  -0.1332367
## [717,]      0.379543  2.65240635  0.2199577      0.2461164  -1.5028732
## [718,]      0.379543 -0.96115930 -0.9986523     -0.6606284  -0.1332367
## [719,]      0.379543 -0.05776789 -0.9986523     -1.5673732  -0.1332367
## [720,]      0.379543 -0.05776789  1.0323644      1.1528613   1.2363997
## [721,]      0.379543 -0.96115930  0.6261610      0.2461164  -0.1332367
## [722,]      0.379543  1.74901494 -0.1862456      0.2461164  -0.1332367
## [723,]      0.379543 -0.96115930  0.6261610      0.2461164  -0.1332367
## [724,]      0.379543  0.84562353 -0.1862456      0.2461164  -1.5028732
## [725,]     -1.025818 -0.05776789 -0.1862456      0.2461164  -1.5028732
## [726,]     -1.025818 -0.96115930 -0.9986523     -0.6606284  -1.5028732
## [727,]      0.379543 -0.05776789 -0.1862456     -1.5673732  -0.1332367
## [728,]      0.379543 -0.96115930  0.6261610      1.1528613   1.2363997
## [729,]      0.379543  0.84562353 -0.1862456      0.2461164  -0.1332367
## [730,]      0.379543  0.84562353 -1.8110589      0.2461164  -1.5028732
## [731,]      1.784904  0.84562353  0.2199577     -1.5673732  -0.1332367
## [732,]     -1.025818 -0.96115930  0.6261610     -1.5673732   1.2363997
## [733,]      0.379543 -0.96115930 -0.9986523     -0.6606284   1.2363997
## [734,]      1.784904 -0.05776789 -0.1862456      1.1528613  -0.1332367
## [735,]     -2.431178 -0.96115930 -0.9986523     -1.5673732  -0.1332367
## [736,]     -1.025818 -0.05776789 -1.8110589      0.2461164   1.2363997
## [737,]     -1.025818  0.84562353 -1.8110589      0.2461164   1.2363997
## [738,]      0.379543 -0.05776789 -0.1862456      0.2461164   1.2363997
## [739,]     -1.025818  1.74901494 -0.1862456      1.1528613  -0.1332367
## [740,]      0.379543 -0.05776789 -0.1862456      1.1528613  -0.1332367
## [741,]      0.379543 -0.96115930 -0.9986523      1.1528613  -1.5028732
## [742,]      0.379543  2.65240635 -0.5924489      0.2461164  -0.1332367
## [743,]      0.379543 -0.96115930 -0.9986523      1.1528613  -0.1332367
## [744,]     -1.025818  1.74901494 -0.1862456      1.1528613   1.2363997
## [745,]     -2.431178 -0.05776789 -1.8110589     -0.6606284  -0.1332367
## [746,]      0.379543 -0.05776789 -1.8110589     -0.6606284  -0.1332367
## [747,]     -2.431178  2.65240635  0.2199577      0.2461164  -1.5028732
## [748,]      0.379543 -0.05776789  1.0323644      1.1528613   1.2363997
## [749,]     -2.431178 -0.05776789  1.0323644     -1.5673732   1.2363997
## [750,]     -2.431178  2.65240635 -0.5924489      1.1528613  -0.1332367
## [751,]      1.784904  1.74901494  1.0323644      1.1528613  -0.1332367
## [752,]      0.379543 -0.05776789  1.0323644      0.2461164  -0.1332367
## [753,]      1.784904 -0.96115930 -0.9986523     -1.5673732   1.2363997
```

```
## [754,]      0.379543  0.84562353 -0.1862456   -1.5673732    1.2363997
## [755,]     -1.025818 -0.96115930  1.4385677    1.1528613    1.2363997
## [756,]      0.379543  1.74901494 -0.5924489    1.1528613   -0.1332367
## [757,]      0.379543 -0.96115930 -0.9986523    0.2461164    1.2363997
## [758,]      1.784904 -0.05776789  1.0323644    1.1528613   -1.5028732
## [759,]      0.379543  0.84562353 -0.5924489    1.1528613   -0.1332367
## [760,]      0.379543 -0.96115930 -1.4048556   -0.6606284    1.2363997
## [761,]     -1.025818  0.84562353  1.0323644   -0.6606284   -0.1332367
## [762,]      0.379543 -0.05776789 -0.9986523    0.2461164   -1.5028732
## [763,]      0.379543 -0.96115930  0.6261610   -1.5673732   -0.1332367
## [764,]      0.379543 -0.96115930  1.4385677    0.2461164   -0.1332367
## [765,]      0.379543 -0.96115930  1.4385677   -0.6606284   -0.1332367
## [766,]      0.379543 -0.96115930  0.6261610    0.2461164   -0.1332367
## [767,]      0.379543  2.65240635  0.2199577    0.2461164   -0.1332367
## [768,]      0.379543 -0.05776789 -1.8110589   -0.6606284    1.2363997
## [769,]      0.379543 -0.05776789  1.0323644   -1.5673732   -0.1332367
## [770,]     -1.025818 -0.96115930  0.6261610    0.2461164   -1.5028732
## [771,]      0.379543  2.65240635  0.2199577    1.1528613   -1.5028732
## [772,]     -1.025818  0.84562353  1.0323644    0.2461164   -0.1332367
## [773,]      0.379543 -0.96115930  0.6261610    0.2461164   -0.1332367
## [774,]     -1.025818  0.84562353 -0.1862456    1.1528613    1.2363997
## [775,]     -1.025818  1.74901494 -0.5924489   -1.5673732    1.2363997
## [776,]     -1.025818  0.84562353  1.0323644    1.1528613   -1.5028732
## [777,]      0.379543 -0.96115930  1.4385677    1.1528613    1.2363997
## [778,]     -1.025818 -0.96115930 -0.9986523   -1.5673732    1.2363997
## [779,]     -1.025818 -0.05776789  0.6261610   -1.5673732   -1.5028732
## [780,]      0.379543 -0.96115930  0.6261610    0.2461164   -0.1332367
## [781,]     -1.025818  0.84562353 -1.8110589   -1.5673732    1.2363997
## [782,]     -1.025818 -0.96115930 -0.9986523   -1.5673732   -0.1332367
## [783,]      0.379543 -0.05776789 -0.1862456   -1.5673732   -0.1332367
## [784,]      1.784904 -0.96115930  0.6261610    0.2461164   -0.1332367
## [785,]     -1.025818  0.84562353 -1.8110589    0.2461164   -0.1332367
## [786,]      0.379543  0.84562353 -1.8110589    1.1528613   -0.1332367
## [787,]     -2.431178 -0.96115930 -0.9986523    0.2461164   -0.1332367
## [788,]      0.379543  0.84562353 -0.1862456   -0.6606284   -0.1332367
## [789,]      0.379543 -0.05776789  0.6261610    0.2461164    1.2363997
## [790,]     -1.025818  0.84562353 -1.4048556   -1.5673732   -0.1332367
## [791,]     -1.025818  0.84562353 -1.8110589    1.1528613   -1.5028732
## [792,]      0.379543  0.84562353  1.0323644   -1.5673732    1.2363997
## [793,]     -1.025818 -0.05776789  0.6261610    0.2461164    1.2363997
## [794,]      0.379543 -0.96115930 -0.9986523    0.2461164   -1.5028732
## [795,]      0.379543 -0.05776789 -1.8110589    1.1528613    1.2363997
## [796,]     -1.025818 -0.05776789  1.0323644    1.1528613   -1.5028732
## [797,]      0.379543 -0.96115930 -0.9986523    1.1528613   -0.1332367
## [798,]      0.379543 -0.96115930 -0.9986523    0.2461164   -1.5028732
## [799,]     -1.025818 -0.96115930  0.6261610   -0.6606284    1.2363997
## [800,]      0.379543  1.74901494 -0.5924489   -1.5673732   -0.1332367
## [801,]     -1.025818 -0.96115930 -0.9986523   -0.6606284   -1.5028732
## [802,]      0.379543 -0.05776789  1.0323644    0.2461164    1.2363997
## [803,]      0.379543 -0.05776789  1.0323644   -0.6606284   -0.1332367
## [804,]     -1.025818 -0.96115930  0.6261610    1.1528613   -0.1332367
## [805,]      1.784904  1.74901494 -0.5924489    1.1528613    1.2363997
## [806,]     -1.025818 -0.05776789  1.0323644    0.2461164   -0.1332367
## [807,]      0.379543  0.84562353 -1.8110589   -0.6606284    1.2363997
```

```
## [808,]      -1.025818  0.84562353  1.0323644      0.2461164  -1.5028732
## [809,]       0.379543 -0.96115930  0.6261610      1.1528613  -1.5028732
## [810,]       0.379543  0.84562353 -0.1862456     -0.6606284  -1.5028732
## [811,]       0.379543  1.74901494 -0.5924489      0.2461164  -0.1332367
## [812,]       0.379543  0.84562353  1.0323644     -0.6606284   1.2363997
## [813,]       0.379543  0.84562353 -0.1862456     -1.5673732  -0.1332367
## [814,]       0.379543  1.74901494 -1.8110589      1.1528613  -1.5028732
## [815,]      -1.025818  2.65240635  0.2199577      0.2461164   1.2363997
## [816,]      -1.025818 -0.96115930  0.6261610     -0.6606284   1.2363997
## [817,]       0.379543 -0.05776789 -0.9986523     -0.6606284   1.2363997
## [818,]       0.379543 -0.05776789 -0.1862456      1.1528613   1.2363997
## [819,]       1.784904 -0.96115930  1.4385677      1.1528613  -0.1332367
## [820,]      -1.025818 -0.96115930  0.6261610     -0.6606284  -0.1332367
## [821,]       0.379543 -0.05776789  1.0323644      1.1528613  -1.5028732
## [822,]      -1.025818  1.74901494  1.0323644     -0.6606284  -0.1332367
## [823,]       0.379543 -0.05776789 -0.1862456      0.2461164   1.2363997
## [824,]       0.379543 -0.96115930  0.6261610     -0.6606284  -1.5028732
## [825,]      -2.431178 -0.05776789 -0.9986523      1.1528613   1.2363997
## [826,]      -1.025818 -0.05776789 -0.1862456      1.1528613  -0.1332367
## [827,]       1.784904 -0.96115930 -1.4048556      0.2461164  -0.1332367
## [828,]      -1.025818 -0.96115930  0.6261610      0.2461164  -1.5028732
## [829,]       0.379543 -0.96115930 -0.9986523      0.2461164   1.2363997
## [830,]       0.379543 -0.05776789  1.0323644     -1.5673732   1.2363997
## [831,]       0.379543 -0.96115930 -0.9986523      1.1528613  -0.1332367
## [832,]       0.379543 -0.96115930 -0.9986523      0.2461164  -0.1332367
## [833,]      -1.025818 -0.05776789 -1.8110589      1.1528613  -1.5028732
## [834,]      -1.025818 -0.96115930  0.6261610      0.2461164  -0.1332367
## [835,]       0.379543 -0.05776789  1.0323644      0.2461164  -0.1332367
## [836,]       0.379543 -0.96115930 -1.4048556      0.2461164   1.2363997
## [837,]      -1.025818  0.84562353  1.0323644     -1.5673732  -0.1332367
## [838,]       0.379543  0.84562353  0.2199577      0.2461164   1.2363997
## [839,]       0.379543  1.74901494  1.0323644     -1.5673732   1.2363997
## [840,]       0.379543 -0.05776789  1.0323644     -1.5673732   1.2363997
## [841,]      -1.025818 -0.96115930 -0.9986523      0.2461164  -0.1332367
## [842,]       0.379543 -0.96115930 -0.9986523     -0.6606284   1.2363997
## [843,]       0.379543 -0.96115930 -0.9986523      1.1528613  -0.1332367
## [844,]       1.784904 -0.96115930 -0.9986523      1.1528613  -0.1332367
## [845,]      -1.025818 -0.05776789  1.0323644      0.2461164  -0.1332367
## [846,]      -1.025818 -0.05776789  0.6261610      1.1528613  -0.1332367
## [847,]      -1.025818  0.84562353 -0.1862456     -0.6606284  -1.5028732
## [848,]      -1.025818 -0.05776789 -1.8110589     -1.5673732   1.2363997
## [849,]      -1.025818 -0.96115930 -0.9986523      1.1528613  -0.1332367
## [850,]      -2.431178 -0.05776789  1.0323644      0.2461164   1.2363997
## [851,]       0.379543 -0.96115930  1.4385677     -1.5673732  -1.5028732
## [852,]       0.379543  2.65240635 -0.5924489     -1.5673732  -1.5028732
## [853,]       0.379543 -0.96115930 -0.9986523      1.1528613  -0.1332367
## [854,]       0.379543 -0.96115930  0.6261610     -1.5673732   1.2363997
## [855,]       0.379543 -0.96115930  0.6261610      0.2461164  -0.1332367
## [856,]      -1.025818 -0.05776789 -0.1862456      1.1528613  -0.1332367
## [857,]      -1.025818 -0.96115930 -0.9986523      0.2461164   1.2363997
## [858,]       0.379543 -0.96115930  0.6261610      0.2461164   1.2363997
## [859,]       0.379543  2.65240635 -0.5924489      0.2461164  -1.5028732
## [860,]      -2.431178 -0.96115930  0.6261610      1.1528613  -0.1332367
## [861,]      -1.025818 -0.96115930  0.6261610      1.1528613  -0.1332367
```

```
## [862,]     0.379543  1.74901494 -0.5924489   -1.5673732   -0.1332367
## [863,]    -2.431178 -0.96115930  0.6261610    0.2461164    1.2363997
## [864,]     0.379543 -0.96115930 -1.4048556    0.2461164   -0.1332367
## [865,]    -1.025818 -0.96115930  0.6261610   -1.5673732   -1.5028732
## [866,]     0.379543 -0.05776789  1.0323644   -1.5673732   -1.5028732
## [867,]     0.379543 -0.05776789  1.0323644   -0.6606284   -0.1332367
## [868,]     0.379543  1.74901494 -0.5924489   -1.5673732   -0.1332367
## [869,]    -1.025818 -0.96115930 -0.9986523   -1.5673732   -0.1332367
## [870,]     0.379543  2.65240635  0.2199577   -0.6606284   -0.1332367
## [871,]     0.379543 -0.05776789  1.0323644   -1.5673732   -0.1332367
## [872,]     0.379543 -0.96115930 -0.9986523   -0.6606284   -0.1332367
## [873,]     0.379543 -0.05776789  1.0323644    0.2461164   -0.1332367
## [874,]    -2.431178 -0.96115930 -0.9986523    0.2461164   -1.5028732
## [875,]     0.379543 -0.05776789 -0.9986523    0.2461164   -1.5028732
## [876,]     0.379543 -0.05776789  0.6261610    1.1528613    1.2363997
## [877,]     1.784904 -0.96115930  1.4385677    1.1528613    1.2363997
## [878,]     0.379543 -0.05776789 -0.1862456    1.1528613   -1.5028732
## [879,]     1.784904 -0.05776789 -1.4048556   -1.5673732   -0.1332367
## [880,]     1.784904 -0.05776789  1.0323644    1.1528613   -1.5028732
## [881,]    -1.025818 -0.96115930 -0.9986523   -0.6606284   -0.1332367
## [882,]     0.379543 -0.05776789  0.6261610    0.2461164    1.2363997
## [883,]    -2.431178  0.84562353 -0.1862456   -1.5673732   -1.5028732
## [884,]     0.379543 -0.96115930  0.6261610    1.1528613   -0.1332367
## [885,]    -1.025818 -0.05776789  1.0323644   -0.6606284   -1.5028732
## [886,]     0.379543 -0.05776789  1.0323644    1.1528613    1.2363997
## [887,]     0.379543 -0.96115930  0.6261610   -0.6606284   -0.1332367
## [888,]     0.379543  0.84562353  0.2199577   -1.5673732   -0.1332367
## [889,]    -1.025818  0.84562353  1.0323644    1.1528613   -0.1332367
## [890,]     0.379543 -0.96115930  0.6261610   -1.5673732   -0.1332367
## [891,]     0.379543  0.84562353 -0.1862456    0.2461164   -1.5028732
## [892,]     1.784904 -0.96115930  0.6261610    1.1528613   -0.1332367
## [893,]    -1.025818 -0.96115930  0.6261610   -0.6606284    1.2363997
## [894,]     0.379543 -0.96115930  0.6261610    1.1528613   -1.5028732
## [895,]     0.379543  1.74901494  0.2199577    1.1528613   -0.1332367
## [896,]     0.379543 -0.05776789 -1.8110589   -1.5673732   -0.1332367
## [897,]    -1.025818 -0.05776789 -1.8110589   -1.5673732    1.2363997
## [898,]    -1.025818 -0.05776789  1.0323644    1.1528613    1.2363997
## [899,]    -2.431178  2.65240635  0.2199577    1.1528613   -0.1332367
## [900,]    -1.025818  2.65240635 -0.5924489    0.2461164   -0.1332367
## [901,]     0.379543 -0.96115930  0.6261610   -0.6606284   -0.1332367
## [902,]     1.784904 -0.96115930 -0.9986523   -0.6606284    1.2363997
## [903,]     0.379543 -0.96115930  0.6261610    0.2461164   -1.5028732
## [904,]     0.379543 -0.05776789 -1.8110589    1.1528613   -1.5028732
## [905,]    -1.025818  2.65240635  0.2199577    1.1528613    1.2363997
## [906,]    -1.025818  1.74901494  0.2199577    1.1528613   -1.5028732
## [907,]     1.784904 -0.96115930  0.6261610    0.2461164   -0.1332367
## [908,]     0.379543  2.65240635 -0.5924489   -0.6606284   -0.1332367
## [909,]     1.784904  0.84562353  1.0323644    0.2461164   -1.5028732
## [910,]     1.784904 -0.96115930  0.6261610    1.1528613    1.2363997
## [911,]     0.379543 -0.96115930  0.6261610    0.2461164   -0.1332367
## [912,]    -2.431178 -0.96115930  1.4385677    1.1528613    1.2363997
## [913,]     0.379543 -0.96115930  0.6261610    1.1528613    1.2363997
## [914,]    -2.431178  2.65240635 -0.5924489   -0.6606284    1.2363997
## [915,]    -1.025818  1.74901494 -1.8110589   -0.6606284   -1.5028732
```

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```
## [916,]      -1.025818 -0.96115930 -0.9986523      0.2461164    1.2363997
## [917,]      -1.025818  2.65240635 -0.5924489     -0.6606284   -0.1332367
## [918,]       0.379543 -0.05776789  1.0323644     -1.5673732    1.2363997
## [919,]       0.379543  2.65240635 -0.5924489     -0.6606284   -1.5028732
## [920,]       0.379543  0.84562353 -0.1862456      1.1528613    1.2363997
## [921,]       0.379543 -0.05776789 -0.9986523     -0.6606284   -1.5028732
## [922,]       0.379543 -0.96115930 -0.9986523      0.2461164    1.2363997
## [923,]       1.784904  2.65240635 -0.5924489     -1.5673732   -1.5028732
## [924,]      -1.025818 -0.05776789 -1.4048556     -0.6606284   -0.1332367
## [925,]       0.379543 -0.96115930  0.6261610      0.2461164   -0.1332367
## [926,]       1.784904 -0.05776789  0.6261610     -0.6606284   -0.1332367
## [927,]      -1.025818  0.84562353  1.0323644      1.1528613    1.2363997
## [928,]       0.379543 -0.05776789 -0.1862456     -0.6606284    1.2363997
## [929,]       0.379543  0.84562353 -1.8110589      1.1528613   -0.1332367
## [930,]      -1.025818 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [931,]      -1.025818 -0.96115930 -0.9986523      0.2461164    1.2363997
## [932,]       0.379543 -0.05776789 -0.1862456      0.2461164    1.2363997
## [933,]       0.379543 -0.96115930 -0.9986523      0.2461164   -1.5028732
## [934,]       0.379543 -0.96115930  0.6261610     -1.5673732    1.2363997
## [935,]       0.379543 -0.96115930  0.6261610     -0.6606284    1.2363997
## [936,]       1.784904 -0.05776789  1.0323644      1.1528613   -0.1332367
## [937,]       0.379543  2.65240635 -0.5924489     -0.6606284    1.2363997
## [938,]      -1.025818  1.74901494 -0.5924489     -0.6606284   -1.5028732
## [939,]       0.379543 -0.96115930  0.6261610      0.2461164   -1.5028732
## [940,]       0.379543 -0.05776789 -0.9986523      0.2461164   -0.1332367
## [941,]       0.379543 -0.96115930  0.6261610     -1.5673732    1.2363997
## [942,]      -1.025818 -0.05776789 -0.9986523      1.1528613   -0.1332367
## [943,]       0.379543  0.84562353 -1.8110589      0.2461164   -0.1332367
## [944,]       0.379543 -0.96115930 -1.4048556     -1.5673732    1.2363997
## [945,]      -2.431178 -0.05776789 -0.9986523      1.1528613   -0.1332367
## [946,]       0.379543  1.74901494  0.2199577     -1.5673732   -0.1332367
## [947,]      -1.025818  0.84562353  1.0323644     -0.6606284    1.2363997
## [948,]       0.379543  0.84562353  1.0323644     -0.6606284    1.2363997
## [949,]       0.379543  0.84562353 -0.5924489     -1.5673732   -0.1332367
## [950,]       0.379543 -0.05776789 -0.1862456      0.2461164    1.2363997
## [951,]       0.379543  0.84562353  1.0323644      0.2461164   -1.5028732
## [952,]      -2.431178 -0.05776789  1.0323644     -0.6606284    1.2363997
## [953,]       0.379543 -0.96115930  1.4385677     -0.6606284    1.2363997
## [954,]       0.379543 -0.96115930 -0.9986523     -1.5673732   -0.1332367
## [955,]       0.379543  1.74901494 -0.5924489      0.2461164   -0.1332367
## [956,]      -2.431178  2.65240635 -0.5924489      0.2461164   -0.1332367
## [957,]       0.379543  2.65240635 -0.5924489     -0.6606284    1.2363997
## [958,]       0.379543 -0.96115930  0.6261610      0.2461164   -1.5028732
## [959,]       0.379543  0.84562353 -1.8110589      1.1528613   -1.5028732
## [960,]       0.379543 -0.05776789  0.6261610      1.1528613    1.2363997
## [961,]       0.379543 -0.05776789  1.0323644     -1.5673732   -1.5028732
## [962,]       0.379543 -0.05776789  0.6261610      0.2461164    1.2363997
## [963,]       0.379543  1.74901494 -0.5924489     -0.6606284   -1.5028732
## [964,]       0.379543 -0.05776789  1.0323644     -1.5673732   -1.5028732
## [965,]       0.379543 -0.05776789  1.0323644     -1.5673732    1.2363997
## [966,]       0.379543 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [967,]      -1.025818  0.84562353 -0.1862456     -1.5673732   -0.1332367
## [968,]       0.379543 -0.96115930 -0.9986523     -0.6606284   -0.1332367
## [969,]       1.784904 -0.05776789  1.0323644     -1.5673732   -0.1332367
```

```
## [970,]      0.379543  0.84562353 -0.1862456      1.1528613    1.2363997
## [971,]      1.784904 -0.96115930  1.4385677      1.1528613   -0.1332367
## [972,]     -1.025818  1.74901494 -0.1862456     -0.6606284    1.2363997
## [973,]      0.379543 -0.96115930 -0.9986523      1.1528613    1.2363997
## [974,]     -1.025818 -0.05776789 -0.9986523      1.1528613   -0.1332367
## [975,]     -2.431178 -0.05776789  1.0323644      1.1528613    1.2363997
## [976,]      1.784904  1.74901494  1.0323644      0.2461164    1.2363997
## [977,]      0.379543  1.74901494 -0.1862456     -0.6606284   -0.1332367
## [978,]     -1.025818 -0.96115930  0.6261610      0.2461164   -1.5028732
## [979,]      1.784904 -0.05776789 -1.8110589      0.2461164   -1.5028732
## [980,]      0.379543 -0.05776789 -0.9986523      0.2461164   -0.1332367
## [981,]     -1.025818 -0.96115930  1.4385677      1.1528613    1.2363997
## [982,]      0.379543 -0.05776789  1.0323644      0.2461164   -0.1332367
## [983,]      1.784904 -0.96115930  0.6261610      0.2461164   -1.5028732
## [984,]      0.379543 -0.05776789 -1.8110589      1.1528613    1.2363997
## [985,]     -1.025818 -0.05776789  1.0323644     -1.5673732   -0.1332367
## [986,]      0.379543 -0.05776789 -0.1862456      0.2461164   -0.1332367
## [987,]     -1.025818 -0.05776789  1.0323644      1.1528613   -0.1332367
## [988,]      0.379543  0.84562353  1.0323644     -0.6606284   -0.1332367
## [989,]      0.379543 -0.05776789  0.6261610      1.1528613   -1.5028732
## [990,]      0.379543 -0.96115930  0.6261610      0.2461164   -0.1332367
## [991,]      0.379543 -0.05776789  1.0323644      1.1528613   -0.1332367
## [992,]      0.379543 -0.05776789  1.0323644     -0.6606284   -0.1332367
## [993,]      0.379543  0.84562353 -1.8110589      0.2461164   -0.1332367
## [994,]      1.784904 -0.05776789  1.0323644      0.2461164   -0.1332367
## [995,]      1.784904  1.74901494 -0.1862456      0.2461164   -0.1332367
## [996,]     -1.025818 -0.05776789  0.6261610      0.2461164    1.2363997
## [997,]     -1.025818 -0.05776789  1.0323644      1.1528613   -0.1332367
## [998,]      0.379543 -0.96115930  0.6261610      0.2461164    1.2363997
## [999,]     -1.025818 -0.96115930  0.6261610      1.1528613    1.2363997
## [1000,]     0.379543  1.74901494 -0.5924489     -1.5673732   -0.1332367
## [1001,]     0.379543 -0.96115930 -0.9986523     -1.5673732   -0.1332367
## [1002,]     0.379543 -0.96115930 -0.9986523      0.2461164    1.2363997
## [1003,]     0.379543  0.84562353 -0.1862456      1.1528613    1.2363997
## [1004,]     0.379543 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [1005,]     1.784904 -0.96115930 -0.9986523     -1.5673732    1.2363997
## [1006,]    -1.025818  0.84562353 -1.4048556     -1.5673732    1.2363997
## [1007,]    -1.025818 -0.05776789 -0.9986523     -1.5673732    1.2363997
## [1008,]     0.379543  0.84562353 -1.8110589      1.1528613    1.2363997
## [1009,]     0.379543  1.74901494  0.2199577      1.1528613    1.2363997
## [1010,]     0.379543  2.65240635  0.2199577     -1.5673732   -0.1332367
## [1011,]     1.784904  1.74901494  0.2199577      1.1528613   -1.5028732
## [1012,]     0.379543 -0.05776789  1.0323644     -0.6606284    1.2363997
## [1013,]    -2.431178 -0.96115930  1.4385677      0.2461164    1.2363997
## [1014,]     0.379543 -0.05776789  1.0323644     -1.5673732   -1.5028732
## [1015,]     0.379543  1.74901494  0.2199577     -0.6606284    1.2363997
## [1016,]     0.379543 -0.96115930  0.6261610     -1.5673732   -1.5028732
## [1017,]    -1.025818 -0.96115930  0.6261610     -0.6606284    1.2363997
## [1018,]     0.379543 -0.96115930 -0.9986523     -1.5673732   -0.1332367
## [1019,]    -1.025818 -0.05776789 -0.9986523      1.1528613    1.2363997
## [1020,]    -1.025818 -0.05776789  1.0323644     -1.5673732   -0.1332367
## [1021,]     0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
## [1022,]    -1.025818 -0.96115930  1.4385677     -1.5673732   -0.1332367
## [1023,]     1.784904 -0.96115930 -0.9986523      0.2461164    1.2363997
```

```
## [1024,]    0.379543 -0.96115930  0.6261610    -1.5673732    -0.1332367
## [1025,]    0.379543  1.74901494  0.2199577     0.2461164    -0.1332367
## [1026,]    0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [1027,]    0.379543 -0.05776789  1.0323644     1.1528613    -0.1332367
## [1028,]   -1.025818 -0.96115930 -0.9986523    -0.6606284    -0.1332367
## [1029,]    1.784904 -0.96115930  0.6261610     0.2461164    -0.1332367
## [1030,]    0.379543 -0.05776789 -0.9986523     0.2461164    -1.5028732
## [1031,]    0.379543  0.84562353  1.0323644     1.1528613    -1.5028732
## [1032,]    0.379543  0.84562353  1.0323644     1.1528613    -1.5028732
## [1033,]   -1.025818 -0.96115930 -0.9986523    -1.5673732     1.2363997
## [1034,]    1.784904  0.84562353 -0.1862456    -0.6606284     1.2363997
## [1035,]   -2.431178  0.84562353 -1.8110589    -1.5673732    -1.5028732
## [1036,]    1.784904 -0.96115930 -1.4048556    -0.6606284     1.2363997
## [1037,]    0.379543 -0.96115930 -0.9986523     1.1528613    -0.1332367
## [1038,]    0.379543  0.84562353 -0.1862456     1.1528613    -0.1332367
## [1039,]    0.379543 -0.05776789  1.0323644    -1.5673732    -1.5028732
## [1040,]    0.379543 -0.96115930 -1.4048556     0.2461164    -0.1332367
## [1041,]   -1.025818  0.84562353  0.2199577    -0.6606284    -1.5028732
## [1042,]    0.379543 -0.05776789  1.0323644    -1.5673732     1.2363997
## [1043,]   -1.025818 -0.96115930 -0.9986523     0.2461164     1.2363997
## [1044,]    1.784904  1.74901494  0.2199577    -0.6606284     1.2363997
## [1045,]    0.379543 -0.05776789 -1.8110589     0.2461164    -0.1332367
## [1046,]    0.379543 -0.96115930  0.6261610     0.2461164    -1.5028732
## [1047,]    0.379543 -0.96115930  0.6261610    -0.6606284     1.2363997
## [1048,]    0.379543 -0.05776789  1.0323644    -1.5673732    -0.1332367
## [1049,]   -2.431178 -0.05776789  1.0323644    -1.5673732     1.2363997
## [1050,]    0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [1051,]    0.379543 -0.96115930 -0.9986523     1.1528613     1.2363997
## [1052,]    0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [1053,]    0.379543 -0.96115930  0.6261610     0.2461164    -1.5028732
## [1054,]    1.784904 -0.05776789  0.6261610     0.2461164    -0.1332367
## [1055,]    0.379543  0.84562353 -1.8110589    -0.6606284    -1.5028732
## [1056,]    0.379543  1.74901494  0.2199577    -1.5673732    -1.5028732
## [1057,]    0.379543 -0.96115930  1.4385677     0.2461164    -0.1332367
## [1058,]    0.379543 -0.05776789  1.0323644    -0.6606284     1.2363997
## [1059,]   -1.025818 -0.05776789  1.0323644    -0.6606284     1.2363997
## [1060,]    0.379543 -0.96115930  1.4385677     0.2461164    -0.1332367
## [1061,]    0.379543 -0.96115930 -0.9986523    -1.5673732     1.2363997
## [1062,]    0.379543 -0.96115930  1.4385677    -0.6606284    -0.1332367
## [1063,]    0.379543  0.84562353 -0.1862456     0.2461164     1.2363997
## [1064,]   -1.025818 -0.05776789  1.0323644     0.2461164    -1.5028732
## [1065,]    0.379543 -0.96115930 -1.4048556     0.2461164    -1.5028732
## [1066,]    0.379543 -0.05776789 -1.8110589     0.2461164    -0.1332367
## [1067,]   -1.025818 -0.96115930 -0.9986523    -0.6606284    -0.1332367
## [1068,]    0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [1069,]   -1.025818 -0.96115930 -0.9986523    -1.5673732     1.2363997
## [1070,]   -1.025818 -0.96115930  0.6261610     0.2461164    -1.5028732
## [1071,]    0.379543 -0.05776789  1.0323644    -1.5673732     1.2363997
## [1072,]   -1.025818 -0.05776789 -0.9986523    -1.5673732    -0.1332367
## [1073,]    0.379543 -0.96115930 -0.9986523    -0.6606284    -0.1332367
## [1074,]   -2.431178 -0.05776789 -0.1862456    -0.6606284    -0.1332367
## [1075,]    0.379543 -0.05776789 -1.8110589     0.2461164     1.2363997
## [1076,]    0.379543  0.84562353 -0.5924489     1.1528613     1.2363997
## [1077,]    0.379543  1.74901494 -0.5924489     1.1528613    -1.5028732
```

```
## [1078,]      -1.025818 -0.96115930  0.6261610      -1.5673732   1.2363997
## [1079,]       0.379543  1.74901494  0.2199577      -1.5673732  -0.1332367
## [1080,]       0.379543  0.84562353 -0.1862456      -0.6606284   1.2363997
## [1081,]       0.379543  1.74901494 -0.5924489      -0.6606284  -0.1332367
## [1082,]      -1.025818  0.84562353 -1.8110589      -0.6606284   1.2363997
## [1083,]       0.379543 -0.05776789 -0.9986523       0.2461164   1.2363997
## [1084,]       0.379543 -0.96115930 -0.9986523      -1.5673732   1.2363997
## [1085,]      -1.025818  0.84562353  1.0323644       0.2461164  -0.1332367
## [1086,]       0.379543 -0.96115930  0.6261610       0.2461164   1.2363997
## [1087,]      -2.431178  1.74901494  0.2199577       1.1528613   1.2363997
## [1088,]       0.379543 -0.96115930  1.4385677       0.2461164  -0.1332367
## [1089,]      -1.025818 -0.96115930 -0.9986523      -0.6606284  -0.1332367
## [1090,]       0.379543 -0.05776789  0.6261610       1.1528613  -0.1332367
## [1091,]      -2.431178 -0.05776789 -1.8110589      -1.5673732  -0.1332367
## [1092,]      -1.025818 -0.05776789 -0.1862456      -0.6606284   1.2363997
## [1093,]       0.379543 -0.96115930  0.6261610       1.1528613  -0.1332367
## [1094,]       0.379543  0.84562353 -1.8110589       1.1528613  -0.1332367
## [1095,]       0.379543 -0.05776789  1.0323644      -1.5673732  -0.1332367
## [1096,]       0.379543 -0.05776789 -0.9986523       0.2461164  -0.1332367
## [1097,]       0.379543  1.74901494 -0.5924489       1.1528613   1.2363997
## [1098,]      -1.025818 -0.96115930 -0.9986523      -1.5673732  -1.5028732
## [1099,]       0.379543 -0.05776789 -1.8110589       1.1528613  -1.5028732
## [1100,]       0.379543  0.84562353 -1.8110589      -0.6606284  -1.5028732
## [1101,]      -1.025818 -0.96115930  1.4385677       0.2461164  -0.1332367
## [1102,]      -1.025818 -0.05776789  0.6261610      -0.6606284  -0.1332367
## [1103,]       0.379543 -0.96115930  1.4385677       1.1528613   1.2363997
## [1104,]       0.379543 -0.05776789  1.0323644       0.2461164  -1.5028732
## [1105,]       1.784904 -0.96115930  0.6261610       0.2461164  -0.1332367
## [1106,]       0.379543 -0.05776789  1.0323644      -1.5673732  -0.1332367
## [1107,]      -1.025818 -0.05776789  1.0323644      -1.5673732  -0.1332367
## [1108,]       0.379543 -0.05776789 -1.4048556       0.2461164  -0.1332367
## [1109,]      -1.025818 -0.96115930 -0.9986523      -1.5673732   1.2363997
## [1110,]       0.379543  0.84562353  1.0323644      -0.6606284  -0.1332367
## [1111,]       0.379543 -0.96115930 -0.9986523      -1.5673732  -1.5028732
## [1112,]      -1.025818  0.84562353 -0.1862456       1.1528613  -0.1332367
## [1113,]       0.379543 -0.05776789 -0.1862456      -0.6606284  -0.1332367
## [1114,]       0.379543 -0.05776789  0.6261610      -1.5673732  -0.1332367
## [1115,]       0.379543 -0.96115930  0.6261610      -1.5673732  -0.1332367
## [1116,]       0.379543 -0.96115930  0.6261610       1.1528613   1.2363997
## [1117,]      -1.025818  2.65240635 -0.5924489       1.1528613  -0.1332367
## [1118,]       0.379543 -0.05776789  0.6261610       1.1528613  -0.1332367
## [1119,]       0.379543 -0.96115930  0.6261610       1.1528613  -0.1332367
## [1120,]       0.379543 -0.05776789  1.0323644      -0.6606284  -0.1332367
## [1121,]       0.379543 -0.05776789  1.0323644      -0.6606284   1.2363997
## [1122,]       0.379543 -0.05776789  1.0323644       0.2461164   1.2363997
## [1123,]       0.379543 -0.96115930 -0.9986523      -1.5673732   1.2363997
## [1124,]       0.379543 -0.05776789 -1.8110589       0.2461164   1.2363997
## [1125,]       1.784904  0.84562353  1.0323644       0.2461164  -0.1332367
## [1126,]       0.379543 -0.05776789 -1.8110589       1.1528613  -1.5028732
## [1127,]       0.379543  2.65240635 -0.5924489       0.2461164  -0.1332367
## [1128,]       1.784904 -0.96115930  0.6261610       0.2461164  -0.1332367
## [1129,]       1.784904 -0.05776789 -0.9986523      -1.5673732  -0.1332367
## [1130,]      -1.025818  2.65240635 -0.5924489       1.1528613   1.2363997
## [1131,]       1.784904 -0.05776789 -0.9986523       0.2461164  -0.1332367
```

```
## [1132,]      -1.025818 -0.05776789 -1.8110589      0.2461164    -0.1332367
## [1133,]       0.379543 -0.05776789  1.0323644     -1.5673732    -0.1332367
## [1134,]       1.784904 -0.96115930 -0.9986523     -0.6606284    -1.5028732
## [1135,]      -1.025818 -0.96115930 -0.9986523      1.1528613    -0.1332367
## [1136,]       1.784904  1.74901494 -0.5924489     -1.5673732     1.2363997
## [1137,]       0.379543 -0.96115930 -0.9986523     -0.6606284    -0.1332367
## [1138,]      -1.025818 -0.96115930  0.6261610      0.2461164    -0.1332367
## [1139,]       0.379543  1.74901494 -1.8110589      0.2461164    -0.1332367
## [1140,]       1.784904 -0.96115930  0.6261610      1.1528613    -0.1332367
## [1141,]       0.379543  2.65240635  0.2199577      1.1528613    -1.5028732
## [1142,]      -1.025818 -0.96115930  0.6261610     -0.6606284    -0.1332367
## [1143,]      -2.431178 -0.05776789 -0.9986523     -1.5673732     1.2363997
## [1144,]      -1.025818 -0.05776789  1.0323644     -1.5673732    -0.1332367
## [1145,]       0.379543 -0.05776789  1.0323644     -1.5673732     1.2363997
## [1146,]       0.379543 -0.05776789 -0.1862456      0.2461164    -0.1332367
## [1147,]       1.784904 -0.05776789 -0.1862456      1.1528613    -1.5028732
## [1148,]       0.379543 -0.96115930 -0.9986523     -1.5673732    -0.1332367
## [1149,]       0.379543 -0.05776789 -0.1862456     -1.5673732    -0.1332367
## [1150,]      -1.025818 -0.96115930 -0.9986523     -1.5673732    -1.5028732
## [1151,]       1.784904 -0.05776789  0.6261610     -1.5673732    -0.1332367
## [1152,]      -2.431178 -0.05776789 -0.1862456     -1.5673732    -1.5028732
## [1153,]       0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [1154,]       0.379543 -0.96115930  1.4385677      1.1528613     1.2363997
## [1155,]       0.379543  2.65240635 -0.5924489      0.2461164    -0.1332367
## [1156,]      -1.025818 -0.05776789 -0.9986523      0.2461164    -1.5028732
## [1157,]      -1.025818  0.84562353 -0.1862456      0.2461164    -0.1332367
## [1158,]       0.379543 -0.05776789 -1.8110589      0.2461164    -0.1332367
## [1159,]       0.379543 -0.05776789 -0.1862456      0.2461164    -0.1332367
## [1160,]       0.379543 -0.05776789 -0.1862456      0.2461164     1.2363997
## [1161,]      -1.025818 -0.05776789 -0.1862456      1.1528613    -1.5028732
## [1162,]      -1.025818  0.84562353 -0.1862456      0.2461164    -0.1332367
## [1163,]      -1.025818  0.84562353  1.0323644     -1.5673732    -0.1332367
## [1164,]       0.379543 -0.96115930  0.6261610     -0.6606284    -0.1332367
## [1165,]       0.379543  0.84562353 -0.1862456      1.1528613     1.2363997
## [1166,]       0.379543 -0.05776789 -1.4048556      1.1528613    -0.1332367
## [1167,]      -1.025818  1.74901494 -0.5924489      1.1528613    -0.1332367
## [1168,]      -2.431178 -0.05776789  1.0323644      1.1528613    -1.5028732
## [1169,]       0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [1170,]       1.784904 -0.96115930  0.6261610      0.2461164    -0.1332367
## [1171,]       0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [1172,]       0.379543 -0.96115930 -0.9986523     -1.5673732     1.2363997
## [1173,]      -1.025818 -0.05776789  1.0323644      0.2461164     1.2363997
## [1174,]       0.379543  0.84562353 -1.8110589     -1.5673732    -0.1332367
## [1175,]       1.784904 -0.05776789 -0.1862456      0.2461164    -1.5028732
## [1176,]       0.379543 -0.05776789 -0.1862456     -0.6606284    -0.1332367
## [1177,]       0.379543  1.74901494  0.2199577     -0.6606284    -0.1332367
## [1178,]      -1.025818  0.84562353  0.2199577     -1.5673732    -1.5028732
## [1179,]       0.379543 -0.96115930  1.4385677      0.2461164     1.2363997
## [1180,]       0.379543 -0.05776789  0.6261610     -0.6606284    -1.5028732
## [1181,]       0.379543 -0.96115930 -0.9986523     -0.6606284     1.2363997
## [1182,]      -1.025818  1.74901494 -1.8110589      0.2461164    -0.1332367
## [1183,]      -1.025818 -0.05776789 -0.1862456      0.2461164    -0.1332367
## [1184,]       1.784904 -0.05776789 -1.8110589     -1.5673732    -1.5028732
## [1185,]       0.379543  1.74901494 -0.5924489      0.2461164    -0.1332367
```

```
## [1186,]     -1.025818  1.74901494  0.2199577     0.2461164    -0.1332367
## [1187,]      0.379543 -0.05776789  1.0323644     1.1528613     1.2363997
## [1188,]      0.379543 -0.05776789  0.6261610     1.1528613    -0.1332367
## [1189,]     -1.025818 -0.05776789  1.0323644    -0.6606284    -1.5028732
## [1190,]      0.379543 -0.05776789  1.0323644     1.1528613    -1.5028732
## [1191,]      0.379543 -0.05776789  0.6261610    -0.6606284    -1.5028732
## [1192,]      0.379543 -0.05776789  1.0323644     1.1528613    -0.1332367
## [1193,]      0.379543 -0.96115930 -0.9986523    -1.5673732    -1.5028732
## [1194,]     -1.025818 -0.96115930 -0.9986523    -0.6606284     1.2363997
## [1195,]      1.784904  1.74901494 -0.5924489    -0.6606284    -1.5028732
## [1196,]      0.379543  1.74901494 -0.5924489     0.2461164     1.2363997
## [1197,]      0.379543  0.84562353  1.0323644     0.2461164     1.2363997
## [1198,]      0.379543 -0.96115930  1.4385677    -1.5673732     1.2363997
## [1199,]      0.379543 -0.05776789  1.0323644     1.1528613    -1.5028732
## [1200,]      0.379543 -0.05776789 -1.8110589     0.2461164    -0.1332367
## [1201,]      0.379543 -0.96115930 -1.4048556     1.1528613    -1.5028732
## [1202,]     -1.025818 -0.96115930 -0.9986523     0.2461164     1.2363997
## [1203,]      0.379543 -0.96115930 -0.9986523     0.2461164    -0.1332367
## [1204,]      1.784904  0.84562353 -1.8110589     1.1528613    -0.1332367
## [1205,]      0.379543 -0.96115930  1.4385677     0.2461164    -0.1332367
## [1206,]      0.379543 -0.96115930 -0.9986523    -0.6606284     1.2363997
## [1207,]      0.379543 -0.96115930 -0.9986523     1.1528613     1.2363997
## [1208,]     -1.025818 -0.96115930  0.6261610    -0.6606284    -1.5028732
## [1209,]     -1.025818 -0.05776789 -0.9986523     1.1528613    -0.1332367
## [1210,]     -2.431178  0.84562353 -1.8110589     1.1528613    -1.5028732
## [1211,]      1.784904 -0.96115930 -0.9986523    -0.6606284    -0.1332367
## [1212,]     -2.431178 -0.05776789  1.0323644     1.1528613    -1.5028732
## [1213,]     -1.025818 -0.96115930  0.6261610     1.1528613    -0.1332367
## [1214,]      0.379543 -0.96115930  1.4385677     1.1528613    -1.5028732
## [1215,]      1.784904  0.84562353 -1.8110589     1.1528613    -0.1332367
## [1216,]     -1.025818 -0.96115930  0.6261610     1.1528613     1.2363997
## [1217,]      0.379543 -0.05776789  1.0323644     1.1528613    -0.1332367
## [1218,]      1.784904 -0.96115930  0.6261610     0.2461164    -0.1332367
## [1219,]      0.379543  0.84562353  1.0323644     0.2461164     1.2363997
## [1220,]      0.379543 -0.96115930 -0.9986523     0.2461164    -0.1332367
## [1221,]      0.379543 -0.05776789  1.4385677     1.1528613     1.2363997
## [1222,]     -1.025818  0.84562353 -1.8110589     0.2461164    -0.1332367
## [1223,]     -2.431178 -0.96115930 -1.4048556     0.2461164    -0.1332367
## [1224,]     -2.431178  1.74901494  1.0323644     0.2461164    -0.1332367
## [1225,]     -2.431178 -0.96115930 -0.9986523     0.2461164    -0.1332367
## [1226,]     -1.025818  1.74901494  0.2199577    -0.6606284     1.2363997
## [1227,]      0.379543 -0.96115930  0.6261610     0.2461164    -0.1332367
## [1228,]      0.379543 -0.96115930 -0.9986523     0.2461164    -0.1332367
## [1229,]     -2.431178 -0.05776789 -1.4048556    -0.6606284    -0.1332367
## [1230,]      0.379543 -0.05776789 -0.1862456    -1.5673732    -0.1332367
## [1231,]      0.379543 -0.96115930 -0.9986523    -1.5673732    -1.5028732
## [1232,]      0.379543 -0.05776789 -1.8110589    -0.6606284     1.2363997
## [1233,]      0.379543 -0.05776789 -0.1862456     0.2461164    -0.1332367
## [1234,]      0.379543 -0.96115930  0.6261610     1.1528613    -0.1332367
## [1235,]      0.379543 -0.05776789  1.0323644    -0.6606284    -0.1332367
## [1236,]      0.379543  0.84562353  1.0323644     1.1528613    -1.5028732
## [1237,]     -1.025818 -0.05776789  1.0323644    -1.5673732    -1.5028732
## [1238,]     -2.431178 -0.05776789  1.0323644    -0.6606284     1.2363997
## [1239,]      0.379543 -0.96115930 -0.9986523    -0.6606284     1.2363997
```

```
## [1240,]      0.379543 -0.05776789 -0.1862456     1.1528613    1.2363997
## [1241,]      0.379543 -0.05776789 -0.9986523     1.1528613   -0.1332367
## [1242,]     -2.431178  0.84562353  1.0323644     0.2461164   -0.1332367
## [1243,]      0.379543  2.65240635 -0.5924489    -0.6606284    1.2363997
## [1244,]     -2.431178  0.84562353 -1.4048556     0.2461164   -0.1332367
## [1245,]     -1.025818 -0.96115930  0.6261610    -1.5673732    1.2363997
## [1246,]      0.379543 -0.96115930 -1.4048556     1.1528613   -0.1332367
## [1247,]     -1.025818 -0.96115930 -1.4048556     1.1528613   -1.5028732
## [1248,]      0.379543 -0.05776789  1.0323644     0.2461164   -0.1332367
## [1249,]      0.379543 -0.96115930  0.6261610     1.1528613    1.2363997
## [1250,]     -2.431178 -0.96115930  1.4385677    -0.6606284    1.2363997
## [1251,]      1.784904 -0.05776789 -1.8110589     0.2461164    1.2363997
## [1252,]     -1.025818  0.84562353  1.0323644    -1.5673732   -1.5028732
## [1253,]      1.784904 -0.96115930  0.6261610     1.1528613   -0.1332367
## [1254,]      0.379543 -0.05776789  1.0323644    -0.6606284    1.2363997
## [1255,]      0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [1256,]      0.379543  0.84562353  1.0323644    -1.5673732    1.2363997
## [1257,]     -1.025818 -0.96115930 -0.9986523    -0.6606284   -0.1332367
## [1258,]      0.379543  0.84562353  1.0323644     0.2461164   -0.1332367
## [1259,]     -1.025818 -0.96115930  0.6261610    -1.5673732   -1.5028732
## [1260,]      1.784904 -0.05776789 -1.8110589     0.2461164   -0.1332367
## [1261,]      0.379543 -0.96115930  0.6261610    -0.6606284    1.2363997
## [1262,]     -2.431178 -0.05776789 -1.8110589     1.1528613   -0.1332367
## [1263,]     -1.025818 -0.96115930  0.6261610     0.2461164   -0.1332367
## [1264,]      0.379543 -0.96115930 -0.9986523    -0.6606284   -1.5028732
## [1265,]     -1.025818  2.65240635  0.2199577    -1.5673732   -0.1332367
## [1266,]      0.379543 -0.05776789  0.6261610    -0.6606284   -1.5028732
## [1267,]      0.379543 -0.96115930 -0.9986523    -1.5673732   -1.5028732
## [1268,]      0.379543 -0.05776789  1.0323644     0.2461164   -1.5028732
## [1269,]     -1.025818  1.74901494 -0.1862456     0.2461164   -0.1332367
## [1270,]      0.379543 -0.96115930 -1.4048556     1.1528613    1.2363997
## [1271,]     -2.431178 -0.05776789  1.0323644     1.1528613    1.2363997
## [1272,]      0.379543 -0.96115930  1.4385677    -0.6606284    1.2363997
## [1273,]     -1.025818 -0.96115930 -0.9986523     0.2461164   -0.1332367
## [1274,]      0.379543 -0.96115930 -0.9986523    -1.5673732   -0.1332367
## [1275,]     -1.025818 -0.05776789  1.0323644     1.1528613   -0.1332367
## [1276,]      0.379543  0.84562353 -0.5924489     0.2461164   -0.1332367
## [1277,]     -1.025818 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [1278,]      0.379543  2.65240635  0.2199577     1.1528613   -1.5028732
## [1279,]      0.379543  0.84562353 -1.8110589    -1.5673732   -0.1332367
## [1280,]      0.379543 -0.96115930  0.6261610    -0.6606284   -1.5028732
## [1281,]      0.379543 -0.05776789 -1.4048556    -0.6606284   -1.5028732
## [1282,]      0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [1283,]      1.784904 -0.96115930  0.6261610    -1.5673732   -0.1332367
## [1284,]      0.379543 -0.96115930  0.6261610     1.1528613   -0.1332367
## [1285,]      0.379543  0.84562353  0.2199577     0.2461164    1.2363997
## [1286,]     -1.025818 -0.05776789  1.0323644    -0.6606284    1.2363997
## [1287,]      0.379543 -0.96115930 -0.9986523    -1.5673732   -0.1332367
## [1288,]      1.784904 -0.05776789 -1.8110589    -1.5673732   -0.1332367
## [1289,]      0.379543 -0.05776789 -0.1862456     1.1528613   -1.5028732
## [1290,]      0.379543 -0.96115930 -1.4048556    -0.6606284   -1.5028732
## [1291,]      0.379543 -0.05776789 -0.9986523    -1.5673732   -0.1332367
## [1292,]      0.379543 -0.05776789 -0.1862456    -1.5673732    1.2363997
## [1293,]      0.379543 -0.05776789  1.0323644     1.1528613   -1.5028732
```

```
## [1294,]       0.379543 -0.96115930  0.6261610       0.2461164       1.2363997
## [1295,]       1.784904 -0.05776789 -1.8110589      -0.6606284       1.2363997
## [1296,]       0.379543  0.84562353  1.0323644       0.2461164      -1.5028732
## [1297,]       0.379543  0.84562353 -0.1862456       0.2461164       1.2363997
## [1298,]       0.379543 -0.96115930 -1.4048556      -0.6606284      -0.1332367
## [1299,]       0.379543 -0.05776789 -1.8110589      -0.6606284      -0.1332367
## [1300,]       0.379543 -0.05776789 -1.8110589       1.1528613      -1.5028732
## [1301,]       1.784904 -0.05776789  1.0323644       0.2461164      -0.1332367
## [1302,]       0.379543  1.74901494 -0.5924489      -0.6606284      -1.5028732
## [1303,]      -2.431178 -0.96115930 -0.9986523       0.2461164      -0.1332367
## [1304,]      -1.025818  0.84562353 -0.1862456      -0.6606284      -1.5028732
## [1305,]       0.379543 -0.05776789 -1.8110589      -1.5673732      -1.5028732
## [1306,]       0.379543 -0.05776789  0.6261610       1.1528613      -0.1332367
## [1307,]       0.379543  0.84562353  1.0323644      -1.5673732      -0.1332367
## [1308,]       0.379543 -0.96115930  0.6261610      -1.5673732      -0.1332367
## [1309,]      -2.431178 -0.05776789  1.4385677       1.1528613      -0.1332367
## [1310,]       0.379543 -0.05776789  1.0323644       1.1528613       1.2363997
## [1311,]       0.379543  1.74901494  0.2199577       0.2461164      -0.1332367
## [1312,]       0.379543 -0.96115930  0.6261610       0.2461164       1.2363997
## [1313,]       1.784904 -0.96115930 -1.4048556      -1.5673732      -0.1332367
## [1314,]      -1.025818 -0.96115930 -1.4048556      -1.5673732      -1.5028732
## [1315,]       0.379543 -0.05776789  1.0323644       0.2461164      -0.1332367
## [1316,]       0.379543 -0.05776789  0.6261610      -0.6606284      -0.1332367
## [1317,]       0.379543 -0.05776789  1.0323644       1.1528613      -0.1332367
## [1318,]       0.379543 -0.96115930 -0.9986523       1.1528613       1.2363997
## [1319,]       0.379543 -0.96115930 -0.9986523       1.1528613      -0.1332367
## [1320,]       0.379543 -0.05776789  1.0323644       1.1528613       1.2363997
## [1321,]       0.379543 -0.96115930  0.6261610       0.2461164      -0.1332367
## [1322,]       0.379543 -0.96115930 -0.9986523       0.2461164       1.2363997
## [1323,]       0.379543  0.84562353 -0.1862456       1.1528613      -1.5028732
## [1324,]       0.379543 -0.96115930 -1.4048556       1.1528613      -1.5028732
## [1325,]      -2.431178 -0.05776789 -1.8110589       0.2461164      -1.5028732
## [1326,]       0.379543 -0.96115930 -0.9986523       0.2461164       1.2363997
## [1327,]      -1.025818 -0.05776789  1.0323644      -0.6606284       1.2363997
## [1328,]       1.784904  1.74901494  1.0323644      -1.5673732      -1.5028732
## [1329,]      -1.025818 -0.05776789  1.4385677       0.2461164      -0.1332367
## [1330,]      -1.025818 -0.96115930 -1.4048556      -0.6606284      -0.1332367
## [1331,]      -1.025818  2.65240635 -0.5924489       0.2461164      -0.1332367
## [1332,]      -1.025818  2.65240635  0.2199577      -0.6606284      -0.1332367
## [1333,]      -1.025818 -0.96115930  0.6261610       1.1528613       1.2363997
## [1334,]       0.379543  0.84562353  1.0323644      -0.6606284      -0.1332367
## [1335,]      -1.025818 -0.96115930  0.6261610      -1.5673732      -0.1332367
## [1336,]       0.379543 -0.05776789  0.6261610       1.1528613      -1.5028732
## [1337,]      -1.025818 -0.96115930  0.6261610       1.1528613      -0.1332367
## [1338,]       0.379543 -0.96115930  1.4385677      -0.6606284      -0.1332367
## [1339,]       0.379543 -0.96115930  1.4385677       1.1528613       1.2363997
## [1340,]       0.379543 -0.96115930  0.6261610      -0.6606284       1.2363997
## [1341,]      -1.025818 -0.05776789  1.0323644       0.2461164      -0.1332367
## [1342,]       0.379543 -0.05776789 -0.9986523       0.2461164      -1.5028732
## [1343,]       0.379543  0.84562353  1.0323644       1.1528613      -0.1332367
## [1344,]       0.379543 -0.96115930 -0.9986523      -1.5673732       1.2363997
## [1345,]       0.379543 -0.05776789  0.6261610      -1.5673732      -0.1332367
## [1346,]      -1.025818 -0.05776789 -0.1862456      -0.6606284      -0.1332367
## [1347,]      -1.025818 -0.05776789 -0.1862456       1.1528613      -0.1332367
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## [1348,]    -1.025818 -0.05776789 -1.4048556     1.1528613    1.2363997
## [1349,]     0.379543  1.74901494 -0.5924489    -1.5673732   -1.5028732
## [1350,]    -1.025818 -0.96115930  0.6261610     0.2461164   -0.1332367
## [1351,]     1.784904 -0.05776789  1.0323644     0.2461164    1.2363997
## [1352,]     0.379543  1.74901494 -0.5924489     1.1528613   -1.5028732
## [1353,]     1.784904 -0.05776789 -1.8110589    -1.5673732   -0.1332367
## [1354,]    -2.431178 -0.96115930  0.6261610    -1.5673732   -0.1332367
## [1355,]     0.379543 -0.96115930 -0.9986523     1.1528613    1.2363997
## [1356,]    -1.025818 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [1357,]     0.379543 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [1358,]     0.379543  0.84562353  0.2199577    -1.5673732   -0.1332367
## [1359,]     0.379543 -0.05776789  1.0323644     1.1528613   -1.5028732
## [1360,]    -1.025818 -0.05776789  1.0323644     1.1528613   -0.1332367
## [1361,]     1.784904 -0.96115930 -0.9986523     0.2461164   -1.5028732
## [1362,]     1.784904 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [1363,]     0.379543 -0.05776789 -1.8110589     0.2461164    1.2363997
## [1364,]     0.379543 -0.05776789  1.0323644     0.2461164    1.2363997
## [1365,]    -1.025818 -0.05776789  1.0323644     1.1528613   -0.1332367
## [1366,]     1.784904 -0.96115930  1.4385677    -1.5673732    1.2363997
## [1367,]    -2.431178 -0.05776789  1.0323644     0.2461164   -0.1332367
## [1368,]     0.379543 -0.96115930  0.6261610    -0.6606284   -0.1332367
## [1369,]    -1.025818 -0.05776789  0.6261610     1.1528613   -0.1332367
## [1370,]     0.379543 -0.05776789  1.0323644     0.2461164    1.2363997
## [1371,]     0.379543 -0.05776789  0.6261610    -0.6606284   -0.1332367
## [1372,]    -1.025818 -0.05776789  1.0323644    -1.5673732   -0.1332367
## [1373,]     0.379543 -0.05776789 -0.1862456    -1.5673732   -0.1332367
## [1374,]    -1.025818 -0.05776789  0.6261610    -0.6606284   -1.5028732
## [1375,]     0.379543  1.74901494 -0.5924489     1.1528613   -0.1332367
## [1376,]     1.784904 -0.96115930  0.6261610     0.2461164    1.2363997
## [1377,]     0.379543 -0.96115930  0.6261610     1.1528613   -1.5028732
## [1378,]     0.379543  2.65240635  0.2199577     1.1528613   -0.1332367
## [1379,]     0.379543 -0.05776789  1.0323644     1.1528613   -1.5028732
## [1380,]    -1.025818 -0.96115930 -1.4048556    -0.6606284   -0.1332367
## [1381,]     0.379543 -0.05776789  1.0323644    -1.5673732   -0.1332367
## [1382,]     0.379543 -0.96115930  0.6261610     0.2461164    1.2363997
## [1383,]     0.379543 -0.96115930  0.6261610    -1.5673732   -1.5028732
## [1384,]     1.784904 -0.96115930 -0.9986523    -0.6606284   -0.1332367
## [1385,]     0.379543  0.84562353  1.0323644     1.1528613    1.2363997
## [1386,]     0.379543  0.84562353  1.0323644     0.2461164   -1.5028732
## [1387,]     0.379543 -0.96115930 -0.9986523    -1.5673732    1.2363997
## [1388,]     0.379543 -0.05776789 -1.8110589    -1.5673732   -0.1332367
## [1389,]     0.379543 -0.05776789 -1.8110589     1.1528613   -1.5028732
## [1390,]    -2.431178 -0.05776789  0.6261610    -1.5673732   -0.1332367
## [1391,]    -1.025818 -0.96115930 -0.9986523     1.1528613   -1.5028732
## [1392,]    -1.025818 -0.96115930  1.4385677    -1.5673732    1.2363997
## [1393,]     0.379543 -0.05776789  1.0323644     1.1528613   -0.1332367
## [1394,]     0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [1395,]    -1.025818 -0.05776789 -0.1862456     1.1528613    1.2363997
## [1396,]     0.379543 -0.05776789  1.0323644     1.1528613   -0.1332367
## [1397,]     0.379543  0.84562353  1.0323644    -1.5673732    1.2363997
## [1398,]     0.379543 -0.05776789  0.6261610     0.2461164   -0.1332367
## [1399,]     0.379543 -0.05776789 -1.8110589     0.2461164   -1.5028732
## [1400,]     0.379543  0.84562353 -1.8110589     0.2461164   -0.1332367
## [1401,]     0.379543 -0.96115930 -1.4048556    -0.6606284   -0.1332367
```

```
## [1402,]      1.784904  2.65240635 -0.5924489     -0.6606284     -0.1332367
## [1403,]     -2.431178 -0.96115930 -0.9986523      1.1528613     -1.5028732
## [1404,]      0.379543  1.74901494  1.0323644     -1.5673732      1.2363997
## [1405,]     -1.025818 -0.05776789  0.6261610      0.2461164      1.2363997
## [1406,]      0.379543  0.84562353  0.2199577      0.2461164     -0.1332367
## [1407,]      0.379543 -0.05776789 -0.1862456     -1.5673732      1.2363997
## [1408,]     -1.025818 -0.05776789 -1.8110589      0.2461164      1.2363997
## [1409,]      0.379543 -0.96115930 -0.9986523      1.1528613      1.2363997
## [1410,]      0.379543 -0.05776789 -0.9986523      0.2461164     -0.1332367
## [1411,]      0.379543 -0.05776789  1.0323644     -0.6606284     -0.1332367
## [1412,]      0.379543 -0.96115930 -1.4048556     -0.6606284     -0.1332367
## [1413,]      0.379543 -0.96115930 -0.9986523     -0.6606284     -0.1332367
## [1414,]      0.379543 -0.96115930 -0.9986523      0.2461164     -1.5028732
## [1415,]      0.379543  0.84562353 -1.8110589      0.2461164      1.2363997
## [1416,]     -1.025818 -0.96115930 -0.9986523      0.2461164     -1.5028732
## [1417,]      0.379543 -0.05776789  1.0323644     -0.6606284     -0.1332367
## [1418,]      0.379543 -0.96115930  1.4385677      0.2461164     -0.1332367
## [1419,]     -1.025818 -0.05776789 -0.1862456      0.2461164     -0.1332367
## [1420,]      0.379543 -0.05776789  0.6261610     -1.5673732     -1.5028732
## [1421,]      0.379543 -0.96115930  0.6261610      1.1528613     -0.1332367
## [1422,]      0.379543  0.84562353  0.2199577     -0.6606284     -0.1332367
## [1423,]      0.379543 -0.96115930 -0.9986523      0.2461164     -0.1332367
## [1424,]      0.379543 -0.96115930  0.6261610      0.2461164      1.2363997
## [1425,]      0.379543 -0.05776789  0.6261610      0.2461164      1.2363997
## [1426,]      0.379543 -0.05776789 -1.8110589      1.1528613     -0.1332367
## [1427,]     -1.025818 -0.96115930 -0.9986523     -0.6606284      1.2363997
## [1428,]      0.379543 -0.96115930 -0.9986523      1.1528613     -0.1332367
## [1429,]     -1.025818 -0.96115930  1.4385677     -0.6606284     -0.1332367
## [1430,]      0.379543 -0.05776789  0.6261610      1.1528613      1.2363997
## [1431,]     -2.431178  0.84562353  0.2199577      0.2461164     -0.1332367
## [1432,]      0.379543  0.84562353  1.0323644      1.1528613     -0.1332367
## [1433,]      1.784904  0.84562353  0.2199577      1.1528613     -0.1332367
## [1434,]      0.379543 -0.05776789  1.0323644      0.2461164     -1.5028732
## [1435,]      0.379543 -0.96115930  1.4385677      1.1528613     -1.5028732
## [1436,]      0.379543 -0.96115930  0.6261610      1.1528613      1.2363997
## [1437,]      0.379543 -0.96115930  1.4385677     -1.5673732      1.2363997
## [1438,]      0.379543  2.65240635 -0.5924489      1.1528613      1.2363997
## [1439,]      0.379543 -0.96115930  1.4385677     -1.5673732     -0.1332367
## [1440,]     -1.025818  0.84562353  1.0323644      1.1528613     -0.1332367
## [1441,]      0.379543 -0.05776789 -0.1862456     -0.6606284     -1.5028732
## [1442,]      0.379543 -0.05776789 -1.8110589      0.2461164     -1.5028732
## [1443,]      0.379543 -0.96115930  0.6261610      1.1528613     -0.1332367
## [1444,]      0.379543  2.65240635 -0.5924489      0.2461164     -0.1332367
## [1445,]      0.379543 -0.96115930 -0.9986523      0.2461164     -0.1332367
## [1446,]     -1.025818  1.74901494 -0.1862456     -0.6606284     -0.1332367
## [1447,]     -1.025818 -0.05776789  1.0323644      0.2461164     -0.1332367
## [1448,]     -2.431178 -0.05776789  1.0323644      1.1528613     -1.5028732
## [1449,]     -1.025818 -0.05776789  1.0323644     -0.6606284     -1.5028732
## [1450,]      0.379543 -0.96115930  0.6261610     -1.5673732      1.2363997
## [1451,]      0.379543  0.84562353 -1.4048556      1.1528613      1.2363997
## [1452,]      0.379543 -0.05776789  1.0323644      1.1528613     -0.1332367
## [1453,]      0.379543 -0.05776789  1.0323644      0.2461164     -1.5028732
## [1454,]     -1.025818 -0.05776789  1.0323644      1.1528613     -0.1332367
## [1455,]      0.379543 -0.05776789  1.0323644      0.2461164      1.2363997
```

```
## [1456,]     -1.025818 -0.96115930  0.6261610       0.2461164      1.2363997
## [1457,]      0.379543 -0.05776789 -1.8110589       0.2461164     -0.1332367
## [1458,]      0.379543 -0.96115930  0.6261610       0.2461164     -0.1332367
## [1459,]     -2.431178 -0.96115930  0.6261610       1.1528613     -0.1332367
## [1460,]     -1.025818 -0.05776789 -0.9986523      -0.6606284     -0.1332367
## [1461,]     -1.025818 -0.96115930  0.6261610      -1.5673732      1.2363997
## [1462,]     -1.025818  0.84562353  1.0323644      -1.5673732     -1.5028732
## [1463,]     -1.025818  1.74901494  1.0323644       1.1528613     -0.1332367
## [1464,]      0.379543 -0.05776789 -0.1862456      -1.5673732      1.2363997
## [1465,]     -1.025818 -0.96115930  1.4385677       0.2461164      1.2363997
## [1466,]      1.784904 -0.05776789 -0.9986523       1.1528613     -0.1332367
## [1467,]     -1.025818  0.84562353 -1.8110589      -1.5673732     -0.1332367
## [1468,]      1.784904 -0.05776789 -0.1862456      -0.6606284     -0.1332367
## [1469,]     -1.025818 -0.05776789  1.0323644      -0.6606284     -0.1332367
## [1470,]      1.784904 -0.05776789 -0.9986523       0.2461164     -0.1332367
##         MonthlyIncome  MonthlyRate NumCompaniesWorked Over18    OverTime
##    [1,] -0.1083126537  0.725772953          2.1244130    NaN   1.5912040
##    [2,] -0.2916193491  1.488369633         -0.6778187    NaN  -0.6280274
##    [3,] -0.9373347071 -1.674271090          1.3237753    NaN   1.5912040
##    [4,] -0.7633738919  1.242787651         -0.6778187    NaN   1.5912040
##    [5,] -0.6446387323  0.325789028          2.5247318    NaN  -0.6280274
##    [6,] -0.7296012794 -0.344082189         -1.0781375    NaN  -0.6280274
##    [7,] -0.8141390138 -0.611019125          0.5231377    NaN   1.5912040
##    [8,] -0.8092536674 -0.137416803         -0.6778187    NaN  -0.6280274
##    [9,]  0.6421190437 -0.776379533         -1.0781375    NaN  -0.6280274
##   [10,] -0.2688918677  0.318061906          1.3237753    NaN  -0.6280274
##   [11,] -0.8659661676  0.304293580         -1.0781375    NaN  -0.6280274
##   [12,] -0.4906441157 -0.229158813         -1.0781375    NaN   1.5912040
##   [13,] -0.7629490792  0.120388080         -0.6778187    NaN  -0.6280274
##   [14,] -0.8160506711 -0.780453833         -1.0781375    NaN  -0.6280274
##   [15,] -0.9505039019 -0.191928135          0.9234565    NaN   1.5912040
##   [16,]  0.7385515347 -0.578565213         -0.6778187    NaN  -0.6280274
##   [17,] -0.6807478149  0.103950385         -1.0781375    NaN   1.5912040
##   [18,] -0.7578513264 -0.981920973         -0.6778187    NaN   1.5912040
##   [19,]  1.8955290200  1.082906476         -0.2774999    NaN  -0.6280274
##   [20,] -0.5435333013 -1.405929223          0.9234565    NaN   1.5912040
##   [21,] -0.5293020746 -0.854353217         -1.0781375    NaN  -0.6280274
##   [22,] -0.6575955208 -1.029407650          1.7240942    NaN  -0.6280274
##   [23,]  1.1663379594  0.980627481         -1.0781375    NaN  -0.6280274
##   [24,] -1.1195793707  0.697955315         -0.6778187    NaN  -0.6280274
##   [25,] -0.7525411672  0.391820797         -0.2774999    NaN  -0.6280274
##   [26,]  2.6744231707 -0.502698926          0.5231377    NaN  -0.6280274
##   [27,] -0.5488434605 -1.353244301         -0.6778187    NaN   1.5912040
##   [28,]  0.0684094443  0.963768306         -1.0781375    NaN  -0.6280274
##   [29,]  0.7954764413 -1.716700014          0.1228189    NaN  -0.6280274
##   [30,]  2.6431994347  1.195441468          0.1228189    NaN  -0.6280274
##   [31,] -0.8510977218 -1.073803477          0.5231377    NaN  -0.6280274
##   [32,] -0.0080568481  0.675476415         -0.2774999    NaN   1.5912040
##   [33,] -0.9126955685  0.253435069         -0.6778187    NaN  -0.6280274
##   [34,] -0.9381843326 -1.542348047          0.1228189    NaN  -0.6280274
##   [35,] -0.8942162145 -1.586603381         -0.2774999    NaN   1.5912040
##   [36,] -0.8194491730  1.069138149         -0.6778187    NaN  -0.6280274
##   [37,] -0.8113777310 -1.475613813         -0.6778187    NaN   1.5912040
##   [38,] -0.9534775911 -0.649935721         -0.6778187    NaN  -0.6280274
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##   [39,] -0.6550466444 -0.174366495      2.5247318    NaN  1.5912040
##   [40,] -0.2393673826 -1.562298070     -0.2774999    NaN -0.6280274
##   [41,] -0.9668591923 -0.478112629     -0.6778187    NaN -0.6280274
##   [42,] -0.8840207088  0.758929331     -0.6778187    NaN -0.6280274
##   [43,] -0.8942162145 -0.527566209     -0.6778187    NaN -0.6280274
##   [44,]  0.4721939495 -1.592925571     -0.6778187    NaN -0.6280274
##   [45,] -0.5293020746 -0.496236242     -0.6778187    NaN -0.6280274
##   [46,]  2.7702184426  0.276335448     -0.6778187    NaN -0.6280274
##   [47,] -0.4109917278 -0.601184606     -1.0781375    NaN -0.6280274
##   [48,] -0.7393719724 -0.574069433      0.5231377    NaN -0.6280274
##   [49,] -0.1552544609  0.861489312      0.5231377    NaN  1.5912040
##   [50,] -0.8993139673 -1.323600252     -0.6778187    NaN -0.6280274
##   [51,] -0.2383053508  0.699781725      2.5247318    NaN  1.5912040
##   [52,] -0.6503737043 -0.440319979     -0.6778187    NaN  1.5912040
##   [53,] -0.2227996859 -1.447655681      0.9234565    NaN  1.5912040
##   [54,]  0.7181605234 -0.844518698     -0.2774999    NaN  1.5912040
##   [55,] -0.4982907449  1.000717998      1.7240942    NaN  1.5912040
##   [56,]  1.4773008819  0.117016245     -0.6778187    NaN  1.5912040
##   [57,]  0.5450493337 -0.461112961     -0.6778187    NaN -0.6280274
##   [58,] -0.5286648555  0.237278360      0.1228189    NaN  1.5912040
##   [59,] -0.1248803504 -0.672274127      0.1228189    NaN -0.6280274
##   [60,] -0.1083126537 -1.633106605     -0.6778187    NaN -0.6280274
##   [61,] -0.0724159775 -0.482748903     -0.6778187    NaN  1.5912040
##   [62,] -0.8702142949 -1.244362130     -0.6778187    NaN -0.6280274
##   [63,]  2.5992313165  0.335483054      0.9234565    NaN  1.5912040
##   [64,]  0.2408834150 -1.680171802      1.7240942    NaN -0.6280274
##   [65,]  0.7631906734 -0.858568010     -0.6778187    NaN -0.6280274
##   [66,]  1.7530043473  0.761036728     -0.2774999    NaN  1.5912040
##   [67,] -0.0008350316  1.172119610     -0.6778187    NaN -0.6280274
##   [68,]  0.6841755046  0.628551711     -0.2774999    NaN -0.6280274
##   [69,] -0.9152444449 -1.186478963      0.5231377    NaN -0.6280274
##   [70,] -0.6616312418  1.048626153     -1.0781375    NaN  1.5912040
##   [71,] -0.2187639649  1.454791776      1.7240942    NaN -0.6280274
##   [72,] -0.8071296037 -1.314608692     -1.0781375    NaN -0.6280274
##   [73,] -0.8500356900  0.626865794     -0.6778187    NaN -0.6280274
##   [74,] -0.0600964082 -0.978830125     -0.6778187    NaN -0.6280274
##   [75,] -0.7359734705  1.080237106      0.1228189    NaN -0.6280274
##   [76,] -0.4415782447  0.894786182     -0.6778187    NaN -0.6280274
##   [77,] -0.4653677579  1.222697134     -1.0781375    NaN -0.6280274
##   [78,]  1.4320583255  0.105917289      0.5231377    NaN  1.5912040
##   [79,]  1.5210565936  1.537682719      0.5231377    NaN -0.6280274
##   [80,] -0.3147716432 -0.546251795      2.1244130    NaN  1.5912040
##   [81,] -0.2924689745  0.236716387     -0.6778187    NaN  1.5912040
##   [82,] -0.7739942103  1.680985706     -0.6778187    NaN -0.6280274
##   [83,]  0.7935647840  0.530908990      0.1228189    NaN -0.6280274
##   [84,] -0.2493504819  0.197237819      1.7240942    NaN  1.5912040
##   [85,] -0.4626064751  0.480893438     -0.6778187    NaN -0.6280274
##   [86,]  0.1608062143  1.037527196      0.5231377    NaN -0.6280274
##   [87,] -0.8880564298 -0.673679059      0.1228189    NaN -0.6280274
##   [88,] -0.9405208027  0.619841138      0.1228189    NaN -0.6280274
##   [89,] -0.4993527768  0.213113543     -0.6778187    NaN -0.6280274
##   [90,]  0.6618728359 -0.100748097     -0.6778187    NaN -0.6280274
##   [91,]  1.4868591684 -0.027832166     -0.6778187    NaN -0.6280274
##   [92,] -0.2255609687 -0.827519030     -1.0781375    NaN  1.5912040
```

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##  [93,] -0.2748392460  0.765251521      -0.6778187    NaN  1.5912040
##  [94,]  0.8857491476 -1.569463220      -0.2774999    NaN  1.5912040
##  [95,] -0.3171081132  1.403230799      -0.6778187    NaN -0.6280274
##  [96,]  1.4966298613  1.361082862       2.5247318    NaN -0.6280274
##  [97,] -0.3194445832  0.450406430      -1.0781375    NaN -0.6280274
##  [98,] -0.4846967374 -0.765702055      -0.6778187    NaN -0.6280274
##  [99,]  1.5652371181  1.418404057      -1.0781375    NaN -0.6280274
## [100,] -0.9475302128  1.507476697       0.5231377    NaN -0.6280274
## [101,] -0.9409456154  1.311488789       0.5231377    NaN  1.5912040
## [102,] -0.7533907926  0.121512025      -0.6778187    NaN -0.6280274
## [103,] -0.7597629837  0.768482863      -0.6778187    NaN  1.5912040
## [104,] -0.3598017931 -0.257257438      -0.6778187    NaN -0.6280274
## [105,] -0.2846099389  0.215923405       0.9234565    NaN -0.6280274
## [106,]  2.6213215788  1.068997656       2.5247318    NaN -0.6280274
## [107,]  2.4785844996 -0.640382188       0.1228189    NaN  1.5912040
## [108,] -0.1612018392  1.776661524      -0.6778187    NaN  1.5912040
## [109,] -0.7676220193  1.767950950      -0.6778187    NaN -0.6280274
## [110,] -0.7714453339  1.330736347      -0.6778187    NaN -0.6280274
## [111,]  0.2083852407  1.613268020       0.1228189    NaN -0.6280274
## [112,] -0.0911077379  1.204573521      -0.6778187    NaN  1.5912040
## [113,]  2.2993135252 -0.062112488      -0.2774999    NaN  1.5912040
## [114,] -0.7920487516 -0.148375267      -1.0781375    NaN -0.6280274
## [115,] -0.4243733289  0.096504249       1.3237753    NaN -0.6280274
## [116,]  0.1964904841  0.027100646      -0.2774999    NaN -0.6280274
## [117,]  1.0892344479 -1.222023723      -0.2774999    NaN -0.6280274
## [118,]  0.6871491937  1.213705574      -1.0781375    NaN -0.6280274
## [119,] -0.7790919631 -1.651089725       0.9234565    NaN -0.6280274
## [120,]  2.2209355755  0.727880350      -0.6778187    NaN  1.5912040
## [121,] -0.8262461768  1.123508988      -0.6778187    NaN -0.6280274
## [122,] -0.0758144794  0.163940949      -1.0781375    NaN -0.6280274
## [123,] -0.3270912125 -1.377268625       2.5247318    NaN  1.5912040
## [124,]  2.7685191917 -1.103026047       1.7240942    NaN -0.6280274
## [125,] -0.0702919138  0.902794290       0.5231377    NaN  1.5912040
## [126,] -0.8782857369  1.262597182      -0.6778187    NaN -0.6280274
## [127,]  0.8090704488 -1.524083940      -0.6778187    NaN -0.6280274
## [128,] -1.0254833498  1.757132979      -0.6778187    NaN  1.5912040
## [129,] -0.8453627499  0.700484191      -1.0781375    NaN -0.6280274
## [130,]  0.0136086014 -1.231296269      -0.6778187    NaN -0.6280274
## [131,] -0.3746702389  0.249641755       0.5231377    NaN -0.6280274
## [132,]  0.5745738188 -1.077315805       0.5231377    NaN -0.6280274
## [133,] -0.4129033851  1.471650951       0.1228189    NaN  1.5912040
## [134,]  0.3581317300  0.966999648       0.1228189    NaN  1.5912040
## [135,] -0.7563644818 -0.758255919      -0.6778187    NaN -0.6280274
## [136,] -0.3317641526 -1.614842499       1.3237753    NaN -0.6280274
## [137,]  0.8808638011  1.522509462      -0.2774999    NaN -0.6280274
## [138,] -0.1276416331  0.038902068       0.5231377    NaN -0.6280274
## [139,]  0.4537145955  1.478254128      -0.2774999    NaN -0.6280274
## [140,] -0.0331207995 -0.046517751      -1.0781375    NaN  1.5912040
## [141,] -0.4891572711 -0.574490913       1.7240942    NaN -0.6280274
## [142,] -0.6480372342 -0.640803667       0.9234565    NaN -0.6280274
## [143,] -0.4643057261 -1.687477444       0.1228189    NaN  1.5912040
## [144,] -0.8222104558  1.348297987      -0.6778187    NaN -0.6280274
## [145,] -0.3897510910  1.194036537      -1.0781375    NaN -0.6280274
## [146,] -0.7007140134 -0.547656726       0.9234565    NaN -0.6280274
```

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## [147,] -0.8035186954 -0.442708362  -1.0781375  NaN -0.6280274
## [148,]  2.2680897891 -0.200217229   0.5231377  NaN -0.6280274
## [149,] -0.9058985647 -1.032919978  -0.2774999  NaN -0.6280274
## [150,] -1.0662653724  0.251327672  -0.6778187  NaN -0.6280274
## [151,] -0.1907263244 -0.816139087  -0.6778187  NaN -0.6280274
## [152,]  0.1682404372 -0.403791767  -0.6778187  NaN -0.6280274
## [153,] -0.8914549317  0.243600550  -0.2774999  NaN  1.5912040
## [154,] -0.8825338643 -0.479377068   2.1244130  NaN -0.6280274
## [155,]  0.5299684815  0.179254700  -0.6778187  NaN -0.6280274
## [156,] -0.4638809133  1.681688172  -0.6778187  NaN -0.6280274
## [157,] -0.0787881685 -0.046377258  -0.2774999  NaN -0.6280274
## [158,] -0.6705523092 -0.342817751   0.5231377  NaN  1.5912040
## [159,]  0.9244071065 -0.809395417   1.7240942  NaN -0.6280274
## [160,] -0.9073854093 -0.421353407   1.3237753  NaN -0.6280274
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## [162,] -0.9513535274 -1.172148664   1.3237753  NaN -0.6280274
## [163,] -0.8050055400 -1.073522491  -0.6778187  NaN -0.6280274
## [164,]  0.6236396897  1.276927480   0.1228189  NaN  1.5912040
## [165,] -0.8362292761  1.547236252  -0.6778187  NaN  1.5912040
## [166,]  2.8511452687  0.384936634   0.1228189  NaN -0.6280274
## [167,] -0.8606560084 -1.363359806   0.5231377  NaN -0.6280274
## [168,]  0.6193915624 -0.879501486  -0.2774999  NaN -0.6280274
## [169,]  0.4636976948 -0.194316518   0.5231377  NaN -0.6280274
## [170,] -0.7359734705 -0.264563080   0.1228189  NaN -0.6280274
## [171,] -0.7317253431 -0.133342502  -1.0781375  NaN  1.5912040
## [172,] -0.8874192107  0.937917571  -1.0781375  NaN -0.6280274
## [173,] -0.9377595199  0.105214823   0.5231377  NaN -0.6280274
## [174,] -0.7287516540 -0.463782331  -0.6778187  NaN -0.6280274
## [175,] -0.3179577387 -1.123116563   0.5231377  NaN  1.5912040
## [176,] -0.4770501081 -0.052558956   0.5231377  NaN  1.5912040
## [177,] -0.8502480963 -0.533607414  -1.0781375  NaN -0.6280274
## [178,] -1.1471921985 -0.712595654  -0.6778187  NaN -0.6280274
## [179,]  0.8390197467 -1.710658810  -0.6778187  NaN -0.6280274
## [180,] -0.8952782463 -1.123116563  -0.6778187  NaN -0.6280274
## [181,] -0.5467193968 -1.029688636   2.1244130  NaN  1.5912040
## [182,] -0.8903928999 -1.208536383  -0.2774999  NaN -0.6280274
## [183,] -0.7143080210  1.041741990  -0.6778187  NaN  1.5912040
## [184,] -0.5974845187 -1.529703665  -0.2774999  NaN -0.6280274
## [185,] -0.4360556792  1.677051899  -0.6778187  NaN -0.6280274
## [186,] -0.7958720662 -1.354368246  -0.6778187  NaN -0.6280274
## [187,]  2.6614663823 -1.097827801  -0.6778187  NaN -0.6280274
## [188,]  2.5954080019 -0.136854830   2.1244130  NaN -0.6280274
## [189,]  0.6465795775 -0.033592384  -0.6778187  NaN -0.6280274
## [190,]  1.5359250394 -1.000466066   0.1228189  NaN -0.6280274
## [191,]  2.8666509336 -1.213172656  -1.0781375  NaN -0.6280274
## [192,] -0.8971899036 -0.355743118  -0.6778187  NaN -0.6280274
## [193,] -0.1246679440  0.166329332   0.1228189  NaN  1.5912040
## [194,] -0.9375471135 -1.276394562   0.5231377  NaN -0.6280274
## [195,]  2.1854637121  0.863877695   2.5247318  NaN -0.6280274
## [196,] -0.6242477210  1.217217902  -0.6778187  NaN  1.5912040
## [197,] -0.4413658384  0.235030470   0.9234565  NaN -0.6280274
## [198,] -0.2629444894  0.298673855  -0.2774999  NaN -0.6280274
## [199,]  0.0106349123 -0.991053027   2.5247318  NaN -0.6280274
## [200,] -0.0513877471 -1.422928891   0.1228189  NaN -0.6280274
```

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## [201,] -0.4683414471 -0.651059666    0.9234565    NaN -0.6280274
## [202,]  0.0639489106  1.331860292   -0.6778187    NaN  1.5912040
## [203,] -0.5709337227 -1.171867678   -0.6778187    NaN  1.5912040
## [204,] -0.7990581617  0.310475278    2.1244130    NaN  1.5912040
## [205,]  0.0361236764 -0.415733682    1.7240942    NaN  1.5912040
## [206,]  0.2413082277  1.434701259   -0.6778187    NaN -0.6280274
## [207,] -0.8867819916 -0.269901819   -0.6778187    NaN  1.5912040
## [208,] -0.9239531060 -0.928674079   -0.6778187    NaN -0.6280274
## [209,] -0.3455705665 -0.009989539    2.5247318    NaN -0.6280274
## [210,]  0.6145062159 -0.273273654    1.7240942    NaN -0.6280274
## [211,]  0.8277622092  1.615515910   -0.6778187    NaN -0.6280274
## [212,]  0.4186675448  0.928926011   -0.6778187    NaN -0.6280274
## [213,]  0.7387639411 -0.196283422   -0.6778187    NaN -0.6280274
## [214,]  1.2716915179  0.199907189    0.9234565    NaN -0.6280274
## [215,] -0.8169002966 -0.808833444    0.9234565    NaN  1.5912040
## [216,]  1.5055509288  0.050703491    0.1228189    NaN  1.5912040
## [217,]  0.0410090229  1.215812971    0.9234565    NaN -0.6280274
## [218,] -0.9441317109  0.764830042   -1.0781375    NaN -0.6280274
## [219,]  0.5017184346  0.355011598    1.3237753    NaN -0.6280274
## [220,] -0.1195701912  0.379035922   -0.2774999    NaN -0.6280274
## [221,] -0.1250927567 -0.613688494    2.1244130    NaN -0.6280274
## [222,] -0.8243345195 -0.149639705    1.3237753    NaN -0.6280274
## [223,]  1.2069075757 -0.598093758   -0.6778187    NaN  1.5912040
## [224,]  0.8721551400 -0.655555446   -1.0781375    NaN -0.6280274
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## [229,]  0.4855755507 -0.732967157   -0.6778187    NaN -0.6280274
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## [232,]  2.7037352495 -1.317840034   -0.6778187    NaN -0.6280274
## [233,] -0.8997387800  1.593739476    2.1244130    NaN -0.6280274
## [234,]  2.7642710643  1.377520557    0.1228189    NaN -0.6280274
## [235,] -0.8638421039  1.100889595    0.9234565    NaN  1.5912040
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## [239,] -0.5462945840  0.938058064   -0.2774999    NaN -0.6280274
## [240,] -0.5889882640 -0.666232923   -1.0781375    NaN  1.5912040
## [241,] -0.9071730029  0.155089882    1.7240942    NaN -0.6280274
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## [243,] -0.7287516540  0.781689217   -0.2774999    NaN -0.6280274
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## [250,] -0.0146414455 -1.291848806    0.5231377    NaN -0.6280274
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## [254,]  0.0089356614  1.222697134    0.1228189    NaN  1.5912040
```

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## [255,]  0.0909245193 -0.503120406   -0.2774999   NaN -0.6280274
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## [259,] -0.8028814763  1.252903156   -0.6778187   NaN -0.6280274
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## [262,] -0.2663429913  0.754293058    0.1228189   NaN -0.6280274
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## [274,] -0.0001978125  1.195862948    0.5231377   NaN -0.6280274
## [275,] -0.6951914479 -0.531359524   -0.6778187   NaN -0.6280274
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## [277,]  1.1667627722  0.672526059    1.7240942   NaN -0.6280274
## [278,] -0.1907263244  0.685310934   -0.6778187   NaN  1.5912040
## [279,] -0.0225004811  1.749686844   -0.6778187   NaN -0.6280274
## [280,]  2.6850434891  0.211006146    0.1228189   NaN -0.6280274
## [281,]  2.3536895554  0.941710886    0.1228189   NaN  1.5912040
## [282,] -0.3389859691  1.435684711   -0.6778187   NaN -0.6280274
## [283,] -0.4139654169  0.835498084   -0.6778187   NaN -0.6280274
## [284,] -0.2310835342  0.233063566    0.1228189   NaN  1.5912040
## [285,] -0.3742454261  1.181392156   -0.6778187   NaN  1.5912040
## [286,] -0.9320245479  0.220278692   -0.6778187   NaN -0.6280274
## [287,] -0.7098474872  0.787730421    0.1228189   NaN  1.5912040
## [288,] -0.1609894329  0.644286941    2.5247318   NaN -0.6280274
## [289,] -0.8772237051 -0.018700113   -0.2774999   NaN  1.5912040
## [290,] -0.6781989384 -1.380359474   -0.6778187   NaN -0.6280274
## [291,]  2.5833008389  1.584888409    2.5247318   NaN  1.5912040
## [292,] -0.4286214563  1.681969158    0.5231377   NaN -0.6280274
## [293,] -0.7888626561 -1.461704993   -0.6778187   NaN -0.6280274
## [294,] -0.1433597043 -0.823725715   -0.6778187   NaN  1.5912040
## [295,] -0.8872068043 -0.407725574   -0.6778187   NaN  1.5912040
## [296,]  1.4915321085  0.077397184    0.9234565   NaN -0.6280274
## [297,] -1.0796469736  1.534170391   -0.6778187   NaN -0.6280274
## [298,]  0.3222350538 -1.294377682   -1.0781375   NaN -0.6280274
## [299,] -0.5979093314 -1.010300585    0.5231377   NaN -0.6280274
## [300,] -0.2168523076  0.282095667    0.9234565   NaN -0.6280274
## [301,]  2.0204239643  0.222386089   -0.6778187   NaN -0.6280274
## [302,] -1.1263763745 -0.644737475   -0.6778187   NaN -0.6280274
## [303,] -0.1788315678 -1.333153784   -1.0781375   NaN -0.6280274
## [304,]  0.0904997066 -0.291116281    0.5231377   NaN -0.6280274
## [305,]  0.6605983977 -0.473616849   -1.0781375   NaN -0.6280274
## [306,] -0.1760702850 -1.037696744    1.7240942   NaN -0.6280274
## [307,] -0.2164274949  0.375383101   -0.6778187   NaN -0.6280274
## [308,]  1.1805691861  1.741257256    0.1228189   NaN -0.6280274
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## [311,] -0.0197391983  0.492975846     0.1228189  NaN -0.6280274
## [312,] -0.2746268396  0.842241753    -0.6778187  NaN -0.6280274
## [313,] -0.8088288546 -0.922492382    -1.0781375  NaN  1.5912040
## [314,]  1.1416988208  1.271588742     1.3237753  NaN -0.6280274
## [315,]  2.2440878696 -1.258551935    -0.6778187  NaN  1.5912040
## [316,] -0.8598063829 -0.511128514    -1.0781375  NaN -0.6280274
## [317,]  1.5847785040  0.491289929     1.7240942  NaN  1.5912040
## [318,] -0.3317641526  0.482438862    -0.2774999  NaN -0.6280274
## [319,] -0.8549210364  0.930752422    -0.6778187  NaN  1.5912040
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## [322,]  0.2217668419 -1.007350229     0.5231377  NaN -0.6280274
## [323,] -0.3075498266 -0.527706702     1.7240942  NaN -0.6280274
## [324,] -0.6454883578  1.464485801     0.9234565  NaN  1.5912040
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## [326,]  0.5182861313 -0.039212109    -0.6778187  NaN -0.6280274
## [327,]  2.7122315042  0.959272526    -0.6778187  NaN -0.6280274
## [328,] -0.2686794613  0.486794149     0.5231377  NaN  1.5912040
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## [330,]  2.5057725147  0.289682295     0.5231377  NaN -0.6280274
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## [333,] -0.3470574111  0.361333789     0.1228189  NaN -0.6280274
## [334,]  0.7396135665 -0.709645298     2.1244130  NaN -0.6280274
## [335,] -0.5959976741 -0.707397408     2.5247318  NaN -0.6280274
## [336,]  0.2026502688 -0.146127377    -0.2774999  NaN  1.5912040
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## [340,] -0.0613708464 -1.531108597    -0.6778187  NaN -0.6280274
## [341,] -0.0331207995  1.245316527     1.7240942  NaN -0.6280274
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## [347,] -0.1000288053 -0.590507129     1.3237753  NaN  1.5912040
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## [349,]  2.0155386178  0.223088554    -0.2774999  NaN -0.6280274
## [350,] -0.3937868120  0.367374993    -0.6778187  NaN -0.6280274
## [351,] -0.8086164483  1.363330752    -1.0781375  NaN  1.5912040
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## [354,] -0.1123483747  0.377630991     0.5231377  NaN  1.5912040
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## [357,]  0.0590635642  0.388448962     0.1228189  NaN -0.6280274
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## [368,]  0.8481532205 -1.623834059   1.3237753  NaN -0.6280274
## [369,] -0.0261113893 -1.152479626  -0.2774999  NaN  1.5912040
## [370,] -0.8169002966 -0.950029034  -1.0781375  NaN  1.5912040
## [371,] -0.8043683209  1.560723592  -0.6778187  NaN -0.6280274
## [372,] -0.9137576003  0.541586467   2.5247318  NaN -0.6280274
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## [375,] -0.2654933658  0.904339714  -0.6778187  NaN -0.6280274
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## [383,] -0.7223794629 -1.086166872  -1.0781375  NaN -0.6280274
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## [389,] -0.8341052124  0.867811502   0.1228189  NaN -0.6280274
## [390,] -0.4897944902  0.956743650  -0.2774999  NaN  1.5912040
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## [393,]  2.7406939575 -0.815436621   0.5231377  NaN -0.6280274
## [394,]  0.0074488168 -0.221010212   2.5247318  NaN -0.6280274
## [395,] -0.4666421961 -1.427003192  -0.6778187  NaN -0.6280274
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## [397,] -0.4207624207 -1.698014428   0.5231377  NaN  1.5912040
## [398,] -0.4281966436 -0.312330743  -0.6778187  NaN  1.5912040
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## [404,]  0.4012502227  0.737995855  -0.6778187  NaN -0.6280274
## [405,] -0.4131157914 -0.109318178  -0.6778187  NaN -0.6280274
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## [471,] -0.8714887331 -1.233965639  -1.0781375  NaN -0.6280274
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## [503,]  0.3989137526 -0.956210732   1.7240942  NaN -0.6280274
## [504,] -0.8096784801 -0.934715284  -0.6778187  NaN -0.6280274
## [505,] -0.4708903235 -1.219916326  -0.2774999  NaN -0.6280274
## [506,] -0.8164754839  0.484124779  -0.6778187  NaN  1.5912040
## [507,]  0.6225776579 -0.661315664  -0.6778187  NaN -0.6280274
## [508,] -0.2000722045 -1.520993092  -0.6778187  NaN -0.6280274
## [509,]  0.0303887045  0.710178217  -0.6778187  NaN -0.6280274
## [510,]  0.2595751753 -1.261361798   0.1228189  NaN -0.6280274
## [511,]  0.8967942787 -1.065514382  -0.2774999  NaN -0.6280274
## [512,]  0.4978951200 -0.053261421  -0.2774999  NaN  1.5912040
## [513,] -0.9468929937  0.120950053  -1.0781375  NaN -0.6280274
## [514,] -1.1669459907  1.782281249  -0.6778187  NaN  1.5912040
## [515,] -0.6701274965 -1.566372371  -0.6778187  NaN  1.5912040
## [516,] -1.1091714587  0.363441186  -0.6778187  NaN -0.6280274
## [517,] -0.7824904650 -0.810519362  -0.2774999  NaN -0.6280274
## [518,] -0.3508807257  0.191758588  -1.0781375  NaN -0.6280274
## [519,] -0.5256911664 -0.916310684  -1.0781375  NaN -0.6280274
## [520,] -0.8035186954  0.652716529  -0.6778187  NaN -0.6280274
## [521,]  0.3434756906  0.601858018   0.1228189  NaN -0.6280274
## [522,] -0.3942116247  0.331549246  -0.6778187  NaN  1.5912040
## [523,] -0.3872022146  0.129098654   0.1228189  NaN -0.6280274
## [524,] -0.6971031052 -1.547686785  -0.6778187  NaN  1.5912040
```

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## [525,]  0.4498912809  0.469373001   -0.6778187   NaN -0.6280274
## [526,] -0.4090800705  1.471229471    2.5247318   NaN -0.6280274
## [527,] -0.4141778233  0.936372147   -0.6778187   NaN -0.6280274
## [528,] -0.2351192552  1.038229662   -0.6778187   NaN -0.6280274
## [529,]  0.0622496597  1.283952137    0.1228189   NaN  1.5912040
## [530,]  0.2383345386  0.712285613   -1.0781375   NaN -0.6280274
## [531,]  0.1930919822 -1.166669432   -0.6778187   NaN -0.6280274
## [532,]  0.9889786423  0.710880682    0.1228189   NaN -0.6280274
## [533,] -0.3277284316 -0.349561421   -0.2774999   NaN -0.6280274
## [534,]  0.8436926868  1.328909936    0.9234565   NaN  1.5912040
## [535,]  1.7653239166 -0.112268534    0.1228189   NaN -0.6280274
## [536,]  2.6844062700 -0.765983041    0.1228189   NaN -0.6280274
## [537,] -0.2332075979 -0.335652601    2.1244130   NaN -0.6280274
## [538,]  0.4864251761 -1.335261181   -0.6778187   NaN -0.6280274
## [539,]  2.6946017757  0.737433883   -0.6778187   NaN -0.6280274
## [540,] -0.5581893406 -0.608349756    1.7240942   NaN -0.6280274
## [541,] -0.9105715048 -1.466903239    1.7240942   NaN  1.5912040
## [542,]  1.1066517701  0.846035068    2.5247318   NaN -0.6280274
## [543,]  0.2884624414  0.152280020    0.5231377   NaN  1.5912040
## [544,] -0.5936612041 -1.715295083   -0.2774999   NaN -0.6280274
## [545,]  1.5435716686 -0.574350420    2.5247318   NaN  1.5912040
## [546,] -0.2546606411  1.540071102    1.7240942   NaN -0.6280274
## [547,] -0.8200863921 -1.623834059   -0.6778187   NaN -0.6280274
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## [549,]  0.0639489106  1.316406048    0.1228189   NaN -0.6280274
## [550,] -0.0766641049 -0.976863221    0.1228189   NaN -0.6280274
## [551,] -0.8502480963 -1.400590484   -0.6778187   NaN -0.6280274
## [552,] -0.0241997320  0.625741849    2.5247318   NaN -0.6280274
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## [558,] -0.2994783847 -1.342004851   -0.2774999   NaN -0.6280274
## [559,] -0.2535986092  0.959974992   -0.6778187   NaN -0.6280274
## [560,] -0.7319377495  0.865142133    1.3237753   NaN  1.5912040
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## [567,] -0.0225004811 -0.558334203    0.5231377   NaN  1.5912040
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## [569,]  2.8369140421  0.967421127    0.9234565   NaN  1.5912040
## [570,]  0.2302630966 -0.011815950   -0.6778187   NaN -0.6280274
## [571,] -0.4768377018  1.724679068   -1.0781375   NaN -0.6280274
## [572,] -0.4543226268 -1.267964975    0.1228189   NaN -0.6280274
## [573,] -0.4604824115  1.578566218    0.5231377   NaN -0.6280274
## [574,] -0.2499877010 -1.580421683    1.3237753   NaN -0.6280274
## [575,] -0.6845711295 -0.107070288   -0.2774999   NaN -0.6280274
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## [577,] -0.4589955669  1.362066314   -1.0781375   NaN -0.6280274
## [578,] -0.7903495006  0.785623024   -1.0781375   NaN  1.5912040
```

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## [579,] -0.1110739364  1.653870533     1.3237753  NaN  1.5912040
## [580,] -0.4507117185 -0.952979390    -0.6778187  NaN -0.6280274
## [581,] -0.8349548379  0.843506192    -0.6778187  NaN -0.6280274
## [582,] -0.5671104081  1.413627290     0.1228189  NaN -0.6280274
## [583,] -0.4798113909 -0.615655398    -0.6778187  NaN -0.6280274
## [584,] -0.0006226252 -0.141631597     0.9234565  NaN -0.6280274
## [585,]  2.5333853425  0.268608327    -0.6778187  NaN -0.6280274
## [586,] -1.0412014210 -1.526893803    -0.6778187  NaN  1.5912040
## [587,] -0.8090412610  1.719340329    -0.6778187  NaN -0.6280274
## [588,] -0.7123963637  1.054807851     2.1244130  NaN -0.6280274
## [589,]  2.3653719056 -1.044159428     0.9234565  NaN -0.6280274
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## [593,]  2.1769674574 -0.187010876    -0.6778187  NaN  1.5912040
## [594,] -0.2708035250  1.271167262    -1.0781375  NaN -0.6280274
## [595,] -0.8077668228  1.329893388    -0.6778187  NaN -0.6280274
## [596,]  2.7067089386  1.608350761     1.7240942  NaN  1.5912040
## [597,] -0.8489736581 -0.142193569     0.1228189  NaN -0.6280274
## [598,] -0.0936566143 -1.441754970     2.5247318  NaN  1.5912040
## [599,] -0.4504993122  0.289541802     1.3237753  NaN -0.6280274
## [600,] -0.9260771696  1.575475370     0.5231377  NaN -0.6280274
## [601,] -0.0724159775  0.675897894    -0.6778187  NaN -0.6280274
## [602,] -0.2992659783 -0.327363507     1.3237753  NaN -0.6280274
## [603,]  0.0794545755  0.831845262     0.9234565  NaN  1.5912040
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## [605,] -0.4394541810 -0.352230790    -0.6778187  NaN -0.6280274
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## [608,]  0.2444943232 -1.187602908    -0.6778187  NaN -0.6280274
## [609,] -0.2852471580  1.012378927     0.5231377  NaN -0.6280274
## [610,]  2.2634168491 -1.280328370     1.3237753  NaN -0.6280274
## [611,]  1.3392367428 -0.768652411    -0.6778187  NaN  1.5912040
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## [615,] -0.8787105496  0.925132697    -0.6778187  NaN  1.5912040
## [616,] -1.0188987524  0.317218948    -0.6778187  NaN -0.6280274
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## [618,] -0.1210570357 -1.280749849     2.5247318  NaN -0.6280274
## [619,] -0.6539846125  1.028254650     1.7240942  NaN -0.6280274
## [620,] -0.5237795091  1.054105385    -0.6778187  NaN -0.6280274
## [621,] -0.8377161206  0.497190640    -0.6778187  NaN -0.6280274
## [622,] -0.0641321292 -1.614280526    -0.6778187  NaN  1.5912040
## [623,] -0.4460387784 -0.711331216    -0.2774999  NaN -0.6280274
## [624,] -0.5824036666 -1.677502432     2.5247318  NaN -0.6280274
## [625,]  0.9411872096  0.899422455     1.7240942  NaN  1.5912040
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## [629,] -0.0358820822  1.439337532     0.5231377  NaN -0.6280274
## [630,] -0.3328261844  1.356025109    -0.6778187  NaN -0.6280274
## [631,] -0.3670236096  0.678988743     1.3237753  NaN -0.6280274
## [632,] -0.7827028714 -1.302245297    -0.2774999  NaN  1.5912040
```

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## [633,] -0.8470620008 -0.736900965    0.9234565  NaN  1.5912040
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## [640,] -0.6208492191 -0.528128182   -0.2774999  NaN -0.6280274
## [641,] -0.7096350809 -0.496657722   -1.0781375  NaN -0.6280274
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## [655,] -0.2759012778 -0.916451178    2.1244130  NaN -0.6280274
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## [664,] -0.8092536674 -0.764718603   -0.6778187  NaN -0.6280274
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```

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## [727,] -0.5002024022 -0.426832639        -0.6778187    NaN -0.6280274
## [728,] -1.1580249233 -0.115218889        -0.6778187    NaN -0.6280274
## [729,]  0.8997679679 -0.051996983         2.1244130    NaN -0.6280274
## [730,]  0.8252133328 -1.030953074        -0.6778187    NaN  1.5912040
## [731,]  1.0435670788  0.490165984        -1.0781375    NaN  1.5912040
## [732,] -0.8290074596  0.556619232        -0.6778187    NaN  1.5912040
## [733,] -0.8668157930  1.603293008        -1.0781375    NaN -0.6280274
## [734,] -0.2189763713 -1.542488540        -0.6778187    NaN -0.6280274
## [735,] -0.8606560084 -1.044159428        -0.6778187    NaN -0.6280274
## [736,] -0.4806610164 -0.167763318        -0.2774999    NaN -0.6280274
## [737,]  0.9549936235  1.114376935         1.7240942    NaN -0.6280274
## [738,] -0.3185949578  1.272572193         1.3237753    NaN -0.6280274
## [739,]  1.3252179225 -1.019011158        -0.6778187    NaN -0.6280274
## [740,] -0.4834222992 -1.356475643        -1.0781375    NaN -0.6280274
```

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## [741,] -0.5492682732 -0.670447717   -0.6778187   NaN -0.6280274
## [742,]  2.5064097338 -0.919261040    1.3237753   NaN -0.6280274
## [743,] -0.8757368605  0.822151237    0.5231377   NaN -0.6280274
## [744,]  1.5342257884  1.055931796    0.1228189   NaN  1.5912040
## [745,] -0.3665987969  0.009679498    0.9234565   NaN -0.6280274
## [746,] -0.0250493575 -0.185605944    0.1228189   NaN  1.5912040
## [747,]  2.8611283680  0.838869918   -0.6778187   NaN -0.6280274
## [748,]  0.0760560736 -1.311096364    2.1244130   NaN  1.5912040
## [749,] -0.3258167743  1.053683906    2.1244130   NaN -0.6280274
## [750,]  2.8339403529  1.620292676   -0.6778187   NaN -0.6280274
## [751,]  1.4479888031 -0.361924816    0.1228189   NaN  1.5912040
## [752,] -0.0331207995  1.490196043   -1.0781375   NaN -0.6280274
## [753,] -0.7986333490 -0.849154971   -0.6778187   NaN -0.6280274
## [754,]  0.9297172657 -1.296766065   -0.6778187   NaN  1.5912040
## [755,] -0.8838083025  1.000858491   -1.0781375   NaN -0.6280274
## [756,]  2.3677083756 -1.251667772    0.1228189   NaN -0.6280274
## [757,] -0.5263283855 -0.446501676    2.5247318   NaN -0.6280274
## [758,]  0.6843879109 -0.285918035   -1.0781375   NaN -0.6280274
## [759,]  1.1472213863 -0.460129510    0.1228189   NaN  1.5912040
## [760,] -0.9188553531 -0.842270808   -0.6778187   NaN -0.6280274
## [761,]  0.2170939018  1.295894052   -0.2774999   NaN -0.6280274
## [762,] -0.3544916339 -0.906897645    1.7240942   NaN -0.6280274
## [763,] -0.9475302128  0.145114870    1.3237753   NaN  1.5912040
## [764,] -0.9097218793  0.575585803   -0.6778187   NaN  1.5912040
## [765,] -1.1578125169  1.274398604   -0.6778187   NaN -0.6280274
## [766,] -0.7820656523 -1.589834723    0.1228189   NaN -0.6280274
## [767,]  2.7047972813 -0.205134489   -0.2774999   NaN  1.5912040
## [768,] -0.5089110633 -0.065343830    0.1228189   NaN -0.6280274
## [769,]  0.4020998481  1.110443128   -0.6778187   NaN -0.6280274
## [770,] -0.9549644357  1.538666171   -0.6778187   NaN -0.6280274
## [771,]  2.7876357648  1.001982436    2.5247318   NaN -0.6280274
## [772,]  0.8885104304 -0.831874317    1.3237753   NaN -0.6280274
## [773,] -0.7563644818 -0.303339183   -0.2774999   NaN -0.6280274
## [774,]  0.5002315900  0.190494149   -1.0781375   NaN -0.6280274
## [775,]  2.1778170828  0.422869777    1.7240942   NaN -0.6280274
## [776,]  0.9122999436 -1.270774837    0.9234565   NaN -0.6280274
## [777,] -0.8878440234  0.406291589   -0.6778187   NaN  1.5912040
## [778,] -1.0804965990  0.413737724   -0.6778187   NaN -0.6280274
## [779,] -0.4010086285  0.943537296    2.1244130   NaN  1.5912040
## [780,] -0.8585319447 -0.559317655    2.5247318   NaN  1.5912040
## [781,]  0.4713443240 -0.275100065   -0.6778187   NaN -0.6280274
## [782,] -0.5411968312 -0.445658718   -0.6778187   NaN -0.6280274
## [783,]  0.7336661882 -0.732967157   -1.0781375   NaN -0.6280274
## [784,] -0.6641801182  0.639229189   -0.6778187   NaN -0.6280274
## [785,]  0.4927973672  1.446362188   -1.0781375   NaN -0.6280274
## [786,]  0.8111945125  1.718075891    0.5231377   NaN -0.6280274
## [787,] -0.3997341903 -1.186338469   -0.6778187   NaN -0.6280274
## [788,]  0.9501082770  0.210725159    0.1228189   NaN -0.6280274
## [789,] -0.6038567097 -0.899732496    0.1228189   NaN -0.6280274
## [790,]  0.8451795313 -1.684105609    2.5247318   NaN -0.6280274
## [791,]  0.1308569165  0.969528524    0.5231377   NaN -0.6280274
## [792,]  0.6540138003 -0.559177162   -1.0781375   NaN  1.5912040
## [793,] -0.4237361098 -1.571289630   -0.6778187   NaN -0.6280274
## [794,] -0.9124831621  1.147673806   -0.6778187   NaN -0.6280274
```

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## [795,]  0.2661597727  1.117327291   -1.0781375   NaN -0.6280274
## [796,]  0.0405842102  1.392272335   -0.2774999   NaN  1.5912040
## [797,] -0.5972721123 -1.363921779   -0.6778187   NaN  1.5912040
## [798,] -0.8763740796  0.710880682   -0.6778187   NaN -0.6280274
## [799,] -0.8899680871 -1.590396695    0.5231377   NaN  1.5912040
## [800,]  2.3708944712  0.012067882   -1.0781375   NaN -0.6280274
## [801,] -0.8298570850 -1.004961846   -0.6778187   NaN -0.6280274
## [802,] -0.3770067089  0.412754272    0.1228189   NaN  1.5912040
## [803,] -0.4674918216 -0.128144257   -1.0781375   NaN -0.6280274
## [804,] -0.7485054462  1.147111833    0.1228189   NaN -0.6280274
## [805,]  2.2052175043  0.258633315   -0.2774999   NaN -0.6280274
## [806,] -0.1932752008  0.513768829   -0.6778187   NaN -0.6280274
## [807,]  0.8373204957  0.141743035    1.7240942   NaN -0.6280274
## [808,]  0.4751676386 -1.228486407   -1.0781375   NaN  1.5912040
## [809,] -0.8472744072  1.777925962    0.5231377   NaN -0.6280274
## [810,]  0.2447067296 -0.881468390   -1.0781375   NaN -0.6280274
## [811,]  2.3284131976  0.180238151    0.1228189   NaN -0.6280274
## [812,]  0.1801351938  0.885935115    1.7240942   NaN -0.6280274
## [813,]  0.9169728836 -0.390304427    2.1244130   NaN -0.6280274
## [814,]  1.2035090738 -0.107632260    1.7240942   NaN -0.6280274
## [815,]  2.7874233584  0.453918758   -0.6778187   NaN -0.6280274
## [816,] -0.9415828345  1.547236252   -0.6778187   NaN  1.5912040
## [817,]  0.0592759705 -0.778767916    2.5247318   NaN -0.6280274
## [818,]  0.2710451192  1.253886608   -0.2774999   NaN -0.6280274
## [819,] -0.7884378433  1.077286751   -1.0781375   NaN -0.6280274
## [820,] -0.7013512325  0.786465983   -1.0781375   NaN -0.6280274
## [821,] -0.3260291806  0.588230185   -0.6778187   NaN -0.6280274
## [822,]  1.4055075296 -0.341974792    1.3237753   NaN -0.6280274
## [823,] -0.5246291345  0.213675515   -0.2774999   NaN -0.6280274
## [824,] -0.6822346594  0.509554035   -1.0781375   NaN -0.6280274
## [825,] -0.4738640126 -0.668059334    0.5231377   NaN -0.6280274
## [826,] -0.3073374203  0.474290261   -0.6778187   NaN  1.5912040
## [827,] -0.7771803058 -1.167371898   -0.6778187   NaN -0.6280274
## [828,] -0.8071296037  1.092319515   -0.6778187   NaN  1.5912040
## [829,] -0.9768422915 -0.106367822   -0.6778187   NaN -0.6280274
## [830,]  0.3655659529  0.572073475   -1.0781375   NaN  1.5912040
## [831,] -0.3689352669 -0.739289348    0.1228189   NaN  1.5912040
## [832,] -0.8268833959 -1.135198972   -0.6778187   NaN -0.6280274
## [833,] -0.1639631220  0.401514822    1.7240942   NaN -0.6280274
## [834,] -0.8419642480 -0.893972278   -0.6778187   NaN -0.6280274
## [835,] -0.1675740303 -1.191958194   -0.6778187   NaN -0.6280274
## [836,] -0.4630312879 -1.012267488   -0.6778187   NaN -0.6280274
## [837,]  0.1769490983 -0.442708362   -0.6778187   NaN -0.6280274
## [838,]  1.4860095430 -0.074616376    2.5247318   NaN -0.6280274
## [839,]  1.5410227922 -1.667105941   -1.0781375   NaN  1.5912040
## [840,] -0.2863091899 -1.694361607    1.7240942   NaN -0.6280274
## [841,] -0.9016504374  0.284765036    1.3237753   NaN -0.6280274
## [842,] -0.6172383109 -1.110472182    2.1244130   NaN -0.6280274
## [843,] -0.8470620008  1.214127054   -0.6778187   NaN  1.5912040
## [844,] -0.4424278702 -0.125334394   -0.6778187   NaN -0.6280274
## [845,]  0.0159450715 -1.630718222   -0.6778187   NaN -0.6280274
## [846,] -0.4420030575  0.967983100    0.1228189   NaN  1.5912040
## [847,]  0.8009990068  0.741086704   -0.2774999   NaN -0.6280274
## [848,] -0.2463767927  1.607507802   -1.0781375   NaN -0.6280274
```

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## [849,] -0.8765864860  1.717373425       -0.6778187     NaN -0.6280274
## [850,] -0.2457395736 -0.677753359        2.1244130     NaN -0.6280274
## [851,] -0.7807912141  0.089058114       -0.6778187     NaN -0.6280274
## [852,]  2.8547561770  0.598767169        0.5231377     NaN -0.6280274
## [853,] -0.7162196783  1.689977266       -0.6778187     NaN -0.6280274
## [854,] -0.8392029652 -1.003275928       -0.6778187     NaN -0.6280274
## [855,] -0.4303207072  0.813019184        0.5231377     NaN  1.5912040
## [856,] -0.0061451908 -0.611440604       -0.6778187     NaN -0.6280274
## [857,] -0.7370355023 -0.208646817       -0.6778187     NaN -0.6280274
## [858,] -0.7576389200 -0.489914052       -0.6778187     NaN  1.5912040
## [859,]  2.5707688632  0.607899222        0.1228189     NaN -0.6280274
## [860,] -0.9207670105  1.773008702       -1.0781375     NaN  1.5912040
## [861,] -0.7752686485 -1.417590152       -1.0781375     NaN  1.5912040
## [862,]  2.2398397422  1.374570202        2.1244130     NaN -0.6280274
## [863,] -0.8948534336 -1.409722537       -0.2774999     NaN -0.6280274
## [864,] -0.6166010918 -0.826676071       -0.6778187     NaN -0.6280274
## [865,] -0.9337237989  0.840134357        1.3237753     NaN -0.6280274
## [866,] -0.5072118124 -0.157507320        2.1244130     NaN -0.6280274
## [867,] -0.4621816624  1.563252468        0.9234565     NaN -0.6280274
## [868,]  2.4114640874 -0.677612866       -0.2774999     NaN -0.6280274
## [869,] -0.7024132644 -0.261893711       -0.6778187     NaN -0.6280274
## [870,]  2.6716618879 -0.486682710        0.9234565     NaN -0.6280274
## [871,]  0.5231714778  0.943115817        0.1228189     NaN  1.5912040
## [872,] -0.9118459430 -1.537149801       -0.6778187     NaN -0.6280274
## [873,] -0.4171515124 -1.321773841       -0.6778187     NaN -0.6280274
## [874,] -0.7990581617 -1.046407318       -0.6778187     NaN -0.6280274
## [875,] -0.6397533859 -0.422055873       -0.6778187     NaN -0.6280274
## [876,] -0.4167266997 -0.922913861       -0.6778187     NaN -0.6280274
## [877,] -0.8124397629 -1.301402338       -0.6778187     NaN -0.6280274
## [878,]  0.1860825721  0.438324021       -0.2774999     NaN -0.6280274
## [879,] -0.0490512771 -0.204432023        1.7240942     NaN -0.6280274
## [880,] -0.2725027760 -0.480501013       -1.0781375     NaN  1.5912040
## [881,] -0.7986333490 -0.980937522       -0.6778187     NaN -0.6280274
## [882,] -0.3196569896 -1.682419692        0.5231377     NaN  1.5912040
## [883,]  0.7963260667 -1.415904235       -0.2774999     NaN  1.5912040
## [884,] -0.7905619070 -1.124240508       -1.0781375     NaN -0.6280274
## [885,]  0.0741444163 -0.382436812        1.7240942     NaN -0.6280274
## [886,] -0.3298524953  0.886497088       -1.0781375     NaN -0.6280274
## [887,] -0.6210616255 -0.694612534       -1.0781375     NaN  1.5912040
## [888,]  1.4205883817  1.259927812        0.1228189     NaN  1.5912040
## [889,]  0.8228768627 -0.078409691        0.5231377     NaN  1.5912040
## [890,] -0.9065357838  0.008977033       -0.6778187     NaN  1.5912040
## [891,]  0.8494276587 -0.653869528        1.7240942     NaN -0.6280274
## [892,] -0.9541148102  0.796440995       -0.6778187     NaN -0.6280274
## [893,] -0.9864005781 -1.147140888       -0.6778187     NaN  1.5912040
## [894,] -0.5826160729 -1.224412106       -0.6778187     NaN -0.6280274
## [895,]  2.3951087971  1.287042985        0.1228189     NaN -0.6280274
## [896,]  0.0701086953  0.389994386       -0.6778187     NaN  1.5912040
## [897,]  0.0656481616  0.405308137       -0.6778187     NaN -0.6280274
## [898,] -0.2829106880  0.305839005        0.9234565     NaN -0.6280274
## [899,]  2.8116376843  0.605791825        0.1228189     NaN -0.6280274
## [900,]  2.5930715319 -0.307553976       -0.2774999     NaN -0.6280274
## [901,] -0.5970597059 -0.710488257       -0.6778187     NaN -0.6280274
## [902,] -0.8377161206  0.324103111        0.9234565     NaN -0.6280274
```

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## [903,] -0.8466371881 -1.560190673        -0.6778187     NaN -0.6280274
## [904,]  0.0255033580 -1.420259522        -0.6778187     NaN  1.5912040
## [905,]  2.4983382918 -0.783966161         1.3237753     NaN -0.6280274
## [906,]  2.0435762584 -1.529984652         0.1228189     NaN -0.6280274
## [907,] -0.8321935551  1.029800075        -1.0781375     NaN -0.6280274
## [908,]  2.4872931607 -0.781437285         1.7240942     NaN -0.6280274
## [909,]  0.3987013462  1.038932128        -1.0781375     NaN  1.5912040
## [910,] -0.7453193507  0.970511976        -0.6778187     NaN  1.5912040
## [911,] -1.1214910280  0.363581679        -0.6778187     NaN -0.6280274
## [912,] -1.1437936966 -0.881327896        -0.6778187     NaN  1.5912040
## [913,] -0.7705957084 -0.609754687        -0.6778187     NaN  1.5912040
## [914,]  2.6170734514 -1.660643257        -0.2774999     NaN  1.5912040
## [915,]  1.5025772396  1.584607423        -0.6778187     NaN  1.5912040
## [916,] -0.8236973004  1.544707375        -0.6778187     NaN -0.6280274
## [917,]  2.6096392285 -0.613548001        -0.2774999     NaN -0.6280274
## [918,] -0.4173639188 -1.162454638        -1.0781375     NaN  1.5912040
## [919,]  2.8343651657  0.686013399         0.5231377     NaN  1.5912040
## [920,]  0.8515517224  0.799250857         1.3237753     NaN -0.6280274
## [921,] -0.4373301174  1.154979448         0.5231377     NaN -0.6280274
## [922,] -0.9237406996 -1.049638659        -1.0781375     NaN  1.5912040
## [923,]  2.6948141820  0.444505718        -0.6778187     NaN -0.6280274
## [924,] -0.4275594245  1.056493768         0.5231377     NaN -0.6280274
## [925,] -0.6365672904 -1.165124008        -1.0781375     NaN  1.5912040
## [926,] -0.8774361114 -1.220197312         1.3237753     NaN  1.5912040
## [927,]  0.7918655330  0.850109368         0.1228189     NaN -0.6280274
## [928,] -0.2321455661 -1.684527088         2.5247318     NaN  1.5912040
## [929,]  0.3133139864 -0.033451891        -0.6778187     NaN -0.6280274
## [930,] -0.5598885916 -0.012799401        -0.6778187     NaN  1.5912040
## [931,] -0.7784547440 -1.412813386        -1.0781375     NaN -0.6280274
## [932,] -0.3840161191 -0.204432023         1.7240942     NaN  1.5912040
## [933,] -0.6720391538  0.417531038         0.1228189     NaN  1.5912040
## [934,] -0.9394587708 -1.346079152        -0.2774999     NaN -0.6280274
## [935,] -0.9360602689  0.634592916        -0.6778187     NaN -0.6280274
## [936,] -0.0624328782 -0.368106513        -0.6778187     NaN -0.6280274
## [937,]  2.4550073928 -0.179564740         0.1228189     NaN -0.6280274
## [938,]  2.2557702198  0.424415202         1.3237753     NaN  1.5912040
## [939,] -0.8774361114  1.652606095        -0.6778187     NaN -0.6280274
## [940,] -0.3440837219  1.198672810        -0.6778187     NaN -0.6280274
## [941,] -0.5520295560  1.101592061        -1.0781375     NaN -0.6280274
## [942,] -0.3984597521  1.309100406        -1.0781375     NaN -0.6280274
## [943,]  0.1255467573 -1.203478631         0.1228189     NaN -0.6280274
## [944,] -0.6541970189  1.214408040         1.3237753     NaN -0.6280274
## [945,]  0.0363360828  0.292070678        -1.0781375     NaN -0.6280274
## [946,]  2.2041554724  1.139244218         0.5231377     NaN  1.5912040
## [947,]  0.5503594928  0.410506382        -0.2774999     NaN  1.5912040
## [948,]  0.4127201665  1.014486324         2.5247318     NaN  1.5912040
## [949,]  1.1497702627  1.631672619        -0.6778187     NaN  1.5912040
## [950,] -0.4182135443 -0.135028420        -1.0781375     NaN -0.6280274
## [951,]  0.7113635196 -0.755586550        -0.6778187     NaN  1.5912040
## [952,] -0.0747524476  1.090352611        -0.6778187     NaN -0.6280274
## [953,] -0.8923045572 -0.842130315        -0.6778187     NaN  1.5912040
## [954,] -0.8795601751  0.050001025         0.5231377     NaN -0.6280274
## [955,]  2.4125261192  1.723695616        -1.0781375     NaN  1.5912040
## [956,]  2.6941769629 -1.028564691         0.5231377     NaN -0.6280274
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##  [957,]   2.8067523379 -1.445829270          1.3237753    NaN -0.6280274
##  [958,] -0.6284958484 -0.812205279          2.5247318    NaN -0.6280274
##  [959,]   0.4241901104 -1.239023391         -1.0781375    NaN -0.6280274
##  [960,] -0.3912379356  1.143880492         -0.6778187    NaN -0.6280274
##  [961,] -0.5097606888 -1.407193661         -1.0781375    NaN -0.6280274
##  [962,] -0.4787493591 -1.632966112         -0.6778187    NaN  1.5912040
##  [963,]   1.5979476988  0.460100455         -0.6778187    NaN  1.5912040
##  [964,]   0.0828530773  0.723244077          0.1228189    NaN -0.6280274
##  [965,] -0.0802750131  1.298141942         -0.6778187    NaN -0.6280274
##  [966,] -0.6019450524 -0.735917513          0.1228189    NaN -0.6280274
##  [967,]   0.7444989130 -0.321743782          1.7240942    NaN  1.5912040
##  [968,] -0.8742500159 -1.060878109          0.1228189    NaN -0.6280274
##  [969,] -0.3959108756 -1.693237662         -0.2774999    NaN -0.6280274
##  [970,]   0.2963214770  0.617171768         -0.6778187    NaN -0.6280274
##  [971,] -0.8430262798 -1.093893994          2.1244130    NaN -0.6280274
##  [972,]   1.4101804697  1.422618850          0.1228189    NaN -0.6280274
##  [973,] -1.0390773573  0.701327150         -0.6778187    NaN -0.6280274
##  [974,] -0.2421286654 -0.487104189         -1.0781375    NaN -0.6280274
##  [975,] -0.3041513248  0.854043176          0.1228189    NaN -0.6280274
##  [976,]   1.5276411910 -0.707537902          1.3237753    NaN  1.5912040
##  [977,]   1.4654061253  0.550999507          0.5231377    NaN  1.5912040
##  [978,] -0.9502914956  0.221683623         -0.6778187    NaN -0.6280274
##  [979,] -0.0267486084 -0.059724105          0.9234565    NaN -0.6280274
##  [980,] -0.2281098451  0.446472622          0.5231377    NaN -0.6280274
##  [981,] -0.7897122815 -0.341553313          1.7240942    NaN -0.6280274
##  [982,] -0.4012210348  1.260911264         -1.0781375    NaN  1.5912040
##  [983,] -0.8268833959  0.201593106         -0.6778187    NaN -0.6280274
##  [984,]   0.0390973656 -1.145033491         -0.6778187    NaN -0.6280274
##  [985,] -0.3778563344  1.393536774         -0.6778187    NaN -0.6280274
##  [986,] -0.0688050693  0.947471104         -0.6778187    NaN  1.5912040
##  [987,] -0.0813370450 -1.509753642          0.1228189    NaN  1.5912040
##  [988,]   0.8693938573  0.151999033         -0.2774999    NaN -0.6280274
##  [989,] -0.2200384031 -0.050592052          0.1228189    NaN  1.5912040
##  [990,] -0.7448945379 -1.282857246          1.7240942    NaN  1.5912040
##  [991,]   0.7423748493  0.699641232          1.3237753    NaN -0.6280274
##  [992,] -0.5150708480  0.868794954         -1.0781375    NaN  1.5912040
##  [993,]   0.9382135204 -1.526331830          0.1228189    NaN -0.6280274
##  [994,] -0.0575475318 -0.257959904         -0.2774999    NaN -0.6280274
##  [995,]   1.4324831383 -0.643754023         -0.2774999    NaN  1.5912040
##  [996,] -0.5144336289  0.799391351         -0.6778187    NaN  1.5912040
##  [997,] -0.1558916800 -1.013391433         -0.6778187    NaN  1.5912040
##  [998,] -0.8727631713  1.597111311         -0.6778187    NaN  1.5912040
##  [999,] -0.5520295560 -1.441895463         -1.0781375    NaN -0.6280274
## [1000,]   2.1869505567  0.323541138         -1.0781375    NaN -0.6280274
## [1001,] -0.7546652308  0.428489502          2.5247318    NaN -0.6280274
## [1002,] -0.6104413071  0.673369018          0.5231377    NaN -0.6280274
## [1003,]   0.6072843994  0.791102256         -0.2774999    NaN -0.6280274
## [1004,] -0.6954038542 -1.321071376          0.5231377    NaN -0.6280274
## [1005,] -0.6212740319  1.301513777         -1.0781375    NaN -0.6280274
## [1006,]   0.3154380501 -0.638415284         -0.6778187    NaN -0.6280274
## [1007,] -0.4713151362  1.179706238          0.1228189    NaN -0.6280274
## [1008,]   0.2230412801  1.210614726         -1.0781375    NaN  1.5912040
## [1009,]   2.2993135252 -1.216825477          1.3237753    NaN -0.6280274
## [1010,]   2.8033538360  1.144020985          0.1228189    NaN  1.5912040
```

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## [1011,]   1.7479065944 -0.266810970      -0.2774999   NaN -0.6280274
## [1012,]   0.5894422645  0.906166125       0.1228189   NaN  1.5912040
## [1013,]  -1.0926037620  0.258633315      -0.6778187   NaN -0.6280274
## [1014,]  -0.3661739842 -0.218059856       1.7240942   NaN -0.6280274
## [1015,]   2.1068733560 -0.767949945       0.1228189   NaN -0.6280274
## [1016,]  -0.7448945379  0.838869918       0.9234565   NaN -0.6280274
## [1017,]  -1.1134195860  1.116765319      -0.6778187   NaN -0.6280274
## [1018,]  -0.9354230498 -0.932045914      -1.0781375   NaN -0.6280274
## [1019,]  -0.1471830190  1.164813967      -0.6778187   NaN -0.6280274
## [1020,]  -0.1818052569 -0.115078396       0.5231377   NaN -0.6280274
## [1021,]  -0.6548342380 -0.577160282       1.7240942   NaN -0.6280274
## [1022,]  -0.4466759976  0.122073998       0.1228189   NaN -0.6280274
## [1023,]  -0.6378417286  1.567467262      -1.0781375   NaN -0.6280274
## [1024,]  -0.9424324600 -0.536557769      -0.2774999   NaN -0.6280274
## [1025,]   2.2655409127  1.740695284       0.1228189   NaN -0.6280274
## [1026,]  -0.4972287131  0.126148299      -0.6778187   NaN  1.5912040
## [1027,]   0.5737241933  1.268638386       0.5231377   NaN -0.6280274
## [1028,]  -0.6815974403 -1.489944111       0.9234565   NaN -0.6280274
## [1029,]  -0.9294756715 -1.229610352      -0.2774999   NaN  1.5912040
## [1030,]  -0.5369487039  1.234358064       0.1228189   NaN -0.6280274
## [1031,]   0.9112379117 -0.832717275      -0.6778187   NaN -0.6280274
## [1032,]   0.7631906734  0.235030470       0.5231377   NaN -0.6280274
## [1033,]  -0.6068303989  0.402919754      -0.2774999   NaN  1.5912040
## [1034,]   0.2003137987 -0.756148523      -0.6778187   NaN -0.6280274
## [1035,]   0.9235574810  0.779722313      -0.2774999   NaN  1.5912040
## [1036,]  -0.9332989862  1.446502681       2.5247318   NaN -0.6280274
## [1037,]  -0.5906875149  0.950842939       1.3237753   NaN  1.5912040
## [1038,]   0.6111077140  0.057166174       0.5231377   NaN  1.5912040
## [1039,]  -0.2160026821  1.472634403       0.5231377   NaN -0.6280274
## [1040,]  -0.7988457553 -1.579297738      -0.6778187   NaN -0.6280274
## [1041,]   1.5408103858  1.526443269      -0.2774999   NaN -0.6280274
## [1042,]   0.4163310748  1.289290875      -1.0781375   NaN -0.6280274
## [1043,]  -0.7096350809 -0.890740936       0.1228189   NaN -0.6280274
## [1044,]   2.1442568767  0.765813494       0.5231377   NaN -0.6280274
## [1045,]   0.0314507363  1.014486324      -0.2774999   NaN -0.6280274
## [1046,]  -0.8831710834 -0.880625431      -0.2774999   NaN -0.6280274
## [1047,]  -0.6548342380  0.961660909      -0.6778187   NaN -0.6280274
## [1048,]  -0.4524109695  0.441555363      -1.0781375   NaN -0.6280274
## [1049,]  -0.3704221115  0.221683623       0.1228189   NaN -0.6280274
## [1050,]  -0.2552978602 -1.597983324       2.1244130   NaN -0.6280274
## [1051,]  -0.6010954269  0.301343225      -0.6778187   NaN -0.6280274
## [1052,]  -0.3685104542 -0.706835436       1.7240942   NaN -0.6280274
## [1053,]  -1.1106583033 -1.006085791      -0.6778187   NaN -0.6280274
## [1054,]  -0.3404728137 -1.628610825      -1.0781375   NaN -0.6280274
## [1055,]   0.8417810295  0.932157353       0.1228189   NaN -0.6280274
## [1056,]   2.2311310812 -0.334950136       1.7240942   NaN -0.6280274
## [1057,]  -0.7633738919  0.201452613       0.1228189   NaN -0.6280274
## [1058,]  -0.1567413055  0.445629663       0.9234565   NaN -0.6280274
## [1059,]  -0.4044071304 -0.912938849      -1.0781375   NaN  1.5912040
## [1060,]  -0.8706391077  0.263972054      -0.6778187   NaN -0.6280274
## [1061,]  -0.7075110172  0.377209512      -0.2774999   NaN  1.5912040
## [1062,]  -0.9494418701 -1.012969954      -0.6778187   NaN -0.6280274
## [1063,]   0.7871925929  0.759491303       0.9234565   NaN  1.5912040
## [1064,]   0.4496788745  1.326802539      -0.6778187   NaN -0.6280274
```

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## [1065,] -0.9428572727  0.156635307      -1.0781375   NaN -0.6280274
## [1066,] -0.5242043218  0.257087890      -1.0781375   NaN  1.5912040
## [1067,] -0.5660483762 -0.859972942       2.1244130   NaN -0.6280274
## [1068,] -0.4061063813  1.389040994       0.1228189   NaN  1.5912040
## [1069,] -0.8372913079 -1.258551935       1.7240942   NaN -0.6280274
## [1070,] -1.0492728630 -0.250513768      -0.6778187   NaN -0.6280274
## [1071,] -0.3408976264 -0.349280434      -1.0781375   NaN -0.6280274
## [1072,] -0.3640499205  1.230283763       0.5231377   NaN -0.6280274
## [1073,] -0.7058117663 -1.355070712      -1.0781375   NaN -0.6280274
## [1074,]  0.0097852868 -1.565107933      -0.6778187   NaN -0.6280274
## [1075,] -0.0244121384  1.086840283      -0.2774999   NaN  1.5912040
## [1076,]  1.0070331836  0.949578501      -0.2774999   NaN -0.6280274
## [1077,]  2.0240348726  1.425007233       0.1228189   NaN -0.6280274
## [1078,] -0.8795601751 -0.947640651       1.3237753   NaN -0.6280274
## [1079,]  2.0869071574  1.090352611       0.1228189   NaN -0.6280274
## [1080,]  0.3978517208 -0.725380528       0.5231377   NaN -0.6280274
## [1081,]  2.1459561277 -0.412080861       2.1244130   NaN -0.6280274
## [1082,]  0.4467051854  0.966859155      -0.6778187   NaN -0.6280274
## [1083,] -0.8986767482  1.475022786      -1.0781375   NaN -0.6280274
## [1084,] -0.9526279656  1.056212782       0.1228189   NaN -0.6280274
## [1085,]  0.1232102872 -0.284513104      -0.6778187   NaN  1.5912040
## [1086,] -0.5137964098 -1.427003192      -0.6778187   NaN -0.6280274
## [1087,]  1.6797241504  1.424164275      -0.6778187   NaN  1.5912040
## [1088,] -0.8910301190 -1.316294609      -1.0781375   NaN  1.5912040
## [1089,] -0.3530047894  1.368248011       0.5231377   NaN -0.6280274
## [1090,] -0.4711027298 -1.585057956      -0.6778187   NaN -0.6280274
## [1091,]  0.6822638472 -0.986978726       0.1228189   NaN -0.6280274
## [1092,] -0.4636685070  1.382297324      -0.6778187   NaN -0.6280274
## [1093,] -0.9284136397 -1.366731641       0.5231377   NaN -0.6280274
## [1094,]  0.7691380517  0.603824921      -0.2774999   NaN  1.5912040
## [1095,] -0.2187639649  0.706946875      -1.0781375   NaN -0.6280274
## [1096,] -0.2752640587  1.213284095      -0.6778187   NaN  1.5912040
## [1097,]  2.1100594515  0.431018378      -0.6778187   NaN  1.5912040
## [1098,] -0.8935789954 -0.600903620      -1.0781375   NaN -0.6280274
## [1099,] -0.5169825053 -0.768792904       0.1228189   NaN  1.5912040
## [1100,]  0.1992517669  0.930049956      -0.6778187   NaN -0.6280274
## [1101,] -0.8651165421  1.670589215      -1.0781375   NaN -0.6280274
## [1102,] -0.1327393860  0.184171959       0.1228189   NaN -0.6280274
## [1103,] -0.8196615794  0.377630991       0.1228189   NaN  1.5912040
## [1104,] -0.0135794136 -0.087120264       2.1244130   NaN -0.6280274
## [1105,] -0.8606560084  1.132781535       1.3237753   NaN -0.6280274
## [1106,] -0.0235625129 -0.523210922      -0.2774999   NaN -0.6280274
## [1107,]  0.6820514409 -1.263047715      -0.6778187   NaN -0.6280274
## [1108,] -0.0904705188  0.070372528       0.1228189   NaN -0.6280274
## [1109,] -0.8608684147  1.042163469      -0.6778187   NaN -0.6280274
## [1110,]  0.5834948862  0.489744504       0.1228189   NaN -0.6280274
## [1111,] -0.9407332090  1.728893861      -0.6778187   NaN  1.5912040
## [1112,]  0.7786963382  0.042835876      -1.0781375   NaN -0.6280274
## [1113,] -0.3500311002 -0.935698736       0.5231377   NaN -0.6280274
## [1114,] -0.5131591907  1.525881297       0.5231377   NaN -0.6280274
## [1115,] -0.8784981433  0.311458730       2.1244130   NaN -0.6280274
## [1116,] -0.7499922908  1.088526201      -0.6778187   NaN -0.6280274
## [1117,]  2.7789271037  1.225647490      -0.6778187   NaN -0.6280274
## [1118,] -0.2164274949 -0.183358054       2.5247318   NaN -0.6280274
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## [1119,] -0.9434944918 -0.446782663      -0.6778187    NaN -0.6280274
## [1120,]  0.7266567781 -0.275100065      -1.0781375    NaN -0.6280274
## [1121,] -0.4895820838  0.290244268      -0.2774999    NaN -0.6280274
## [1122,]  0.0662853807  1.002263422       1.3237753    NaN -0.6280274
## [1123,] -0.3780687408  0.266922409      -0.6778187    NaN  1.5912040
## [1124,] -0.0766641049 -1.417590152       0.1228189    NaN  1.5912040
## [1125,]  0.3683272357 -1.356475643      -0.2774999    NaN -0.6280274
## [1126,]  0.4991695582  1.428800548      -0.6778187    NaN -0.6280274
## [1127,]  2.7247634799  0.731392678       0.5231377    NaN  1.5912040
## [1128,] -0.9409456154 -0.208927803      -0.2774999    NaN -0.6280274
## [1129,] -0.1998597982  0.758367358       0.1228189    NaN  1.5912040
## [1130,]  2.7846620756  1.692787128       2.1244130    NaN -0.6280274
## [1131,] -0.6575955208  1.550327100      -0.6778187    NaN -0.6280274
## [1132,] -0.3058505757  0.143147967      -0.6778187    NaN -0.6280274
## [1133,] -0.3959108756 -0.428659050      -0.6778187    NaN -0.6280274
## [1134,] -0.3455705665 -1.188305373       0.9234565    NaN -0.6280274
## [1135,] -0.8098908865 -0.927269148      -0.6778187    NaN -0.6280274
## [1136,]  2.3500786471 -1.567496316      -0.6778187    NaN -0.6280274
## [1137,] -0.8697894822 -0.981920973      -0.6778187    NaN  1.5912040
## [1138,] -0.7835524969 -0.564796887      -0.6778187    NaN  1.5912040
## [1139,]  1.0072455900  0.895769634      -0.2774999    NaN  1.5912040
## [1140,] -0.6777741257  0.627989739       0.1228189    NaN -0.6280274
## [1141,]  2.6648648842 -1.512282518      -1.0781375    NaN  1.5912040
## [1142,] -0.9265019824 -1.259535387      -0.6778187    NaN -0.6280274
## [1143,] -0.1558916800  1.283249671      -0.6778187    NaN  1.5912040
## [1144,] -0.4498620931  1.383702255      -0.6778187    NaN -0.6280274
## [1145,] -0.2487132628  1.024039856       1.7240942    NaN -0.6280274
## [1146,] -0.3908131228 -0.265827519       2.5247318    NaN  1.5912040
## [1147,] -0.3778563344  0.377490498      -0.6778187    NaN -0.6280274
## [1148,] -0.6992271689  1.094286419      -0.6778187    NaN -0.6280274
## [1149,] -0.2391549762 -1.472101484      -0.2774999    NaN -0.6280274
## [1150,] -0.5176197244  0.277740380      -0.6778187    NaN -0.6280274
## [1151,] -0.2750516524  1.685762472      -0.6778187    NaN -0.6280274
## [1152,] -0.3453581601  0.863596708      -1.0781375    NaN -0.6280274
## [1153,] -0.7191933674  1.643193056      -0.6778187    NaN -0.6280274
## [1154,] -1.0479984248  0.576990735      -0.6778187    NaN  1.5912040
## [1155,]  2.7942203622 -1.277518507       0.1228189    NaN -0.6280274
## [1156,] -0.7293888731 -0.563532449      -1.0781375    NaN -0.6280274
## [1157,]  0.8351964320  1.613829993      -0.6778187    NaN -0.6280274
## [1158,] -0.5002024022 -0.289851843      -0.6778187    NaN -0.6280274
## [1159,] -0.1561040864  1.711191728       0.1228189    NaN -0.6280274
## [1160,] -0.3103111094 -1.569744206      -1.0781375    NaN -0.6280274
## [1161,] -0.1556792737 -1.253915662      -0.6778187    NaN -0.6280274
## [1162,]  0.2661597727 -0.016030743       0.1228189    NaN  1.5912040
## [1163,]  0.8077960106  1.013924351       2.5247318    NaN -0.6280274
## [1164,] -0.5452325522 -0.612564549      -0.6778187    NaN -0.6280274
## [1165,]  0.3063045763  0.791664229       1.3237753    NaN  1.5912040
## [1166,] -0.1614142456 -0.535293331       0.5231377    NaN  1.5912040
## [1167,]  1.8477375873 -1.223850134      -0.2774999    NaN -0.6280274
## [1168,] -0.2257733751  1.093724446       1.3237753    NaN  1.5912040
## [1169,] -0.5826160729  0.408117999      -0.6778187    NaN  1.5912040
## [1170,] -0.6342308203  1.148797751       1.7240942    NaN -0.6280274
## [1171,] -0.8332555869 -1.126207412      -0.2774999    NaN -0.6280274
## [1172,] -0.9211918232 -1.541786074       0.1228189    NaN  1.5912040
```

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## [1173,] -0.1346510433  1.278472905     2.5247318   NaN -0.6280274
## [1174,]  0.3196861774  1.191226674     0.5231377   NaN -0.6280274
## [1175,] -0.2754764651 -1.312220309    -0.6778187   NaN -0.6280274
## [1176,] -0.2565722984 -0.930079011     0.5231377   NaN -0.6280274
## [1177,]  2.1049616987 -1.519447667     0.1228189   NaN -0.6280274
## [1178,]  1.4371560784  1.077286751     0.9234565   NaN -0.6280274
## [1179,] -0.7901370943 -0.149218225    -0.6778187   NaN -0.6280274
## [1180,] -0.2272602196  0.705120464    -0.6778187   NaN -0.6280274
## [1181,] -0.9536899975 -0.472492904    -0.2774999   NaN -0.6280274
## [1182,]  1.5852033167 -0.373866731    -0.2774999   NaN  1.5912040
## [1183,] -0.4521985631  0.154246923    -1.0781375   NaN -0.6280274
## [1184,]  0.0720203526  1.685200500     1.3237753   NaN -0.6280274
## [1185,]  2.3201293493  0.614221413     0.1228189   NaN -0.6280274
## [1186,]  2.3577252764 -1.515654353    -0.6778187   NaN -0.6280274
## [1187,] -0.4082304450 -0.547797219     0.1228189   NaN  1.5912040
## [1188,] -0.3755198643 -0.624646958     1.7240942   NaN -0.6280274
## [1189,] -0.4919185539 -1.539397691    -0.6778187   NaN  1.5912040
## [1190,] -0.2119669611 -1.460019076    -0.6778187   NaN -0.6280274
## [1191,] -0.2194011840  1.574210932    -1.0781375   NaN -0.6280274
## [1192,] -0.2181267458  1.162706570    -0.6778187   NaN -0.6280274
## [1193,] -0.8317687424  1.493146399     0.5231377   NaN  1.5912040
## [1194,] -0.8629924784  1.336496565    -0.6778187   NaN -0.6280274
## [1195,]  2.0112904905  0.951545404     1.3237753   NaN -0.6280274
## [1196,]  1.8853335144  1.133905480     0.5231377   NaN -0.6280274
## [1197,]  0.1229978809 -0.382436812     0.1228189   NaN  1.5912040
## [1198,] -0.8018194445  0.950983432    -0.6778187   NaN -0.6280274
## [1199,] -0.2410666335  0.255261480    -0.6778187   NaN  1.5912040
## [1200,] -0.2455271673 -0.968574127     1.3237753   NaN -0.6280274
## [1201,] -0.7026256707 -1.425457767     0.5231377   NaN  1.5912040
## [1202,] -0.5339750147  0.881298842    -0.6778187   NaN  1.5912040
## [1203,] -0.6790485639  1.666655407     1.7240942   NaN -0.6280274
## [1204,]  0.1066425905 -1.525067392     0.1228189   NaN -0.6280274
## [1205,] -0.8173251093 -0.361503336    -0.2774999   NaN  1.5912040
## [1206,] -1.0853819455  1.480642511    -0.6778187   NaN -0.6280274
## [1207,] -0.8353796506 -0.335512108    -0.6778187   NaN -0.6280274
## [1208,] -0.6299826930  1.323992677     0.9234565   NaN -0.6280274
## [1209,] -0.5346122338 -0.337338519    -0.6778187   NaN -0.6280274
## [1210,]  0.9303544848  0.864580160     0.1228189   NaN -0.6280274
## [1211,] -0.9505039019 -0.094987879    -0.6778187   NaN -0.6280274
## [1212,]  0.6419066374 -0.932326901    -0.6778187   NaN -0.6280274
## [1213,] -0.7591257646  0.846456547    -0.6778187   NaN -0.6280274
## [1214,] -0.8980395291  1.515906285    -0.6778187   NaN  1.5912040
## [1215,]  0.2922857560  0.069810556    -0.6778187   NaN  1.5912040
## [1216,] -0.3341006226 -0.048203669    -1.0781375   NaN  1.5912040
## [1217,]  0.2854887522 -1.158239845    -0.6778187   NaN  1.5912040
## [1218,] -0.4464635912  0.464034263    -0.6778187   NaN -0.6280274
## [1219,]  0.5815832289  0.218592774    -0.6778187   NaN -0.6280274
## [1220,] -0.7495674780  1.559318660     2.5247318   NaN -0.6280274
## [1221,] -0.4250105480 -0.965764264     0.1228189   NaN -0.6280274
## [1222,]  0.9016796252 -1.533918459     0.1228189   NaN -0.6280274
## [1223,] -1.0509721139 -0.383279770    -0.6778187   NaN -0.6280274
## [1224,]  1.3664247579  1.383983241     1.7240942   NaN -0.6280274
## [1225,] -0.8916673381 -1.137446862    -0.6778187   NaN -0.6280274
## [1226,]  2.1667719517  0.394209180    -0.6778187   NaN -0.6280274
```

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## [1227,] -0.6520729552  0.428068023    1.3237753  NaN -0.6280274
## [1228,] -0.6427270750  0.532454414   -0.6778187  NaN -0.6280274
## [1229,] -0.0154910709  0.910521412    1.3237753  NaN -0.6280274
## [1230,]  0.0027758767 -1.302666776   -0.2774999  NaN  1.5912040
## [1231,] -0.5513923369 -1.502026520   -0.6778187  NaN -0.6280274
## [1232,] -0.1998597982 -0.648530789    1.3237753  NaN -0.6280274
## [1233,]  0.0807290137 -1.287212533   -0.2774999  NaN -0.6280274
## [1234,] -0.7733569912 -1.475473319   -0.6778187  NaN -0.6280274
## [1235,] -0.3239051170 -1.514108929    1.7240942  NaN -0.6280274
## [1236,]  0.8209652054 -1.224693092    0.5231377  NaN  1.5912040
## [1237,] -0.0783633558 -0.794503146    0.9234565  NaN  1.5912040
## [1238,]  0.0492928712 -0.304322635    1.3237753  NaN -0.6280274
## [1239,] -0.6813850340 -0.203870051   -0.6778187  NaN -0.6280274
## [1240,] -0.2686794613 -1.073803477   -0.2774999  NaN -0.6280274
## [1241,] -0.0065700035 -0.747999921   -0.6778187  NaN  1.5912040
## [1242,]  0.6599611786 -1.471399019    0.1228189  NaN -0.6280274
## [1243,]  2.8313914765 -1.399888019   -0.6778187  NaN -0.6280274
## [1244,]  0.6909725083 -1.084340461    0.5231377  NaN -0.6280274
## [1245,] -0.3260291806  1.701919182   -1.0781375  NaN -0.6280274
## [1246,] -0.9256523569 -1.716278535   -1.0781375  NaN -0.6280274
## [1247,] -0.9182181340 -0.643613530    1.3237753  NaN -0.6280274
## [1248,]  0.3914795297  0.931454887   -0.6778187  NaN -0.6280274
## [1249,] -0.6495240788 -1.146578915   -0.6778187  NaN -0.6280274
## [1250,] -0.7950224407  0.044521793   -0.6778187  NaN -0.6280274
## [1251,] -0.0443783370  1.228878832    2.1244130  NaN  1.5912040
## [1252,]  0.1353174502 -1.577049848   -0.2774999  NaN -0.6280274
## [1253,] -0.7584885455 -1.226098024   -1.0781375  NaN  1.5912040
## [1254,] -0.2880084408 -0.508037665    2.1244130  NaN -0.6280274
## [1255,] -0.4239485162 -0.860113435    0.1228189  NaN -0.6280274
## [1256,]  0.4377841179 -0.593036005   -0.2774999  NaN  1.5912040
## [1257,] -0.8570451001  0.231799128    0.5231377  NaN -0.6280274
## [1258,]  0.3521843517  0.658757733   -0.2774999  NaN -0.6280274
## [1259,] -0.9332989862 -0.604977921   -0.6778187  NaN -0.6280274
## [1260,] -0.2567847047 -0.728471377    0.1228189  NaN -0.6280274
## [1261,] -0.8039435082  0.472182864   -0.2774999  NaN -0.6280274
## [1262,] -0.1469706126  1.436668163    0.1228189  NaN  1.5912040
## [1263,] -0.8636296975  0.178973713    2.5247318  NaN  1.5912040
## [1264,] -0.7937480025 -0.753198167    2.1244130  NaN -0.6280274
## [1265,]  2.6625284141  0.771573712    2.1244130  NaN -0.6280274
## [1266,] -0.7323625622 -1.140678204    0.9234565  NaN -0.6280274
## [1267,] -0.8950658400  0.872026296   -0.6778187  NaN -0.6280274
## [1268,] -0.5314261383 -0.281000776   -0.6778187  NaN  1.5912040
## [1269,]  1.3725845426  1.123228002    0.5231377  NaN  1.5912040
## [1270,] -0.6295578802 -1.303790721   -1.0781375  NaN -0.6280274
## [1271,] -0.1006660244  1.551029566    0.9234565  NaN -0.6280274
## [1272,] -0.8122273565 -1.369260517   -0.6778187  NaN -0.6280274
## [1273,] -0.5949356423  0.289822788   -0.6778187  NaN -0.6280274
## [1274,] -0.8719135459  0.236856881   -0.6778187  NaN  1.5912040
## [1275,] -0.2198259968 -0.128003763   -0.6778187  NaN -0.6280274
## [1276,]  1.4046579041  1.218201354   -0.2774999  NaN -0.6280274
## [1277,] -0.4914937412 -0.774553122   -0.6778187  NaN -0.6280274
## [1278,]  2.7241262608 -0.013361374    1.7240942  NaN  1.5912040
## [1279,]  0.3861693705  1.634763468    1.7240942  NaN  1.5912040
## [1280,] -0.8838083025 -0.452542881   -0.6778187  NaN  1.5912040
```

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## [1281,] -0.5165576926 -0.208084844      -0.2774999   NaN -0.6280274
## [1282,] -0.1465457999 -0.115359382      -0.6778187   NaN  1.5912040
## [1283,] -0.7136708019 -1.157256393       1.3237753   NaN -0.6280274
## [1284,] -0.9471054001 -1.233825145      -0.6778187   NaN -0.6280274
## [1285,]  1.4785753201 -0.899030030       1.7240942   NaN -0.6280274
## [1286,]  0.3160752692  1.524757352       2.1244130   NaN -0.6280274
## [1287,] -0.6639677118  1.586433833       0.5231377   NaN -0.6280274
## [1288,] -0.2049575510 -1.210643780       0.9234565   NaN -0.6280274
## [1289,] -0.1573785246  1.423040330      -0.2774999   NaN -0.6280274
## [1290,] -0.8307067105 -1.009317133       0.9234565   NaN -0.6280274
## [1291,] -0.2457395736 -1.138711300       0.5231377   NaN -0.6280274
## [1292,] -0.4863959883 -1.309550940      -0.6778187   NaN -0.6280274
## [1293,] -0.5046629360  0.684889454      -0.2774999   NaN -0.6280274
## [1294,] -0.8634172912  1.498344644       0.5231377   NaN -0.6280274
## [1295,]  0.0779677309  0.170965605       0.1228189   NaN -0.6280274
## [1296,]  0.8377453085  1.706274468      -1.0781375   NaN  1.5912040
## [1297,]  0.6720683416 -1.626081949       2.5247318   NaN -0.6280274
## [1298,] -0.9250151378 -1.043035483      -1.0781375   NaN  1.5912040
## [1299,]  0.5146752231 -0.487666162       0.5231377   NaN -0.6280274
## [1300,]  0.0021386576 -0.738024910       0.5231377   NaN -0.6280274
## [1301,]  0.0628868788  1.097939240      -0.6778187   NaN -0.6280274
## [1302,]  2.0790481218  1.161020653       0.5231377   NaN -0.6280274
## [1303,] -0.8067047910 -0.648671282      -1.0781375   NaN -0.6280274
## [1304,]  0.8135309825  0.696550383       2.1244130   NaN  1.5912040
## [1305,] -0.4364804919 -0.500872516      -0.2774999   NaN -0.6280274
## [1306,]  0.0745692290  0.194287464       0.5231377   NaN -0.6280274
## [1307,]  0.6656961506 -0.848031026      -0.2774999   NaN -0.6280274
## [1308,] -0.6185127491 -0.223960567      -0.6778187   NaN -0.6280274
## [1309,] -0.2332075979 -1.414639797      -0.2774999   NaN  1.5912040
## [1310,] -0.3863525891 -0.728892856      -0.6778187   NaN -0.6280274
## [1311,]  1.9719953124  1.027130705      -0.2774999   NaN  1.5912040
## [1312,] -1.0596807750 -0.884418745      -0.6778187   NaN -0.6280274
## [1313,] -0.7533907926  1.009007092      -1.0781375   NaN -0.6280274
## [1314,] -0.8852951470 -1.567355823       0.5231377   NaN  1.5912040
## [1315,] -0.2865215962  0.751904675       0.5231377   NaN -0.6280274
## [1316,]  0.0975091167  0.738979307       0.5231377   NaN  1.5912040
## [1317,] -0.1758578786  0.693038055      -0.6778187   NaN -0.6280274
## [1318,] -0.8759492669  0.774524068      -1.0781375   NaN  1.5912040
## [1319,] -0.5715709418 -1.027019266      -0.6778187   NaN -0.6280274
## [1320,] -0.3939992183  1.652465602       2.1244130   NaN -0.6280274
## [1321,] -0.7576389200 -1.145314477       0.1228189   NaN -0.6280274
## [1322,] -0.9341486116 -1.250684320       0.5231377   NaN -0.6280274
## [1323,]  0.4407578071  0.797424447       0.1228189   NaN -0.6280274
## [1324,] -0.8064923846 -0.536557769      -0.6778187   NaN -0.6280274
## [1325,] -0.0252617639  0.959553512       2.1244130   NaN -0.6280274
## [1326,] -0.5384355484 -0.096814290       0.5231377   NaN -0.6280274
## [1327,]  0.7230458699  1.668060339       1.7240942   NaN  1.5912040
## [1328,]  1.4278101982 -0.923616327      -0.2774999   NaN -0.6280274
## [1329,] -0.6293454738 -1.024911870      -0.6778187   NaN -0.6280274
## [1330,] -0.7856765605  0.157478265      -0.6778187   NaN -0.6280274
## [1331,]  2.7377202683  1.155681914       1.7240942   NaN -0.6280274
## [1332,]  2.7957072067 -0.102574508       0.5231377   NaN -0.6280274
## [1333,] -0.8632048848  0.061802448      -0.6778187   NaN  1.5912040
## [1334,]  0.1722761582 -0.042443451       0.9234565   NaN -0.6280274
```

```
## [1335,] -0.3672360160  1.339025441     -1.0781375     NaN -0.6280274
## [1336,] -0.5524543687 -1.288617464      2.1244130     NaN -0.6280274
## [1337,] -0.8158382648 -0.890459950      2.1244130     NaN -0.6280274
## [1338,] -0.7746314294 -1.492192001     -0.6778187     NaN -0.6280274
## [1339,] -1.1516527322  0.239666743     -0.6778187     NaN -0.6280274
## [1340,] -0.8561954746  1.654853985     -0.6778187     NaN  1.5912040
## [1341,] -0.1762826914 -1.159504283     -0.6778187     NaN  1.5912040
## [1342,] -0.4897944902  0.605651332     -0.6778187     NaN -0.6280274
## [1343,]  0.6818390345  1.423321316     -0.2774999     NaN  1.5912040
## [1344,] -0.9432820854  0.712426107      0.1228189     NaN -0.6280274
## [1345,] -0.4713151362 -0.101872042      0.9234565     NaN  1.5912040
## [1346,] -0.3642623268  1.555946825     -1.0781375     NaN  1.5912040
## [1347,] -0.1267920077  1.345207139     -1.0781375     NaN -0.6280274
## [1348,] -0.5558528706 -1.417590152     -0.6778187     NaN -0.6280274
## [1349,]  2.1920483095  0.657212309     -0.2774999     NaN -0.6280274
## [1350,] -0.7582761391  0.083578882     -0.6778187     NaN  1.5912040
## [1351,] -0.0006226252  1.782000262     -1.0781375     NaN -0.6280274
## [1352,]  2.2666029446 -1.668510872      0.1228189     NaN -0.6280274
## [1353,] -0.3122227667 -0.695315000     -0.2774999     NaN -0.6280274
## [1354,] -0.8912425253  0.020637962     -0.6778187     NaN  1.5912040
## [1355,] -0.8317687424 -0.569292667     -0.6778187     NaN -0.6280274
## [1356,] -0.2115421484  0.352482722     -0.2774999     NaN -0.6280274
## [1357,] -0.4481628421  1.760083335      0.9234565     NaN -0.6280274
## [1358,]  1.4539361814  0.074306336      2.5247318     NaN -0.6280274
## [1359,]  0.0170071033  0.815126580     -0.2774999     NaN  1.5912040
## [1360,]  0.3398647824  0.306541470      0.1228189     NaN  1.5912040
## [1361,] -0.5363114848  0.241352661      2.1244130     NaN -0.6280274
## [1362,] -0.8409022162 -1.013110447     -1.0781375     NaN -0.6280274
## [1363,] -0.2344820361  0.027803111      0.5231377     NaN -0.6280274
## [1364,] -0.2157902758 -0.548359192     -0.6778187     NaN -0.6280274
## [1365,]  0.0703211016  0.694302494     -0.6778187     NaN  1.5912040
## [1366,] -1.1495286686 -0.515764787     -0.6778187     NaN -0.6280274
## [1367,] -0.1629010902 -1.450746530      1.3237753     NaN -0.6280274
## [1368,] -0.9084474411 -1.157677872     -0.6778187     NaN -0.6280274
## [1369,] -0.1605646201  1.711613207     -0.6778187     NaN  1.5912040
## [1370,]  0.7117883324  1.269902824      0.1228189     NaN  1.5912040
## [1371,] -0.2200384031 -1.712344727      2.1244130     NaN -0.6280274
## [1372,] -0.2385177571  0.845051616      0.5231377     NaN -0.6280274
## [1373,] -0.2871588153 -0.280719790     -0.6778187     NaN -0.6280274
## [1374,] -0.9282012333  0.534140332     -0.6778187     NaN  1.5912040
## [1375,]  2.4154998084 -0.358552981      0.5231377     NaN  1.5912040
## [1376,] -0.8646917294  0.141181063      0.1228189     NaN  1.5912040
## [1377,] -0.3678732351 -0.002824390     -0.2774999     NaN -0.6280274
## [1378,]  2.6886543974 -0.080798074      0.1228189     NaN -0.6280274
## [1379,] -0.3007528229 -1.603462556      0.1228189     NaN  1.5912040
## [1380,] -0.7731445848  0.736450431     -0.6778187     NaN -0.6280274
## [1381,] -0.2000722045  0.233485046     -1.0781375     NaN -0.6280274
## [1382,] -0.9258647633 -1.712766206     -0.6778187     NaN -0.6280274
## [1383,] -0.7302384985 -1.449622585     -0.6778187     NaN  1.5912040
## [1384,] -0.7844021223 -0.713017133     -0.6778187     NaN -0.6280274
## [1385,]  0.7190101489 -1.059754164     -0.6778187     NaN -0.6280274
## [1386,]  0.4513781255  1.208366836     -0.6778187     NaN -0.6280274
## [1387,] -0.7722949594  0.799812830     -1.0781375     NaN -0.6280274
## [1388,] -0.2400046017 -1.136322917     -1.0781375     NaN -0.6280274
```

```
## [1389,]  0.0348492382  0.313144647    0.9234565   NaN -0.6280274
## [1390,] -0.3185949578 -1.200106796   -0.6778187   NaN -0.6280274
## [1391,] -0.8784981433  0.627427766    0.9234565   NaN -0.6280274
## [1392,] -0.7742066167 -0.399015000    0.5231377   NaN -0.6280274
## [1393,] -0.2759012778 -0.102153029   -0.6778187   NaN  1.5912040
## [1394,] -0.5093358760 -1.294518175   -0.6778187   NaN -0.6280274
## [1395,]  0.6746172180 -0.586573321    2.1244130   NaN -0.6280274
## [1396,] -0.1881774480  0.949999980   -0.6778187   NaN  1.5912040
## [1397,]  0.8379577148 -1.189991291    1.3237753   NaN  1.5912040
## [1398,] -0.7659227683  1.146549861    0.1228189   NaN -0.6280274
## [1399,] -0.1136228129  0.529082579   -0.6778187   NaN -0.6280274
## [1400,]  0.2139078063  0.359647871   -0.6778187   NaN -0.6280274
## [1401,] -0.7459565698 -1.276956535   -1.0781375   NaN  1.5912040
## [1402,]  2.7895474221  1.615375417    0.5231377   NaN  1.5912040
## [1403,] -1.1414572266  0.452794813   -0.6778187   NaN  1.5912040
## [1404,]  1.4524493368  1.515203819   -1.0781375   NaN -0.6280274
## [1405,] -0.4611196306  0.069951049   -0.6778187   NaN -0.6280274
## [1406,]  0.9617906273  1.763033691    0.5231377   NaN -0.6280274
## [1407,] -0.4381797428  1.529253132    1.3237753   NaN  1.5912040
## [1408,] -0.4005838157 -0.027129700   -0.6778187   NaN -0.6280274
## [1409,] -0.8190243603 -0.090070620   -0.6778187   NaN -0.6280274
## [1410,] -0.0382185523  1.761207280   -0.6778187   NaN -0.6280274
## [1411,] -0.1754330659 -1.412672893    0.1228189   NaN -0.6280274
## [1412,] -0.9167312895  0.750499743    0.5231377   NaN -0.6280274
## [1413,] -0.5851649493 -1.438102148   -0.6778187   NaN -0.6280274
## [1414,] -0.5365238911 -0.985573795    1.3237753   NaN  1.5912040
## [1415,]  0.4524401573 -0.172680577   -0.2774999   NaN -0.6280274
## [1416,] -0.9547520293  0.860646353   -0.6778187   NaN -0.6280274
## [1417,] -0.4381797428 -0.938087119   -1.0781375   NaN -0.6280274
## [1418,] -0.7298136858 -1.112720072   -1.0781375   NaN -0.6280274
## [1419,] -0.2510497328 -0.004088828   -0.2774999   NaN -0.6280274
## [1420,] -0.2321455661 -0.438915048    1.3237753   NaN  1.5912040
## [1421,] -0.7903495006  0.997346163    0.1228189   NaN -0.6280274
## [1422,]  1.1584789238  0.409944410   -1.0781375   NaN -0.6280274
## [1423,] -0.8162630775  0.831564276    1.7240942   NaN  1.5912040
## [1424,] -0.6643925245  0.465158208   -1.0781375   NaN -0.6280274
## [1425,] -0.2984163528  0.616047823   -0.6778187   NaN -0.6280274
## [1426,] -0.3451457537  1.031205006   -1.0781375   NaN  1.5912040
## [1427,] -0.7786671504  0.225617431   -0.6778187   NaN -0.6280274
## [1428,] -0.8702142949 -1.440490531    2.1244130   NaN -0.6280274
## [1429,] -0.8993139673  0.521355457   -1.0781375   NaN -0.6280274
## [1430,] -0.5086986569 -1.260659332    1.7240942   NaN -0.6280274
## [1431,]  1.4237744772 -1.536587829    0.1228189   NaN -0.6280274
## [1432,]  0.8324351493  1.365438149   -0.6778187   NaN -0.6280274
## [1433,]  1.5380491031  0.162676511   -0.6778187   NaN  1.5912040
## [1434,] -0.3389859691 -0.088384702   -1.0781375   NaN  1.5912040
## [1435,] -0.6416650432  0.769185329   -0.2774999   NaN -0.6280274
## [1436,] -0.8638421039 -0.125193901    1.3237753   NaN  1.5912040
## [1437,] -0.8757368605  1.568731700   -0.6778187   NaN  1.5912040
## [1438,]  2.7460041167  0.138933173   -0.2774999   NaN -0.6280274
## [1439,] -1.0010566175  1.776240044   -0.6778187   NaN -0.6280274
## [1440,]  0.2423702596 -0.227332402   -1.0781375   NaN -0.6280274
## [1441,] -0.2914069427 -0.719479817    1.7240942   NaN -0.6280274
## [1442,] -0.0418294605  1.675084995   -0.6778187   NaN -0.6280274
```

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## [1443,] -0.3644747332  1.659349765           2.5247318  NaN  1.5912040
## [1444,]  2.6289682080  0.421324353           0.9234565  NaN -0.6280274
## [1445,] -0.8844455216 -1.495844822           2.1244130  NaN -0.6280274
## [1446,]  1.5010903951 -1.218511395          -1.0781375  NaN -0.6280274
## [1447,]  0.0444075248 -0.749545346          -0.6778187  NaN -0.6280274
## [1448,] -0.2329951916 -0.544706370          -0.6778187  NaN -0.6280274
## [1449,]  0.5172240995 -0.293083185          -0.2774999  NaN -0.6280274
## [1450,] -0.8632048848 -0.425006228          -0.6778187  NaN -0.6280274
## [1451,]  0.4957710563  0.327193960          -0.6778187  NaN  1.5912040
## [1452,] -0.2463767927 -1.170462746          -0.6778187  NaN -0.6280274
## [1453,]  0.0478060267 -0.008163128           1.7240942  NaN -0.6280274
## [1454,]  0.0316631427  0.007853088           0.5231377  NaN -0.6280274
## [1455,] -0.3510931320  1.267233455           2.1244130  NaN -0.6280274
## [1456,] -0.7846145287 -1.628048852          -0.2774999  NaN -0.6280274
## [1457,] -0.1728841895  1.444395285          -0.6778187  NaN  1.5912040
## [1458,] -0.9562388739 -0.247844399          -0.2774999  NaN -0.6280274
## [1459,] -0.7489302589 -0.753198167          -0.6778187  NaN -0.6280274
## [1460,] -0.5263283855  1.315844076           0.5231377  NaN  1.5912040
## [1461,] -0.5773059137 -0.818246484          -0.6778187  NaN -0.6280274
## [1462,]  0.9241947002  0.319326345           0.5231377  NaN  1.5912040
## [1463,]  1.1741969950 -0.770619314          -1.0781375  NaN -0.6280274
## [1464,]  0.7292056545 -1.478845154          -1.0781375  NaN -0.6280274
## [1465,] -0.7512667290  0.992569397          -1.0781375  NaN -0.6280274
## [1466,] -0.8351672442 -0.284232118           0.5231377  NaN -0.6280274
## [1467,]  0.7408880048  1.003668353           0.5231377  NaN -0.6280274
## [1468,] -0.0766641049 -1.283981191          -0.6778187  NaN  1.5912040
## [1469,] -0.2363936934 -0.150342170          -0.2774999  NaN -0.6280274
## [1470,] -0.4458263721 -0.573928940          -0.2774999  NaN -0.6280274
##          PercentSalaryHike PerformanceRating RelationshipSatisfaction
##    [1,]        -1.15016269         -0.426085                -1.5836393
##    [2,]         2.12858163          2.345353                 1.1910327
##    [3,]        -0.05724792         -0.426085                -0.6587487
##    [4,]        -1.15016269         -0.426085                 0.2661420
##    [5,]        -0.87693400         -0.426085                 1.1910327
##    [6,]        -0.60370530         -0.426085                 0.2661420
##    [7,]         1.30889555          2.345353                -1.5836393
##    [8,]         1.85535294          2.345353                -0.6587487
##    [9,]         1.58212424          2.345353                -0.6587487
##   [10,]        -0.60370530         -0.426085                -0.6587487
##   [11,]        -0.60370530         -0.426085                 0.2661420
##   [12,]        -0.87693400         -0.426085                 1.1910327
##   [13,]         0.48920947         -0.426085                 1.1910327
##   [14,]        -1.15016269         -0.426085                 0.2661420
##   [15,]        -0.33047661         -0.426085                -0.6587487
##   [16,]        -1.15016269         -0.426085                 0.2661420
##   [17,]        -0.87693400         -0.426085                 1.1910327
##   [18,]        -0.60370530         -0.426085                -0.6587487
##   [19,]         0.21598078         -0.426085                 0.2661420
##   [20,]        -1.15016269         -0.426085                 0.2661420
##   [21,]         0.76243816         -0.426085                 1.1910327
##   [22,]         2.12858163          2.345353                -0.6587487
##   [23,]        -1.15016269         -0.426085                 0.2661420
##   [24,]        -0.33047661         -0.426085                 1.1910327
##   [25,]        -1.15016269         -0.426085                 0.2661420
```

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```
##  [26,]      -1.15016269      -0.426085        1.1910327
##  [27,]       1.85535294       2.345353       -0.6587487
##  [28,]      -1.15016269      -0.426085        1.1910327
##  [29,]      -0.33047661      -0.426085        1.1910327
##  [30,]      -0.87693400      -0.426085        1.1910327
##  [31,]      -1.15016269      -0.426085        1.1910327
##  [32,]      -0.60370530      -0.426085        1.1910327
##  [33,]      -0.60370530      -0.426085       -1.5836393
##  [34,]      -0.33047661      -0.426085        0.2661420
##  [35,]       0.21598078      -0.426085       -1.5836393
##  [36,]      -0.87693400      -0.426085        1.1910327
##  [37,]      -0.33047661      -0.426085        0.2661420
##  [38,]      -0.60370530      -0.426085       -1.5836393
##  [39,]      -0.33047661      -0.426085        1.1910327
##  [40,]       1.03566686      -0.426085       -1.5836393
##  [41,]      -0.87693400      -0.426085        0.2661420
##  [42,]      -0.60370530      -0.426085        1.1910327
##  [43,]      -0.87693400      -0.426085        0.2661420
##  [44,]      -0.05724792      -0.426085        1.1910327
##  [45,]       2.12858163       2.345353        1.1910327
##  [46,]      -0.87693400      -0.426085        1.1910327
##  [47,]       1.30889555       2.345353        0.2661420
##  [48,]       1.58212424       2.345353       -1.5836393
##  [49,]       1.58212424       2.345353        0.2661420
##  [50,]       1.03566686      -0.426085        1.1910327
##  [51,]      -0.60370530      -0.426085        1.1910327
##  [52,]      -0.60370530      -0.426085        0.2661420
##  [53,]       1.58212424       2.345353        0.2661420
##  [54,]      -0.60370530      -0.426085        0.2661420
##  [55,]       1.03566686      -0.426085        0.2661420
##  [56,]      -0.87693400      -0.426085        0.2661420
##  [57,]       1.85535294       2.345353        1.1910327
##  [58,]      -0.05724792      -0.426085        0.2661420
##  [59,]       1.85535294       2.345353        1.1910327
##  [60,]       0.76243816      -0.426085        0.2661420
##  [61,]       1.85535294       2.345353       -0.6587487
##  [62,]      -1.15016269      -0.426085        1.1910327
##  [63,]      -0.87693400      -0.426085        1.1910327
##  [64,]      -1.15016269      -0.426085        1.1910327
##  [65,]      -0.60370530      -0.426085       -0.6587487
##  [66,]      -0.33047661      -0.426085        0.2661420
##  [67,]      -0.60370530      -0.426085        0.2661420
##  [68,]       0.48920947      -0.426085        0.2661420
##  [69,]      -0.60370530      -0.426085        1.1910327
##  [70,]       0.48920947      -0.426085       -1.5836393
##  [71,]      -1.15016269      -0.426085        1.1910327
##  [72,]       2.12858163       2.345353        1.1910327
##  [73,]       0.48920947      -0.426085       -0.6587487
##  [74,]       0.48920947      -0.426085       -0.6587487
##  [75,]      -0.87693400      -0.426085       -0.6587487
##  [76,]       2.12858163       2.345353        1.1910327
##  [77,]      -0.33047661      -0.426085       -0.6587487
##  [78,]      -0.33047661      -0.426085       -0.6587487
##  [79,]      -0.60370530      -0.426085       -1.5836393
```

```
##   [80,]       1.85535294        2.345353        1.1910327
##   [81,]      -0.87693400       -0.426085        0.2661420
##   [82,]       0.76243816       -0.426085       -1.5836393
##   [83,]      -0.33047661       -0.426085        1.1910327
##   [84,]      -0.87693400       -0.426085        1.1910327
##   [85,]      -0.05724792       -0.426085        0.2661420
##   [86,]      -1.15016269       -0.426085       -1.5836393
##   [87,]      -0.60370530       -0.426085        0.2661420
##   [88,]       2.12858163        2.345353       -0.6587487
##   [89,]       1.03566686       -0.426085       -1.5836393
##   [90,]       0.21598078       -0.426085        1.1910327
##   [91,]       1.85535294        2.345353        1.1910327
##   [92,]       1.85535294        2.345353        1.1910327
##   [93,]      -0.87693400       -0.426085       -0.6587487
##   [94,]      -0.60370530       -0.426085        0.2661420
##   [95,]       0.21598078       -0.426085       -1.5836393
##   [96,]      -0.87693400       -0.426085       -1.5836393
##   [97,]       1.58212424        2.345353       -1.5836393
##   [98,]      -0.05724792       -0.426085       -0.6587487
##   [99,]      -0.60370530       -0.426085        0.2661420
##  [100,]      -0.87693400       -0.426085        0.2661420
##  [101,]       1.85535294        2.345353        1.1910327
##  [102,]      -0.60370530       -0.426085        1.1910327
##  [103,]       0.76243816       -0.426085       -0.6587487
##  [104,]      -0.33047661       -0.426085        0.2661420
##  [105,]      -0.33047661       -0.426085        1.1910327
##  [106,]       1.58212424        2.345353        1.1910327
##  [107,]       1.03566686       -0.426085       -1.5836393
##  [108,]      -1.15016269       -0.426085        1.1910327
##  [109,]      -1.15016269       -0.426085        0.2661420
##  [110,]      -0.05724792       -0.426085        0.2661420
##  [111,]       1.30889555        2.345353        0.2661420
##  [112,]       2.40181032        2.345353        1.1910327
##  [113,]      -0.87693400       -0.426085        0.2661420
##  [114,]      -0.87693400       -0.426085        0.2661420
##  [115,]      -0.05724792       -0.426085        0.2661420
##  [116,]      -0.87693400       -0.426085       -1.5836393
##  [117,]      -0.87693400       -0.426085        1.1910327
##  [118,]      -0.33047661       -0.426085        0.2661420
##  [119,]       1.85535294        2.345353       -1.5836393
##  [120,]      -0.87693400       -0.426085        1.1910327
##  [121,]       2.67503902        2.345353        0.2661420
##  [122,]      -0.60370530       -0.426085       -1.5836393
##  [123,]       0.76243816       -0.426085       -1.5836393
##  [124,]      -0.60370530       -0.426085        0.2661420
##  [125,]       0.76243816       -0.426085       -0.6587487
##  [126,]       1.03566686       -0.426085        0.2661420
##  [127,]      -0.87693400       -0.426085        1.1910327
##  [128,]       1.03566686       -0.426085        1.1910327
##  [129,]      -0.33047661       -0.426085        0.2661420
##  [130,]      -0.33047661       -0.426085        0.2661420
##  [131,]      -0.87693400       -0.426085        1.1910327
##  [132,]      -1.15016269       -0.426085        1.1910327
##  [133,]      -1.15016269       -0.426085        0.2661420
```

```
## [134,]     -0.60370530     -0.426085        0.2661420
## [135,]      2.12858163      2.345353        1.1910327
## [136,]      1.30889555      2.345353        1.1910327
## [137,]     -0.05724792     -0.426085        1.1910327
## [138,]     -0.33047661     -0.426085        0.2661420
## [139,]      0.76243816     -0.426085        1.1910327
## [140,]      1.03566686     -0.426085        1.1910327
## [141,]      1.85535294      2.345353       -1.5836393
## [142,]     -0.60370530     -0.426085       -0.6587487
## [143,]      1.30889555      2.345353       -0.6587487
## [144,]     -0.33047661     -0.426085        0.2661420
## [145,]      0.48920947     -0.426085        1.1910327
## [146,]     -0.33047661     -0.426085        1.1910327
## [147,]     -0.60370530     -0.426085        1.1910327
## [148,]     -0.60370530     -0.426085       -0.6587487
## [149,]      1.58212424      2.345353        1.1910327
## [150,]     -0.33047661     -0.426085        1.1910327
## [151,]     -1.15016269     -0.426085       -1.5836393
## [152,]     -0.60370530     -0.426085       -1.5836393
## [153,]      1.30889555      2.345353        1.1910327
## [154,]      0.76243816     -0.426085        0.2661420
## [155,]     -0.33047661     -0.426085        1.1910327
## [156,]     -0.60370530     -0.426085       -1.5836393
## [157,]      0.48920947     -0.426085        0.2661420
## [158,]      1.30889555      2.345353       -0.6587487
## [159,]     -1.15016269     -0.426085       -1.5836393
## [160,]      0.76243816     -0.426085        1.1910327
## [161,]      2.40181032      2.345353       -1.5836393
## [162,]      0.76243816     -0.426085        1.1910327
## [163,]     -1.15016269     -0.426085        0.2661420
## [164,]      0.21598078     -0.426085       -0.6587487
## [165,]     -0.05724792     -0.426085        1.1910327
## [166,]     -0.05724792     -0.426085       -0.6587487
## [167,]     -0.87693400     -0.426085       -1.5836393
## [168,]     -0.87693400     -0.426085        0.2661420
## [169,]      1.85535294      2.345353        0.2661420
## [170,]      1.30889555      2.345353       -1.5836393
## [171,]      0.21598078     -0.426085        1.1910327
## [172,]      1.58212424      2.345353       -1.5836393
## [173,]     -0.87693400     -0.426085        0.2661420
## [174,]     -1.15016269     -0.426085        0.2661420
## [175,]     -1.15016269     -0.426085       -1.5836393
## [176,]      0.76243816     -0.426085        0.2661420
## [177,]     -0.33047661     -0.426085       -1.5836393
## [178,]      1.85535294      2.345353        0.2661420
## [179,]      2.67503902      2.345353        0.2661420
## [180,]     -0.87693400     -0.426085        0.2661420
## [181,]      2.12858163      2.345353        0.2661420
## [182,]     -0.05724792     -0.426085        1.1910327
## [183,]      1.85535294      2.345353        1.1910327
## [184,]     -0.05724792     -0.426085        1.1910327
## [185,]     -1.15016269     -0.426085        0.2661420
## [186,]     -0.60370530     -0.426085        1.1910327
## [187,]     -0.33047661     -0.426085       -0.6587487
```

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## [188,]        -1.15016269        -0.426085          1.1910327
## [189,]         0.48920947        -0.426085          0.2661420
## [190,]         0.76243816        -0.426085          0.2661420
## [191,]        -0.33047661        -0.426085         -1.5836393
## [192,]         0.21598078        -0.426085          1.1910327
## [193,]        -0.60370530        -0.426085         -1.5836393
## [194,]        -0.33047661        -0.426085          1.1910327
## [195,]         2.12858163         2.345353          1.1910327
## [196,]        -0.87693400        -0.426085         -1.5836393
## [197,]        -1.15016269        -0.426085          1.1910327
## [198,]         0.21598078        -0.426085         -0.6587487
## [199,]        -0.33047661        -0.426085         -0.6587487
## [200,]         0.76243816        -0.426085         -1.5836393
## [201,]         1.03566686        -0.426085          0.2661420
## [202,]        -0.05724792        -0.426085         -1.5836393
## [203,]         0.48920947        -0.426085          1.1910327
## [204,]        -0.05724792        -0.426085          0.2661420
## [205,]         1.03566686        -0.426085         -0.6587487
## [206,]         1.85535294         2.345353          1.1910327
## [207,]         0.21598078        -0.426085         -1.5836393
## [208,]        -0.60370530        -0.426085         -1.5836393
## [209,]        -0.33047661        -0.426085          1.1910327
## [210,]         0.21598078        -0.426085          0.2661420
## [211,]        -1.15016269        -0.426085          0.2661420
## [212,]         1.85535294         2.345353          0.2661420
## [213,]        -0.33047661        -0.426085          1.1910327
## [214,]         0.21598078        -0.426085          1.1910327
## [215,]        -1.15016269        -0.426085          0.2661420
## [216,]         0.76243816        -0.426085          0.2661420
## [217,]        -0.05724792        -0.426085          0.2661420
## [218,]        -0.33047661        -0.426085          1.1910327
## [219,]        -0.87693400        -0.426085          1.1910327
## [220,]        -0.33047661        -0.426085          1.1910327
## [221,]         0.21598078        -0.426085          1.1910327
## [222,]         1.58212424         2.345353          1.1910327
## [223,]        -0.33047661        -0.426085          0.2661420
## [224,]        -0.87693400        -0.426085          0.2661420
## [225,]        -0.87693400        -0.426085          1.1910327
## [226,]         0.48920947        -0.426085         -1.5836393
## [227,]         0.48920947        -0.426085          0.2661420
## [228,]        -0.33047661        -0.426085          1.1910327
## [229,]        -0.33047661        -0.426085         -1.5836393
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## [231,]        -0.05724792        -0.426085         -0.6587487
## [232,]        -1.15016269        -0.426085          1.1910327
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## [234,]        -1.15016269        -0.426085          0.2661420
## [235,]        -0.60370530        -0.426085          0.2661420
## [236,]         1.85535294         2.345353          0.2661420
## [237,]         1.30889555         2.345353         -1.5836393
## [238,]         0.76243816        -0.426085          1.1910327
## [239,]        -1.15016269        -0.426085         -1.5836393
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## [241,]        -0.33047661        -0.426085          0.2661420
```

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## [244,]     0.48920947    -0.426085    -1.5836393
## [245,]    -1.15016269    -0.426085     0.2661420
## [246,]    -0.87693400    -0.426085    -1.5836393
## [247,]    -0.60370530    -0.426085     0.2661420
## [248,]    -0.60370530    -0.426085    -0.6587487
## [249,]    -0.33047661    -0.426085    -1.5836393
## [250,]     0.48920947    -0.426085     1.1910327
## [251,]    -1.15016269    -0.426085    -0.6587487
## [252,]     2.67503902     2.345353     1.1910327
## [253,]     1.03566686    -0.426085    -1.5836393
## [254,]    -0.60370530    -0.426085     0.2661420
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## [256,]    -0.87693400    -0.426085     1.1910327
## [257,]    -1.15016269    -0.426085     0.2661420
## [258,]     1.03566686    -0.426085     1.1910327
## [259,]    -1.15016269    -0.426085    -0.6587487
## [260,]    -1.15016269    -0.426085    -0.6587487
## [261,]     1.30889555     2.345353     0.2661420
## [262,]     0.76243816    -0.426085     1.1910327
## [263,]    -0.60370530    -0.426085     1.1910327
## [264,]    -0.87693400    -0.426085    -0.6587487
## [265,]    -1.15016269    -0.426085     0.2661420
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## [267,]     1.58212424     2.345353    -0.6587487
## [268,]    -0.87693400    -0.426085     1.1910327
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## [278,]     2.40181032     2.345353     0.2661420
## [279,]     1.30889555     2.345353    -1.5836393
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## [284,]     1.03566686    -0.426085     1.1910327
## [285,]    -0.60370530    -0.426085     0.2661420
## [286,]    -0.87693400    -0.426085    -0.6587487
## [287,]     1.85535294     2.345353     1.1910327
## [288,]    -0.33047661    -0.426085    -0.6587487
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## [291,]    -1.15016269    -0.426085     1.1910327
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## [293,]    -1.15016269    -0.426085     0.2661420
## [294,]    -0.87693400    -0.426085    -0.6587487
## [295,]    -0.87693400    -0.426085     0.2661420
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## [296,]      -0.33047661      -0.426085       1.1910327
## [297,]      -0.60370530      -0.426085       0.2661420
## [298,]      -0.05724792      -0.426085       0.2661420
## [299,]       0.76243816      -0.426085       1.1910327
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## [301,]       1.03566686      -0.426085      -0.6587487
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## [303,]       1.03566686      -0.426085       0.2661420
## [304,]      -1.15016269      -0.426085      -0.6587487
## [305,]       0.48920947      -0.426085      -1.5836393
## [306,]      -0.05724792      -0.426085       0.2661420
## [307,]      -0.33047661      -0.426085       0.2661420
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## [320,]      -1.15016269      -0.426085       1.1910327
## [321,]      -1.15016269      -0.426085      -1.5836393
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## [325,]      -0.60370530      -0.426085       1.1910327
## [326,]       2.40181032       2.345353      -1.5836393
## [327,]      -0.05724792      -0.426085      -1.5836393
## [328,]       0.76243816      -0.426085      -1.5836393
## [329,]      -0.33047661      -0.426085       0.2661420
## [330,]      -1.15016269      -0.426085      -0.6587487
## [331,]      -1.15016269      -0.426085      -0.6587487
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## [336,]       1.85535294       2.345353       0.2661420
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## [339,]      -0.60370530      -0.426085       0.2661420
## [340,]       0.76243816      -0.426085      -1.5836393
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## [347,]      -0.05724792      -0.426085       1.1910327
## [348,]       1.03566686      -0.426085      -1.5836393
## [349,]      -0.33047661      -0.426085      -0.6587487
```

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## [350,]      -0.33047661      -0.426085      -1.5836393
## [351,]      -1.15016269      -0.426085       0.2661420
## [352,]      -0.60370530      -0.426085       0.2661420
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## [354,]      -0.60370530      -0.426085      -1.5836393
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## [356,]       0.48920947      -0.426085      -0.6587487
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## [358,]      -1.15016269      -0.426085       0.2661420
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## [360,]      -1.15016269      -0.426085      -1.5836393
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## [363,]       2.40181032       2.345353       0.2661420
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## [365,]       1.30889555       2.345353      -0.6587487
## [366,]      -0.33047661      -0.426085       0.2661420
## [367,]       0.76243816      -0.426085       0.2661420
## [368,]      -0.05724792      -0.426085       1.1910327
## [369,]      -0.87693400      -0.426085      -1.5836393
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## [379,]      -0.60370530      -0.426085      -0.6587487
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## [386,]       2.12858163       2.345353       0.2661420
## [387,]      -0.87693400      -0.426085       0.2661420
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## [393,]      -1.15016269      -0.426085       0.2661420
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## [401,]      -0.33047661      -0.426085       0.2661420
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## [403,]      -1.15016269      -0.426085      -0.6587487
```

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## [404,]      0.21598078      -0.426085       0.2661420
## [405,]     -0.87693400      -0.426085       1.1910327
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## [457,]      1.58212424       2.345353       0.2661420
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## [483,]     0.48920947    -0.426085     0.2661420
## [484,]    -0.33047661    -0.426085     1.1910327
## [485,]     1.85535294     2.345353     1.1910327
## [486,]    -0.87693400    -0.426085     0.2661420
## [487,]    -1.15016269    -0.426085     0.2661420
## [488,]    -0.60370530    -0.426085     1.1910327
## [489,]    -0.60370530    -0.426085    -0.6587487
## [490,]    -0.33047661    -0.426085     0.2661420
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## [492,]    -0.60370530    -0.426085    -0.6587487
## [493,]    -1.15016269    -0.426085    -1.5836393
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## [495,]     0.76243816    -0.426085     1.1910327
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## [497,]    -1.15016269    -0.426085     0.2661420
## [498,]    -0.87693400    -0.426085    -1.5836393
## [499,]     1.30889555     2.345353     1.1910327
## [500,]    -0.87693400    -0.426085     1.1910327
## [501,]    -0.87693400    -0.426085     1.1910327
## [502,]     1.30889555     2.345353     0.2661420
## [503,]     1.30889555     2.345353     1.1910327
## [504,]    -0.87693400    -0.426085     1.1910327
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## [506,]    -0.60370530    -0.426085     0.2661420
## [507,]    -0.05724792    -0.426085     0.2661420
## [508,]    -0.33047661    -0.426085    -1.5836393
## [509,]    -0.60370530    -0.426085    -0.6587487
## [510,]     2.12858163     2.345353     0.2661420
## [511,]    -0.05724792    -0.426085     0.2661420
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## [512,]    -1.15016269    -0.426085     0.2661420
## [513,]    -0.60370530    -0.426085     1.1910327
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## [516,]     0.76243816    -0.426085     0.2661420
## [517,]     0.21598078    -0.426085    -1.5836393
## [518,]     1.85535294     2.345353     0.2661420
## [519,]     1.30889555     2.345353    -1.5836393
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## [522,]     1.30889555     2.345353    -0.6587487
## [523,]     0.48920947    -0.426085    -1.5836393
## [524,]    -1.15016269    -0.426085     0.2661420
## [525,]    -0.33047661    -0.426085    -0.6587487
## [526,]    -0.33047661    -0.426085    -1.5836393
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## [533,]    -0.87693400    -0.426085     1.1910327
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## [535,]     1.03566686    -0.426085     0.2661420
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## [540,]    -0.05724792    -0.426085     1.1910327
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## [542,]    -0.33047661    -0.426085    -1.5836393
## [543,]    -0.33047661    -0.426085     1.1910327
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## [547,]    -1.15016269    -0.426085     0.2661420
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## [562,]    -1.15016269    -0.426085    -1.5836393
## [563,]    -0.60370530    -0.426085     0.2661420
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## [565,]    -0.60370530    -0.426085    -1.5836393
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## [566,]      0.76243816     -0.426085      1.1910327
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## [569,]     -0.60370530     -0.426085      1.1910327
## [570,]     -0.05724792     -0.426085     -0.6587487
## [571,]      0.76243816     -0.426085     -1.5836393
## [572,]     -0.33047661     -0.426085     -1.5836393
## [573,]     -0.87693400     -0.426085     -1.5836393
## [574,]      0.48920947     -0.426085      0.2661420
## [575,]      0.21598078     -0.426085      0.2661420
## [576,]     -1.15016269     -0.426085     -0.6587487
## [577,]      1.03566686     -0.426085     -0.6587487
## [578,]     -0.60370530     -0.426085     -0.6587487
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## [580,]     -1.15016269     -0.426085      0.2661420
## [581,]      0.21598078     -0.426085     -0.6587487
## [582,]      1.58212424      2.345353      0.2661420
## [583,]      2.40181032      2.345353      1.1910327
## [584,]      0.48920947     -0.426085     -0.6587487
## [585,]     -0.60370530     -0.426085     -0.6587487
## [586,]      1.58212424      2.345353      0.2661420
## [587,]     -1.15016269     -0.426085      0.2661420
## [588,]      1.30889555      2.345353     -0.6587487
## [589,]      0.21598078     -0.426085      1.1910327
## [590,]     -1.15016269     -0.426085      1.1910327
## [591,]     -1.15016269     -0.426085      1.1910327
## [592,]     -0.05724792     -0.426085      0.2661420
## [593,]     -1.15016269     -0.426085      0.2661420
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## [596,]     -0.87693400     -0.426085      1.1910327
## [597,]     -0.60370530     -0.426085      0.2661420
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## [604,]     -0.33047661     -0.426085      1.1910327
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## [613,]      1.30889555      2.345353     -1.5836393
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## [615,]     -0.33047661     -0.426085     -1.5836393
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## [625,]     0.76243816    -0.426085      1.1910327
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## [629,]     1.03566686    -0.426085      1.1910327
## [630,]    -0.60370530    -0.426085      1.1910327
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## [637,]     1.03566686    -0.426085     -1.5836393
## [638,]    -0.87693400    -0.426085     -0.6587487
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## [641,]     0.48920947    -0.426085      1.1910327
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## [644,]    -0.60370530    -0.426085     -0.6587487
## [645,]     1.03566686    -0.426085     -0.6587487
## [646,]     1.03566686    -0.426085      0.2661420
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## [671,]     1.03566686    -0.426085      0.2661420
## [672,]    -0.33047661    -0.426085     -0.6587487
## [673,]     0.48920947    -0.426085     -1.5836393
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## [674,]     -1.15016269    -0.426085    -0.6587487
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## [681,]      0.76243816    -0.426085     0.2661420
## [682,]     -0.60370530    -0.426085    -0.6587487
## [683,]      1.30889555     2.345353     0.2661420
## [684,]      0.76243816    -0.426085     0.2661420
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## [699,]      0.21598078    -0.426085    -0.6587487
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## [709,]     -0.60370530    -0.426085     1.1910327
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## [728,]      -0.05724792      -0.426085       1.1910327
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## [763,]      -0.33047661      -0.426085      -0.6587487
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## [776,]      -0.60370530      -0.426085       0.2661420
## [777,]      -0.33047661      -0.426085      -0.6587487
## [778,]      -0.60370530      -0.426085      -1.5836393
## [779,]       2.12858163       2.345353      -1.5836393
## [780,]      -0.87693400      -0.426085       0.2661420
## [781,]      -0.87693400      -0.426085      -1.5836393
```

```
## [782,]    0.21598078   -0.426085   -1.5836393
## [783,]   -0.05724792   -0.426085    0.2661420
## [784,]   -0.60370530   -0.426085    0.2661420
## [785,]    0.76243816   -0.426085   -1.5836393
## [786,]    1.30889555    2.345353    1.1910327
## [787,]    1.03566686   -0.426085    1.1910327
## [788,]    0.76243816   -0.426085   -0.6587487
## [789,]   -0.60370530   -0.426085    1.1910327
## [790,]   -0.33047661   -0.426085    1.1910327
## [791,]   -0.05724792   -0.426085    0.2661420
## [792,]    1.85535294    2.345353   -1.5836393
## [793,]    1.85535294    2.345353   -0.6587487
## [794,]    0.21598078   -0.426085    1.1910327
## [795,]    0.48920947   -0.426085    0.2661420
## [796,]   -0.33047661   -0.426085    0.2661420
## [797,]   -0.05724792   -0.426085   -0.6587487
## [798,]    1.30889555    2.345353    0.2661420
## [799,]    1.30889555    2.345353   -0.6587487
## [800,]    0.48920947   -0.426085    1.1910327
## [801,]   -0.05724792   -0.426085   -1.5836393
## [802,]   -0.33047661   -0.426085    1.1910327
## [803,]    0.48920947   -0.426085    0.2661420
## [804,]    0.48920947   -0.426085    1.1910327
## [805,]    1.85535294    2.345353    0.2661420
## [806,]   -0.60370530   -0.426085    1.1910327
## [807,]    1.03566686   -0.426085    1.1910327
## [808,]   -0.33047661   -0.426085   -0.6587487
## [809,]    1.85535294    2.345353   -1.5836393
## [810,]    0.48920947   -0.426085   -0.6587487
## [811,]   -0.87693400   -0.426085    1.1910327
## [812,]    0.21598078   -0.426085    0.2661420
## [813,]   -1.15016269   -0.426085    0.2661420
## [814,]   -1.15016269   -0.426085    1.1910327
## [815,]   -0.33047661   -0.426085   -1.5836393
## [816,]   -1.15016269   -0.426085    0.2661420
## [817,]   -0.05724792   -0.426085    0.2661420
## [818,]    1.30889555    2.345353   -1.5836393
## [819,]   -0.87693400   -0.426085   -1.5836393
## [820,]    0.48920947   -0.426085   -1.5836393
## [821,]   -1.15016269   -0.426085    1.1910327
## [822,]    0.48920947   -0.426085   -0.6587487
## [823,]   -1.15016269   -0.426085    1.1910327
## [824,]   -0.33047661   -0.426085    1.1910327
## [825,]    1.03566686   -0.426085   -1.5836393
## [826,]   -0.05724792   -0.426085    0.2661420
## [827,]   -0.60370530   -0.426085    1.1910327
## [828,]   -0.33047661   -0.426085    1.1910327
## [829,]   -0.87693400   -0.426085    1.1910327
## [830,]    0.48920947   -0.426085   -1.5836393
## [831,]   -1.15016269   -0.426085   -1.5836393
## [832,]   -0.87693400   -0.426085    0.2661420
## [833,]   -0.60370530   -0.426085    0.2661420
## [834,]   -0.60370530   -0.426085    0.2661420
## [835,]    1.30889555    2.345353   -1.5836393
```

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## [836,]      0.48920947      -0.426085      -0.6587487
## [837,]     -0.60370530      -0.426085      -1.5836393
## [838,]      0.48920947      -0.426085       0.2661420
## [839,]     -0.87693400      -0.426085      -0.6587487
## [840,]     -0.60370530      -0.426085       1.1910327
## [841,]     -0.87693400      -0.426085      -0.6587487
## [842,]      1.85535294       2.345353       1.1910327
## [843,]     -1.15016269      -0.426085       1.1910327
## [844,]      1.85535294       2.345353      -0.6587487
## [845,]      0.76243816      -0.426085      -1.5836393
## [846,]     -0.60370530      -0.426085       1.1910327
## [847,]      0.76243816      -0.426085      -0.6587487
## [848,]      1.30889555       2.345353       0.2661420
## [849,]     -0.60370530      -0.426085      -0.6587487
## [850,]     -0.60370530      -0.426085      -0.6587487
## [851,]     -0.87693400      -0.426085       0.2661420
## [852,]     -0.60370530      -0.426085       1.1910327
## [853,]     -0.60370530      -0.426085      -1.5836393
## [854,]      2.67503902       2.345353       0.2661420
## [855,]      1.03566686      -0.426085       0.2661420
## [856,]     -0.60370530      -0.426085      -0.6587487
## [857,]     -0.87693400      -0.426085      -1.5836393
## [858,]     -1.15016269      -0.426085       0.2661420
## [859,]      0.76243816      -0.426085      -0.6587487
## [860,]      0.76243816      -0.426085      -1.5836393
## [861,]     -1.15016269      -0.426085      -0.6587487
## [862,]      2.12858163       2.345353      -1.5836393
## [863,]     -0.60370530      -0.426085       1.1910327
## [864,]     -0.60370530      -0.426085       1.1910327
## [865,]      0.48920947      -0.426085      -1.5836393
## [866,]      1.03566686      -0.426085       0.2661420
## [867,]     -0.87693400      -0.426085       1.1910327
## [868,]      1.85535294       2.345353       0.2661420
## [869,]     -0.87693400      -0.426085       0.2661420
## [870,]     -1.15016269      -0.426085      -1.5836393
## [871,]     -0.05724792      -0.426085       1.1910327
## [872,]     -0.60370530      -0.426085      -1.5836393
## [873,]     -0.87693400      -0.426085      -1.5836393
## [874,]     -0.33047661      -0.426085       0.2661420
## [875,]     -0.60370530      -0.426085      -1.5836393
## [876,]      2.67503902       2.345353      -0.6587487
## [877,]      0.48920947      -0.426085       1.1910327
## [878,]     -1.15016269      -0.426085       0.2661420
## [879,]      0.21598078      -0.426085      -1.5836393
## [880,]      0.76243816      -0.426085      -0.6587487
## [881,]      1.30889555       2.345353       0.2661420
## [882,]     -0.33047661      -0.426085       1.1910327
## [883,]      1.58212424       2.345353       0.2661420
## [884,]     -0.60370530      -0.426085      -0.6587487
## [885,]     -0.87693400      -0.426085      -0.6587487
## [886,]     -0.33047661      -0.426085      -0.6587487
## [887,]      1.58212424       2.345353      -1.5836393
## [888,]      0.48920947      -0.426085       0.2661420
## [889,]     -1.15016269      -0.426085      -0.6587487
```

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## [890,]      -0.33047661    -0.426085     1.1910327
## [891,]       0.48920947    -0.426085    -1.5836393
## [892,]      -0.60370530    -0.426085     1.1910327
## [893,]       2.67503902     2.345353    -0.6587487
## [894,]      -0.05724792    -0.426085    -1.5836393
## [895,]      -0.33047661    -0.426085    -1.5836393
## [896,]      -0.87693400    -0.426085     1.1910327
## [897,]       1.03566686    -0.426085    -0.6587487
## [898,]       0.48920947    -0.426085     1.1910327
## [899,]      -0.33047661    -0.426085    -0.6587487
## [900,]      -0.60370530    -0.426085     0.2661420
## [901,]      -0.87693400    -0.426085     0.2661420
## [902,]      -1.15016269    -0.426085     0.2661420
## [903,]      -1.15016269    -0.426085    -0.6587487
## [904,]      -1.15016269    -0.426085    -0.6587487
## [905,]      -0.87693400    -0.426085     0.2661420
## [906,]      -0.33047661    -0.426085    -0.6587487
## [907,]       0.48920947    -0.426085     1.1910327
## [908,]      -1.15016269    -0.426085     0.2661420
## [909,]      -0.33047661    -0.426085     1.1910327
## [910,]      -0.87693400    -0.426085     1.1910327
## [911,]       1.85535294     2.345353     1.1910327
## [912,]      -0.33047661    -0.426085     1.1910327
## [913,]       1.30889555     2.345353    -0.6587487
## [914,]       0.21598078    -0.426085    -1.5836393
## [915,]      -0.05724792    -0.426085     1.1910327
## [916,]       1.30889555     2.345353     0.2661420
## [917,]      -0.33047661    -0.426085     0.2661420
## [918,]      -0.87693400    -0.426085     1.1910327
## [919,]       2.40181032     2.345353    -1.5836393
## [920,]      -0.87693400    -0.426085     1.1910327
## [921,]      -0.60370530    -0.426085     0.2661420
## [922,]      -1.15016269    -0.426085     0.2661420
## [923,]      -0.33047661    -0.426085     1.1910327
## [924,]      -1.15016269    -0.426085     1.1910327
## [925,]      -0.33047661    -0.426085     1.1910327
## [926,]       0.21598078    -0.426085     1.1910327
## [927,]      -0.33047661    -0.426085     1.1910327
## [928,]      -1.15016269    -0.426085     1.1910327
## [929,]      -1.15016269    -0.426085     1.1910327
## [930,]      -0.87693400    -0.426085    -0.6587487
## [931,]      -0.33047661    -0.426085    -0.6587487
## [932,]       0.76243816    -0.426085     0.2661420
## [933,]      -0.60370530    -0.426085    -1.5836393
## [934,]      -1.15016269    -0.426085    -0.6587487
## [935,]       0.76243816    -0.426085     1.1910327
## [936,]      -0.05724792    -0.426085     0.2661420
## [937,]       1.85535294     2.345353     0.2661420
## [938,]      -0.60370530    -0.426085     1.1910327
## [939,]      -0.87693400    -0.426085     1.1910327
## [940,]       0.76243816    -0.426085    -1.5836393
## [941,]      -0.60370530    -0.426085    -1.5836393
## [942,]      -0.87693400    -0.426085    -1.5836393
## [943,]      -0.87693400    -0.426085    -1.5836393
```

```
## [944,]    -0.87693400   -0.426085     0.2661420
## [945,]    -1.15016269   -0.426085    -1.5836393
## [946,]    -1.15016269   -0.426085    -0.6587487
## [947,]    -0.87693400   -0.426085     0.2661420
## [948,]     1.03566686   -0.426085     0.2661420
## [949,]     2.12858163    2.345353     1.1910327
## [950,]    -1.15016269   -0.426085    -1.5836393
## [951,]     1.03566686   -0.426085    -1.5836393
## [952,]    -0.60370530   -0.426085    -1.5836393
## [953,]    -1.15016269   -0.426085    -1.5836393
## [954,]    -0.87693400   -0.426085     0.2661420
## [955,]    -0.60370530   -0.426085     1.1910327
## [956,]    -0.33047661   -0.426085     1.1910327
## [957,]    -0.33047661   -0.426085    -1.5836393
## [958,]     0.21598078   -0.426085    -0.6587487
## [959,]    -1.15016269   -0.426085     1.1910327
## [960,]    -0.60370530   -0.426085     0.2661420
## [961,]     0.48920947   -0.426085     1.1910327
## [962,]    -1.15016269   -0.426085    -0.6587487
## [963,]    -1.15016269   -0.426085    -0.6587487
## [964,]    -0.05724792   -0.426085     1.1910327
## [965,]    -0.87693400   -0.426085     1.1910327
## [966,]    -1.15016269   -0.426085     0.2661420
## [967,]    -0.33047661   -0.426085     1.1910327
## [968,]     1.85535294    2.345353     0.2661420
## [969,]     0.21598078   -0.426085     1.1910327
## [970,]    -1.15016269   -0.426085     0.2661420
## [971,]    -0.33047661   -0.426085    -0.6587487
## [972,]     0.21598078   -0.426085    -0.6587487
## [973,]    -0.05724792   -0.426085     0.2661420
## [974,]    -0.87693400   -0.426085    -0.6587487
## [975,]     1.30889555    2.345353    -0.6587487
## [976,]     0.48920947   -0.426085     0.2661420
## [977,]    -0.87693400   -0.426085    -1.5836393
## [978,]     1.30889555    2.345353     0.2661420
## [979,]     1.30889555    2.345353    -0.6587487
## [980,]    -0.60370530   -0.426085    -1.5836393
## [981,]    -0.33047661   -0.426085     0.2661420
## [982,]     0.76243816   -0.426085     0.2661420
## [983,]    -1.15016269   -0.426085     1.1910327
## [984,]    -1.15016269   -0.426085     1.1910327
## [985,]    -1.15016269   -0.426085     0.2661420
## [986,]    -0.05724792   -0.426085     1.1910327
## [987,]    -0.87693400   -0.426085     1.1910327
## [988,]    -1.15016269   -0.426085    -0.6587487
## [989,]    -0.33047661   -0.426085    -1.5836393
## [990,]    -0.05724792   -0.426085     1.1910327
## [991,]    -0.60370530   -0.426085    -1.5836393
## [992,]    -0.60370530   -0.426085    -1.5836393
## [993,]     1.58212424    2.345353    -0.6587487
## [994,]    -1.15016269   -0.426085    -0.6587487
## [995,]    -1.15016269   -0.426085    -0.6587487
## [996,]    -0.33047661   -0.426085    -1.5836393
## [997,]    -1.15016269   -0.426085     1.1910327
```

```
##  [998,]     -0.60370530     -0.426085      1.1910327
##  [999,]     -0.87693400     -0.426085      1.1910327
## [1000,]     -0.33047661     -0.426085      0.2661420
## [1001,]     -0.60370530     -0.426085      0.2661420
## [1002,]      0.76243816     -0.426085     -1.5836393
## [1003,]     -1.15016269     -0.426085      0.2661420
## [1004,]     -1.15016269     -0.426085     -0.6587487
## [1005,]     -0.87693400     -0.426085      1.1910327
## [1006,]     -0.60370530     -0.426085     -1.5836393
## [1007,]      1.30889555      2.345353     -1.5836393
## [1008,]     -0.87693400     -0.426085     -1.5836393
## [1009,]      1.03566686     -0.426085      1.1910327
## [1010,]      1.58212424      2.345353      0.2661420
## [1011,]     -0.60370530     -0.426085      1.1910327
## [1012,]      0.21598078     -0.426085      1.1910327
## [1013,]     -0.87693400     -0.426085     -0.6587487
## [1014,]     -0.33047661     -0.426085     -0.6587487
## [1015,]     -1.15016269     -0.426085      0.2661420
## [1016,]     -0.33047661     -0.426085      0.2661420
## [1017,]     -0.87693400     -0.426085      0.2661420
## [1018,]     -0.33047661     -0.426085     -0.6587487
## [1019,]      0.21598078     -0.426085      0.2661420
## [1020,]     -0.60370530     -0.426085     -1.5836393
## [1021,]     -0.87693400     -0.426085      0.2661420
## [1022,]     -0.87693400     -0.426085     -1.5836393
## [1023,]     -0.33047661     -0.426085     -1.5836393
## [1024,]      1.85535294      2.345353      1.1910327
## [1025,]      1.03566686     -0.426085     -0.6587487
## [1026,]     -0.87693400     -0.426085      0.2661420
## [1027,]     -0.87693400     -0.426085      0.2661420
## [1028,]      0.48920947     -0.426085     -1.5836393
## [1029,]     -0.87693400     -0.426085     -1.5836393
## [1030,]     -1.15016269     -0.426085      0.2661420
## [1031,]      0.76243816     -0.426085     -1.5836393
## [1032,]     -1.15016269     -0.426085     -1.5836393
## [1033,]      2.12858163      2.345353     -0.6587487
## [1034,]     -1.15016269     -0.426085     -1.5836393
## [1035,]      0.76243816     -0.426085     -0.6587487
## [1036,]      0.76243816     -0.426085      1.1910327
## [1037,]     -0.60370530     -0.426085      0.2661420
## [1038,]      0.76243816     -0.426085      1.1910327
## [1039,]     -1.15016269     -0.426085     -1.5836393
## [1040,]     -0.05724792     -0.426085      1.1910327
## [1041,]     -1.15016269     -0.426085      0.2661420
## [1042,]      0.76243816     -0.426085      1.1910327
## [1043,]     -0.33047661     -0.426085      1.1910327
## [1044,]     -0.87693400     -0.426085     -0.6587487
## [1045,]     -0.33047661     -0.426085     -0.6587487
## [1046,]     -0.33047661     -0.426085      0.2661420
## [1047,]     -0.60370530     -0.426085      0.2661420
## [1048,]     -0.33047661     -0.426085     -1.5836393
## [1049,]      0.76243816     -0.426085      1.1910327
## [1050,]     -0.05724792     -0.426085      0.2661420
## [1051,]     -0.60370530     -0.426085      0.2661420
```

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## [1052,]      -0.87693400       -0.426085        0.2661420
## [1053,]      -0.60370530       -0.426085       -0.6587487
## [1054,]       2.40181032        2.345353       -1.5836393
## [1055,]      -0.33047661       -0.426085       -0.6587487
## [1056,]      -0.33047661       -0.426085        1.1910327
## [1057,]      -0.05724792       -0.426085        1.1910327
## [1058,]      -1.15016269       -0.426085       -1.5836393
## [1059,]       2.12858163        2.345353        0.2661420
## [1060,]      -0.60370530       -0.426085       -1.5836393
## [1061,]      -1.15016269       -0.426085        0.2661420
## [1062,]      -0.60370530       -0.426085        0.2661420
## [1063,]       0.76243816       -0.426085       -0.6587487
## [1064,]      -0.33047661       -0.426085        0.2661420
## [1065,]       1.58212424        2.345353       -1.5836393
## [1066,]       0.21598078       -0.426085       -0.6587487
## [1067,]      -1.15016269       -0.426085        1.1910327
## [1068,]       0.48920947       -0.426085        0.2661420
## [1069,]      -1.15016269       -0.426085        0.2661420
## [1070,]      -0.33047661       -0.426085        1.1910327
## [1071,]      -0.33047661       -0.426085        1.1910327
## [1072,]       2.67503902        2.345353       -1.5836393
## [1073,]      -0.60370530       -0.426085        0.2661420
## [1074,]      -0.33047661       -0.426085       -0.6587487
## [1075,]       0.48920947       -0.426085       -1.5836393
## [1076,]       2.67503902        2.345353       -0.6587487
## [1077,]       1.30889555        2.345353       -1.5836393
## [1078,]      -0.60370530       -0.426085        0.2661420
## [1079,]      -0.60370530       -0.426085        0.2661420
## [1080,]       0.76243816       -0.426085        1.1910327
## [1081,]      -0.87693400       -0.426085        1.1910327
## [1082,]       1.03566686       -0.426085        1.1910327
## [1083,]      -0.33047661       -0.426085       -0.6587487
## [1084,]      -0.33047661       -0.426085       -0.6587487
## [1085,]      -0.33047661       -0.426085        1.1910327
## [1086,]      -0.87693400       -0.426085       -1.5836393
## [1087,]      -0.60370530       -0.426085        1.1910327
## [1088,]       2.67503902        2.345353       -0.6587487
## [1089,]      -0.33047661       -0.426085       -0.6587487
## [1090,]       0.48920947       -0.426085       -1.5836393
## [1091,]      -0.60370530       -0.426085        0.2661420
## [1092,]      -0.60370530       -0.426085        1.1910327
## [1093,]       1.30889555        2.345353        1.1910327
## [1094,]      -0.33047661       -0.426085        0.2661420
## [1095,]      -0.87693400       -0.426085        1.1910327
## [1096,]      -0.87693400       -0.426085       -0.6587487
## [1097,]       1.58212424        2.345353        1.1910327
## [1098,]      -0.33047661       -0.426085       -0.6587487
## [1099,]       0.76243816       -0.426085        0.2661420
## [1100,]      -0.87693400       -0.426085       -1.5836393
## [1101,]       2.12858163        2.345353       -1.5836393
## [1102,]      -0.87693400       -0.426085       -1.5836393
## [1103,]       1.58212424        2.345353        1.1910327
## [1104,]      -0.33047661       -0.426085        0.2661420
## [1105,]       0.76243816       -0.426085       -1.5836393
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## [1106,]     -0.60370530     -0.426085      1.1910327
## [1107,]     -1.15016269     -0.426085      1.1910327
## [1108,]     -1.15016269     -0.426085      0.2661420
## [1109,]      1.03566686     -0.426085     -0.6587487
## [1110,]     -0.87693400     -0.426085     -0.6587487
## [1111,]     -0.87693400     -0.426085      1.1910327
## [1112,]      0.21598078     -0.426085     -0.6587487
## [1113,]     -1.15016269     -0.426085     -1.5836393
## [1114,]     -0.33047661     -0.426085     -0.6587487
## [1115,]     -0.87693400     -0.426085      1.1910327
## [1116,]     -0.60370530     -0.426085      0.2661420
## [1117,]      1.58212424      2.345353      0.2661420
## [1118,]      0.48920947     -0.426085     -0.6587487
## [1119,]      1.58212424      2.345353     -1.5836393
## [1120,]     -1.15016269     -0.426085      1.1910327
## [1121,]     -0.87693400     -0.426085     -0.6587487
## [1122,]     -0.60370530     -0.426085     -1.5836393
## [1123,]      0.76243816     -0.426085      1.1910327
## [1124,]      0.21598078     -0.426085      0.2661420
## [1125,]     -1.15016269     -0.426085     -1.5836393
## [1126,]      1.03566686     -0.426085      1.1910327
## [1127,]      0.21598078     -0.426085      0.2661420
## [1128,]      0.21598078     -0.426085      1.1910327
## [1129,]     -0.60370530     -0.426085      1.1910327
## [1130,]      1.85535294      2.345353      1.1910327
## [1131,]      0.48920947     -0.426085      1.1910327
## [1132,]     -0.33047661     -0.426085     -0.6587487
## [1133,]     -0.05724792     -0.426085      0.2661420
## [1134,]     -0.87693400     -0.426085      0.2661420
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## [1137,]      0.48920947     -0.426085      0.2661420
## [1138,]     -0.33047661     -0.426085     -0.6587487
## [1139,]     -0.05724792     -0.426085      0.2661420
## [1140,]      0.48920947     -0.426085      1.1910327
## [1141,]     -0.33047661     -0.426085      1.1910327
## [1142,]     -0.87693400     -0.426085     -0.6587487
## [1143,]     -0.33047661     -0.426085     -1.5836393
## [1144,]     -0.05724792     -0.426085     -1.5836393
## [1145,]     -0.60370530     -0.426085      1.1910327
## [1146,]     -0.87693400     -0.426085     -0.6587487
## [1147,]     -0.60370530     -0.426085     -1.5836393
## [1148,]     -0.33047661     -0.426085      1.1910327
## [1149,]     -0.60370530     -0.426085      1.1910327
## [1150,]     -1.15016269     -0.426085     -1.5836393
## [1151,]     -1.15016269     -0.426085      1.1910327
## [1152,]      1.58212424      2.345353     -0.6587487
## [1153,]      0.76243816     -0.426085      0.2661420
## [1154,]     -0.87693400     -0.426085      0.2661420
## [1155,]     -1.15016269     -0.426085      0.2661420
## [1156,]     -0.05724792     -0.426085      1.1910327
## [1157,]     -0.60370530     -0.426085      1.1910327
## [1158,]     -0.87693400     -0.426085      1.1910327
## [1159,]      0.48920947     -0.426085     -1.5836393
```

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## [1160,]     -0.60370530      -0.426085       1.1910327
## [1161,]      1.03566686      -0.426085      -1.5836393
## [1162,]      1.03566686      -0.426085       1.1910327
## [1163,]      0.48920947      -0.426085       0.2661420
## [1164,]     -1.15016269      -0.426085      -1.5836393
## [1165,]     -0.05724792      -0.426085       1.1910327
## [1166,]     -1.15016269      -0.426085       0.2661420
## [1167,]      2.67503902       2.345353      -0.6587487
## [1168,]     -0.33047661      -0.426085       1.1910327
## [1169,]     -0.60370530      -0.426085       0.2661420
## [1170,]      0.48920947      -0.426085      -1.5836393
## [1171,]     -0.60370530      -0.426085       0.2661420
## [1172,]     -0.33047661      -0.426085      -0.6587487
## [1173,]     -1.15016269      -0.426085       0.2661420
## [1174,]     -0.87693400      -0.426085       0.2661420
## [1175,]      0.48920947      -0.426085       0.2661420
## [1176,]      1.58212424       2.345353       0.2661420
## [1177,]      0.21598078      -0.426085      -0.6587487
## [1178,]     -0.05724792      -0.426085       0.2661420
## [1179,]      1.03566686      -0.426085      -1.5836393
## [1180,]     -0.87693400      -0.426085       0.2661420
## [1181,]     -1.15016269      -0.426085       0.2661420
## [1182,]      1.03566686      -0.426085      -0.6587487
## [1183,]     -0.05724792      -0.426085       0.2661420
## [1184,]      1.30889555       2.345353      -1.5836393
## [1185,]      2.67503902       2.345353       0.2661420
## [1186,]      2.40181032       2.345353      -1.5836393
## [1187,]      2.40181032       2.345353      -1.5836393
## [1188,]     -0.05724792      -0.426085       1.1910327
## [1189,]     -0.60370530      -0.426085      -0.6587487
## [1190,]     -0.33047661      -0.426085       0.2661420
## [1191,]     -0.60370530      -0.426085       0.2661420
## [1192,]     -1.15016269      -0.426085      -1.5836393
## [1193,]      0.21598078      -0.426085      -0.6587487
## [1194,]      1.85535294       2.345353      -0.6587487
## [1195,]     -0.33047661      -0.426085       0.2661420
## [1196,]     -0.33047661      -0.426085      -1.5836393
## [1197,]      0.21598078      -0.426085       1.1910327
## [1198,]     -1.15016269      -0.426085      -1.5836393
## [1199,]      2.67503902       2.345353       0.2661420
## [1200,]     -0.33047661      -0.426085      -0.6587487
## [1201,]      0.76243816      -0.426085      -1.5836393
## [1202,]     -1.15016269      -0.426085      -1.5836393
## [1203,]      1.03566686      -0.426085       1.1910327
## [1204,]     -0.05724792      -0.426085       0.2661420
## [1205,]     -1.15016269      -0.426085       0.2661420
## [1206,]     -0.87693400      -0.426085      -1.5836393
## [1207,]      1.30889555       2.345353       0.2661420
## [1208,]     -0.87693400      -0.426085       1.1910327
## [1209,]     -0.33047661      -0.426085       0.2661420
## [1210,]      1.30889555       2.345353       0.2661420
## [1211,]      0.76243816      -0.426085       1.1910327
## [1212,]     -0.33047661      -0.426085       0.2661420
## [1213,]     -0.87693400      -0.426085      -0.6587487
```

```
## [1214,]         1.58212424          2.345353             -0.6587487
## [1215,]         1.03566686         -0.426085             -0.6587487
## [1216,]        -0.33047661         -0.426085              0.2661420
## [1217,]         0.48920947         -0.426085             -1.5836393
## [1218,]         0.21598078         -0.426085              1.1910327
## [1219,]        -0.87693400         -0.426085             -0.6587487
## [1220,]         0.48920947         -0.426085              0.2661420
## [1221,]        -0.05724792         -0.426085              0.2661420
## [1222,]         2.12858163          2.345353              1.1910327
## [1223,]        -1.15016269         -0.426085              0.2661420
## [1224,]        -1.15016269         -0.426085              0.2661420
## [1225,]        -0.05724792         -0.426085              0.2661420
## [1226,]        -1.15016269         -0.426085              0.2661420
## [1227,]        -0.60370530         -0.426085             -1.5836393
## [1228,]        -0.33047661         -0.426085              1.1910327
## [1229,]         1.03566686         -0.426085             -0.6587487
## [1230,]         0.21598078         -0.426085             -0.6587487
## [1231,]        -0.60370530         -0.426085             -0.6587487
## [1232,]        -0.33047661         -0.426085              1.1910327
## [1233,]         0.21598078         -0.426085             -0.6587487
## [1234,]        -0.87693400         -0.426085             -0.6587487
## [1235,]        -1.15016269         -0.426085              1.1910327
## [1236,]        -0.87693400         -0.426085             -0.6587487
## [1237,]        -0.60370530         -0.426085             -0.6587487
## [1238,]        -0.05724792         -0.426085             -0.6587487
## [1239,]        -0.60370530         -0.426085              0.2661420
## [1240,]         1.30889555          2.345353              1.1910327
## [1241,]        -0.05724792         -0.426085              1.1910327
## [1242,]        -0.60370530         -0.426085              0.2661420
## [1243,]        -0.33047661         -0.426085             -0.6587487
## [1244,]         1.58212424          2.345353              0.2661420
## [1245,]         0.21598078         -0.426085              1.1910327
## [1246,]        -0.33047661         -0.426085              1.1910327
## [1247,]        -1.15016269         -0.426085              0.2661420
## [1248,]         1.03566686         -0.426085              0.2661420
## [1249,]        -1.15016269         -0.426085              0.2661420
## [1250,]        -0.60370530         -0.426085              0.2661420
## [1251,]        -0.87693400         -0.426085              1.1910327
## [1252,]        -1.15016269         -0.426085             -1.5836393
## [1253,]        -0.33047661         -0.426085             -1.5836393
## [1254,]        -0.05724792         -0.426085              1.1910327
## [1255,]        -0.87693400         -0.426085              0.2661420
## [1256,]         1.30889555          2.345353              0.2661420
## [1257,]        -0.33047661         -0.426085             -0.6587487
## [1258,]        -0.60370530         -0.426085             -1.5836393
## [1259,]        -0.60370530         -0.426085              0.2661420
## [1260,]         0.21598078         -0.426085              0.2661420
## [1261,]        -0.33047661         -0.426085             -0.6587487
## [1262,]         0.21598078         -0.426085              0.2661420
## [1263,]         0.21598078         -0.426085              1.1910327
## [1264,]         1.85535294          2.345353             -0.6587487
## [1265,]        -0.87693400         -0.426085             -0.6587487
## [1266,]        -0.05724792         -0.426085              1.1910327
## [1267,]         1.30889555          2.345353             -0.6587487
```

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## [1268,]     -0.33047661     -0.426085      0.2661420
## [1269,]      1.30889555      2.345353      1.1910327
## [1270,]     -0.60370530     -0.426085     -0.6587487
## [1271,]     -0.87693400     -0.426085     -1.5836393
## [1272,]     -0.60370530     -0.426085     -0.6587487
## [1273,]     -1.15016269     -0.426085     -0.6587487
## [1274,]      0.48920947     -0.426085      0.2661420
## [1275,]     -0.33047661     -0.426085     -1.5836393
## [1276,]     -1.15016269     -0.426085      1.1910327
## [1277,]     -0.33047661     -0.426085     -1.5836393
## [1278,]      0.48920947     -0.426085      0.2661420
## [1279,]     -0.60370530     -0.426085      1.1910327
## [1280,]     -0.87693400     -0.426085      0.2661420
## [1281,]     -0.60370530     -0.426085      0.2661420
## [1282,]      0.76243816     -0.426085      1.1910327
## [1283,]      1.03566686     -0.426085     -0.6587487
## [1284,]     -1.15016269     -0.426085      0.2661420
## [1285,]      1.58212424      2.345353      0.2661420
## [1286,]     -0.05724792     -0.426085      0.2661420
## [1287,]      0.48920947     -0.426085      1.1910327
## [1288,]      0.76243816     -0.426085      0.2661420
## [1289,]     -0.33047661     -0.426085      0.2661420
## [1290,]     -0.60370530     -0.426085      1.1910327
## [1291,]      0.48920947     -0.426085      0.2661420
## [1292,]     -0.05724792     -0.426085     -0.6587487
## [1293,]      0.76243816     -0.426085      1.1910327
## [1294,]     -0.60370530     -0.426085      0.2661420
## [1295,]     -0.87693400     -0.426085     -1.5836393
## [1296,]     -0.60370530     -0.426085      1.1910327
## [1297,]     -0.33047661     -0.426085     -0.6587487
## [1298,]     -1.15016269     -0.426085      0.2661420
## [1299,]      1.85535294      2.345353      1.1910327
## [1300,]      0.48920947     -0.426085      1.1910327
## [1301,]      1.58212424      2.345353      0.2661420
## [1302,]      1.85535294      2.345353      1.1910327
## [1303,]      0.21598078     -0.426085     -0.6587487
## [1304,]     -0.87693400     -0.426085      0.2661420
## [1305,]     -0.87693400     -0.426085     -0.6587487
## [1306,]     -0.05724792     -0.426085     -0.6587487
## [1307,]     -0.33047661     -0.426085      1.1910327
## [1308,]      2.67503902      2.345353      0.2661420
## [1309,]      1.30889555      2.345353     -1.5836393
## [1310,]     -0.60370530     -0.426085     -1.5836393
## [1311,]     -0.33047661     -0.426085     -0.6587487
## [1312,]      0.21598078     -0.426085      0.2661420
## [1313,]      0.48920947     -0.426085      0.2661420
## [1314,]     -0.05724792     -0.426085      1.1910327
## [1315,]      1.85535294      2.345353     -0.6587487
## [1316,]      1.85535294      2.345353      1.1910327
## [1317,]      1.30889555      2.345353      0.2661420
## [1318,]     -0.33047661     -0.426085      0.2661420
## [1319,]     -0.60370530     -0.426085     -0.6587487
## [1320,]     -0.60370530     -0.426085      0.2661420
## [1321,]      1.85535294      2.345353     -0.6587487
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## [1322,]       -0.87693400        -0.426085           0.2661420
## [1323,]       -0.33047661        -0.426085           0.2661420
## [1324,]       -0.05724792        -0.426085          -0.6587487
## [1325,]        0.48920947        -0.426085           1.1910327
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## [1328,]       -0.87693400        -0.426085           1.1910327
## [1329,]        1.58212424         2.345353           1.1910327
## [1330,]       -1.15016269        -0.426085           1.1910327
## [1331,]       -0.60370530        -0.426085           1.1910327
## [1332,]       -0.87693400        -0.426085           1.1910327
## [1333,]        2.40181032         2.345353          -0.6587487
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## [1335,]        1.03566686        -0.426085           1.1910327
## [1336,]       -0.33047661        -0.426085          -0.6587487
## [1337,]        1.30889555         2.345353          -0.6587487
## [1338,]        1.03566686        -0.426085           1.1910327
## [1339,]       -0.60370530        -0.426085           0.2661420
## [1340,]        2.12858163         2.345353          -1.5836393
## [1341,]       -0.60370530        -0.426085          -1.5836393
## [1342,]       -1.15016269        -0.426085          -1.5836393
## [1343,]       -0.60370530        -0.426085           1.1910327
## [1344,]       -0.33047661        -0.426085          -0.6587487
## [1345,]        1.85535294         2.345353           0.2661420
## [1346,]       -1.15016269        -0.426085           1.1910327
## [1347,]       -0.60370530        -0.426085           1.1910327
## [1348,]        1.58212424         2.345353           1.1910327
## [1349,]       -1.15016269        -0.426085          -1.5836393
## [1350,]       -0.60370530        -0.426085           0.2661420
## [1351,]       -0.33047661        -0.426085          -0.6587487
## [1352,]       -1.15016269        -0.426085          -0.6587487
## [1353,]       -0.05724792        -0.426085           1.1910327
## [1354,]        2.12858163         2.345353          -0.6587487
## [1355,]        0.21598078        -0.426085           1.1910327
## [1356,]        0.21598078        -0.426085           0.2661420
## [1357,]        1.58212424         2.345353           0.2661420
## [1358,]       -0.60370530        -0.426085          -0.6587487
## [1359,]       -1.15016269        -0.426085           1.1910327
## [1360,]       -0.87693400        -0.426085           0.2661420
## [1361,]       -0.87693400        -0.426085          -0.6587487
## [1362,]        0.76243816        -0.426085          -1.5836393
## [1363,]       -0.87693400        -0.426085           0.2661420
## [1364,]       -0.33047661        -0.426085          -0.6587487
## [1365,]       -0.87693400        -0.426085           0.2661420
## [1366,]        0.48920947        -0.426085           1.1910327
## [1367,]        1.03566686        -0.426085           0.2661420
## [1368,]       -1.15016269        -0.426085           0.2661420
## [1369,]       -0.05724792        -0.426085          -0.6587487
## [1370,]       -1.15016269        -0.426085           1.1910327
## [1371,]        0.76243816        -0.426085           0.2661420
## [1372,]        0.21598078        -0.426085           0.2661420
## [1373,]        2.67503902         2.345353           1.1910327
## [1374,]        0.21598078        -0.426085           0.2661420
## [1375,]       -0.60370530        -0.426085           0.2661420
```

```
## [1376,]      -0.33047661      -0.426085      -1.5836393
## [1377,]       1.03566686      -0.426085       1.1910327
## [1378,]      -0.05724792      -0.426085       1.1910327
## [1379,]      -0.87693400      -0.426085       0.2661420
## [1380,]      -0.87693400      -0.426085      -1.5836393
## [1381,]       0.21598078      -0.426085       1.1910327
## [1382,]      -0.33047661      -0.426085       0.2661420
## [1383,]      -0.60370530      -0.426085       1.1910327
## [1384,]       1.85535294       2.345353      -0.6587487
## [1385,]       1.58212424       2.345353      -1.5836393
## [1386,]       0.76243816      -0.426085       0.2661420
## [1387,]      -0.60370530      -0.426085       1.1910327
## [1388,]      -0.87693400      -0.426085      -1.5836393
## [1389,]       0.76243816      -0.426085      -0.6587487
## [1390,]       1.58212424       2.345353      -0.6587487
## [1391,]      -0.87693400      -0.426085      -1.5836393
## [1392,]      -0.33047661      -0.426085      -1.5836393
## [1393,]      -1.15016269      -0.426085       1.1910327
## [1394,]      -0.33047661      -0.426085      -1.5836393
## [1395,]       2.40181032       2.345353      -0.6587487
## [1396,]      -1.15016269      -0.426085       0.2661420
## [1397,]      -0.60370530      -0.426085      -0.6587487
## [1398,]      -1.15016269      -0.426085       0.2661420
## [1399,]       1.30889555       2.345353       0.2661420
## [1400,]       0.48920947      -0.426085      -0.6587487
## [1401,]      -1.15016269      -0.426085      -0.6587487
## [1402,]       0.76243816      -0.426085      -1.5836393
## [1403,]      -1.15016269      -0.426085       0.2661420
## [1404,]      -0.87693400      -0.426085      -1.5836393
## [1405,]      -0.87693400      -0.426085       1.1910327
## [1406,]       1.30889555       2.345353       0.2661420
## [1407,]       1.03566686      -0.426085       1.1910327
## [1408,]      -0.87693400      -0.426085      -0.6587487
## [1409,]      -0.60370530      -0.426085       0.2661420
## [1410,]      -1.15016269      -0.426085      -1.5836393
## [1411,]      -0.33047661      -0.426085       0.2661420
## [1412,]      -0.33047661      -0.426085       0.2661420
## [1413,]      -0.60370530      -0.426085       0.2661420
## [1414,]       1.03566686      -0.426085       0.2661420
## [1415,]       2.12858163       2.345353      -0.6587487
## [1416,]      -0.87693400      -0.426085       0.2661420
## [1417,]      -0.05724792      -0.426085      -1.5836393
## [1418,]       1.03566686      -0.426085       0.2661420
## [1419,]      -1.15016269      -0.426085       1.1910327
## [1420,]       0.48920947      -0.426085       0.2661420
## [1421,]       1.85535294       2.345353      -1.5836393
## [1422,]       0.76243816      -0.426085      -1.5836393
## [1423,]      -1.15016269      -0.426085       0.2661420
## [1424,]      -0.87693400      -0.426085       1.1910327
## [1425,]       1.03566686      -0.426085      -0.6587487
## [1426,]      -0.60370530      -0.426085      -1.5836393
## [1427,]      -0.60370530      -0.426085       0.2661420
## [1428,]       1.03566686      -0.426085       0.2661420
## [1429,]      -0.33047661      -0.426085      -0.6587487
```

```
## [1430,]      -0.60370530          -0.426085             -1.5836393
## [1431,]      -0.87693400          -0.426085             -1.5836393
## [1432,]       1.03566686          -0.426085              0.2661420
## [1433,]       2.67503902           2.345353             -1.5836393
## [1434,]       1.85535294           2.345353             -0.6587487
## [1435,]      -0.05724792          -0.426085             -0.6587487
## [1436,]      -0.87693400          -0.426085              0.2661420
## [1437,]      -1.15016269          -0.426085              1.1910327
## [1438,]      -0.60370530          -0.426085              0.2661420
## [1439,]       1.03566686          -0.426085             -1.5836393
## [1440,]       1.03566686          -0.426085              0.2661420
## [1441,]      -0.60370530          -0.426085             -0.6587487
## [1442,]       1.58212424           2.345353             -1.5836393
## [1443,]      -0.33047661          -0.426085             -0.6587487
## [1444,]      -1.15016269          -0.426085             -1.5836393
## [1445,]      -1.15016269          -0.426085              1.1910327
## [1446,]       2.12858163           2.345353              0.2661420
## [1447,]       1.58212424           2.345353              1.1910327
## [1448,]       2.40181032           2.345353             -1.5836393
## [1449,]      -1.15016269          -0.426085              0.2661420
## [1450,]      -0.33047661          -0.426085              1.1910327
## [1451,]       0.21598078          -0.426085              0.2661420
## [1452,]      -1.15016269          -0.426085              0.2661420
## [1453,]      -0.87693400          -0.426085              1.1910327
## [1454,]      -0.60370530          -0.426085             -1.5836393
## [1455,]      -0.05724792          -0.426085              0.2661420
## [1456,]      -0.33047661          -0.426085              1.1910327
## [1457,]      -0.33047661          -0.426085              1.1910327
## [1458,]      -0.33047661          -0.426085             -0.6587487
## [1459,]      -0.87693400          -0.426085              1.1910327
## [1460,]      -0.60370530          -0.426085             -1.5836393
## [1461,]      -0.33047661          -0.426085             -0.6587487
## [1462,]      -0.60370530          -0.426085             -0.6587487
## [1463,]      -1.15016269          -0.426085             -1.5836393
## [1464,]       1.03566686          -0.426085             -0.6587487
## [1465,]       0.76243816          -0.426085              1.1910327
## [1466,]       0.48920947          -0.426085              0.2661420
## [1467,]      -0.05724792          -0.426085             -1.5836393
## [1468,]       1.30889555           2.345353             -0.6587487
## [1469,]      -0.33047661          -0.426085              1.1910327
## [1470,]      -0.87693400          -0.426085             -1.5836393
##          StandardHours StockOptionLevel TotalWorkingYears TrainingTimesLastYear
##    [1,]            NaN       -0.9316973       -0.42149902            -2.1712429
##    [2,]            NaN        0.2419060       -0.16445544             0.1556541
##    [3,]            NaN       -0.9316973       -0.55002081             0.1556541
##    [4,]            NaN       -0.9316973       -0.42149902             0.1556541
##    [5,]            NaN        0.2419060       -0.67854260             0.1556541
##    [6,]            NaN       -0.9316973       -0.42149902            -0.6199782
##    [7,]            NaN        2.5891126        0.09258815             0.1556541
##    [8,]            NaN        0.2419060       -1.32115156            -0.6199782
##    [9,]            NaN       -0.9316973       -0.16445544            -0.6199782
##   [10,]            NaN        1.4155093        0.73519711             0.1556541
##   [11,]            NaN        0.2419060       -0.67854260             1.7069188
##   [12,]            NaN       -0.9316973       -0.16445544             0.1556541
```

```
##  [13,]          NaN     0.2419060    -0.80706439    -1.3956106
##  [14,]          NaN     0.2419060    -1.06410798    -0.6199782
##  [15,]          NaN    -0.9316973    -0.67854260     0.9312865
##  [16,]          NaN     0.2419060    -0.16445544    -1.3956106
##  [17,]          NaN     1.4155093    -0.55002081     1.7069188
##  [18,]          NaN     1.4155093    -1.32115156    -0.6199782
##  [19,]          NaN    -0.9316973     2.53450219     0.1556541
##  [20,]          NaN    -0.9316973    -0.67854260     0.1556541
##  [21,]          NaN     0.2419060    -0.80706439     1.7069188
##  [22,]          NaN    -0.9316973    -0.16445544     0.9312865
##  [23,]          NaN    -0.9316973     0.22110994     0.9312865
##  [24,]          NaN    -0.9316973    -1.44967335     2.4825512
##  [25,]          NaN    -0.9316973    -0.42149902    -0.6199782
##  [26,]          NaN     0.2419060     1.89189323     0.1556541
##  [27,]          NaN    -0.9316973    -0.16445544     1.7069188
##  [28,]          NaN     0.2419060    -0.16445544    -0.6199782
##  [29,]          NaN     0.2419060     1.63484965     0.9312865
##  [30,]          NaN    -0.9316973     1.37780606    -0.6199782
##  [31,]          NaN    -0.9316973    -0.55002081     0.1556541
##  [32,]          NaN    -0.9316973    -0.29297723     1.7069188
##  [33,]          NaN    -0.9316973    -0.16445544     1.7069188
##  [34,]          NaN     0.2419060     0.99224069     2.4825512
##  [35,]          NaN     0.2419060    -0.67854260    -0.6199782
##  [36,]          NaN     1.4155093    -0.67854260     0.1556541
##  [37,]          NaN    -0.9316973    -1.06410798    -0.6199782
##  [38,]          NaN    -0.9316973    -1.19262977     0.1556541
##  [39,]          NaN     0.2419060    -0.67854260     0.1556541
##  [40,]          NaN     1.4155093    -0.16445544     0.1556541
##  [41,]          NaN     0.2419060    -1.32115156     0.1556541
##  [42,]          NaN     0.2419060    -1.32115156     2.4825512
##  [43,]          NaN    -0.9316973    -1.32115156    -0.6199782
##  [44,]          NaN    -0.9316973    -0.29297723    -2.1712429
##  [45,]          NaN    -0.9316973     0.09258815    -0.6199782
##  [46,]          NaN    -0.9316973     1.50632785    -2.1712429
##  [47,]          NaN    -0.9316973    -0.16445544    -0.6199782
##  [48,]          NaN    -0.9316973    -0.42149902    -1.3956106
##  [49,]          NaN    -0.9316973     0.34963173     0.9312865
##  [50,]          NaN    -0.9316973    -1.32115156    -0.6199782
##  [51,]          NaN    -0.9316973     1.50632785    -0.6199782
##  [52,]          NaN    -0.9316973    -1.19262977     0.1556541
##  [53,]          NaN     0.2419060    -0.29297723    -0.6199782
##  [54,]          NaN     0.2419060    -0.16445544     0.1556541
##  [55,]          NaN     0.2419060    -0.80706439    -0.6199782
##  [56,]          NaN    -0.9316973     0.47815352    -1.3956106
##  [57,]          NaN     0.2419060    -0.29297723     0.1556541
##  [58,]          NaN     0.2419060    -0.93558618     0.1556541
##  [59,]          NaN     0.2419060    -0.16445544     0.1556541
##  [60,]          NaN     0.2419060    -0.55002081    -0.6199782
##  [61,]          NaN     0.2419060    -0.29297723     0.1556541
##  [62,]          NaN    -0.9316973    -0.16445544    -0.6199782
##  [63,]          NaN     0.2419060     2.27745860    -0.6199782
##  [64,]          NaN    -0.9316973     2.14893681     0.1556541
##  [65,]          NaN     2.5891126     0.73519711    -0.6199782
##  [66,]          NaN     2.5891126     1.24928427    -0.6199782
```

```
##  [67,]          NaN   -0.9316973   -0.67854260    0.1556541
##  [68,]          NaN    0.2419060    1.76337144   -0.6199782
##  [69,]          NaN    0.2419060   -0.80706439   -0.6199782
##  [70,]          NaN    0.2419060   -1.19262977   -2.1712429
##  [71,]          NaN   -0.9316973    1.12076248   -0.6199782
##  [72,]          NaN    0.2419060   -0.67854260    0.1556541
##  [73,]          NaN   -0.9316973   -1.32115156    0.9312865
##  [74,]          NaN    1.4155093   -0.16445544    0.1556541
##  [75,]          NaN   -0.9316973   -0.80706439    0.1556541
##  [76,]          NaN   -0.9316973   -0.03593364   -0.6199782
##  [77,]          NaN   -0.9316973    0.60667531   -0.6199782
##  [78,]          NaN   -0.9316973    0.73519711    0.1556541
##  [79,]          NaN   -0.9316973    0.60667531    0.1556541
##  [80,]          NaN    0.2419060    0.60667531   -0.6199782
##  [81,]          NaN    1.4155093   -0.16445544   -1.3956106
##  [82,]          NaN   -0.9316973   -0.67854260    0.1556541
##  [83,]          NaN    0.2419060    1.63484965    0.9312865
##  [84,]          NaN    2.5891126    0.73519711    0.1556541
##  [85,]          NaN   -0.9316973   -0.80706439   -0.6199782
##  [86,]          NaN   -0.9316973    3.30563293    0.1556541
##  [87,]          NaN    0.2419060   -1.06410798    0.1556541
##  [88,]          NaN    1.4155093   -0.16445544    0.9312865
##  [89,]          NaN    2.5891126   -0.03593364    0.1556541
##  [90,]          NaN   -0.9316973   -0.29297723    0.1556541
##  [91,]          NaN    0.2419060    1.37780606    0.1556541
##  [92,]          NaN   -0.9316973   -0.03593364   -0.6199782
##  [93,]          NaN    2.5891126   -0.03593364    0.9312865
##  [94,]          NaN    0.2419060    1.24928427    1.7069188
##  [95,]          NaN   -0.9316973    0.09258815   -2.1712429
##  [96,]          NaN    0.2419060    0.60667531    1.7069188
##  [97,]          NaN    0.2419060   -0.93558618   -0.6199782
##  [98,]          NaN   -0.9316973   -0.80706439    0.1556541
##  [99,]          NaN   -0.9316973    3.43415473   -1.3956106
## [100,]          NaN    0.2419060    0.73519711    0.1556541
## [101,]          NaN   -0.9316973   -0.55002081    0.1556541
## [102,]          NaN   -0.9316973   -1.32115156   -0.6199782
## [103,]          NaN   -0.9316973   -1.32115156    1.7069188
## [104,]          NaN   -0.9316973    0.60667531    0.1556541
## [105,]          NaN    0.2419060    0.73519711   -0.6199782
## [106,]          NaN    0.2419060    2.40598039    0.1556541
## [107,]          NaN   -0.9316973    2.14893681   -1.3956106
## [108,]          NaN   -0.9316973   -0.67854260   -1.3956106
## [109,]          NaN    1.4155093   -1.19262977   -0.6199782
## [110,]          NaN   -0.9316973   -1.32115156    1.7069188
## [111,]          NaN   -0.9316973    1.50632785   -1.3956106
## [112,]          NaN   -0.9316973   -0.29297723    0.1556541
## [113,]          NaN   -0.9316973    1.50632785    0.1556541
## [114,]          NaN    0.2419060   -0.67854260   -0.6199782
## [115,]          NaN    0.2419060    0.09258815    0.1556541
## [116,]          NaN   -0.9316973    0.09258815    0.1556541
## [117,]          NaN   -0.9316973    0.34963173    2.4825512
## [118,]          NaN    0.2419060   -0.16445544    2.4825512
## [119,]          NaN    0.2419060   -0.55002081   -0.6199782
## [120,]          NaN    1.4155093    1.76337144    0.1556541
```

```
## [121,]        NaN       2.5891126      -0.16445544      -0.6199782
## [122,]        NaN       0.2419060      -0.42149902      -0.6199782
## [123,]        NaN       2.5891126      -0.55002081      -0.6199782
## [124,]        NaN      -0.9316973       1.50632785       1.7069188
## [125,]        NaN      -0.9316973       0.09258815       0.1556541
## [126,]        NaN      -0.9316973      -0.80706439       0.1556541
## [127,]        NaN       0.2419060       3.69119831       0.1556541
## [128,]        NaN      -0.9316973      -1.44967335      -0.6199782
## [129,]        NaN       0.2419060      -1.06410798      -0.6199782
## [130,]        NaN      -0.9316973       0.60667531      -0.6199782
## [131,]        NaN      -0.9316973       0.86371890      -0.6199782
## [132,]        NaN      -0.9316973       0.60667531       0.1556541
## [133,]        NaN       0.2419060      -0.93558618      -0.6199782
## [134,]        NaN       0.2419060       0.09258815      -0.6199782
## [135,]        NaN       0.2419060      -0.42149902       0.1556541
## [136,]        NaN       1.4155093      -0.55002081      -2.1712429
## [137,]        NaN      -0.9316973       0.86371890      -0.6199782
## [138,]        NaN       0.2419060       0.73519711      -1.3956106
## [139,]        NaN      -0.9316973      -0.67854260       0.1556541
## [140,]        NaN      -0.9316973       0.09258815      -0.6199782
## [141,]        NaN      -0.9316973      -0.16445544      -0.6199782
## [142,]        NaN      -0.9316973      -0.29297723      -0.6199782
## [143,]        NaN      -0.9316973       0.99224069      -0.6199782
## [144,]        NaN      -0.9316973      -0.80706439       0.9312865
## [145,]        NaN       2.5891126      -0.29297723      -0.6199782
## [146,]        NaN       0.2419060      -0.42149902       0.1556541
## [147,]        NaN      -0.9316973      -0.67854260       0.1556541
## [148,]        NaN       0.2419060       1.24928427      -0.6199782
## [149,]        NaN       0.2419060      -0.55002081      -0.6199782
## [150,]        NaN      -0.9316973      -1.32115156       0.1556541
## [151,]        NaN       0.2419060       1.12076248      -0.6199782
## [152,]        NaN       1.4155093      -0.16445544       0.1556541
## [153,]        NaN       0.2419060       0.22110994       0.1556541
## [154,]        NaN       0.2419060       1.12076248      -0.6199782
## [155,]        NaN      -0.9316973      -0.29297723      -0.6199782
## [156,]        NaN       0.2419060      -0.16445544      -1.3956106
## [157,]        NaN      -0.9316973      -0.16445544      -0.6199782
## [158,]        NaN       0.2419060      -0.29297723       0.1556541
## [159,]        NaN       0.2419060       0.47815352      -0.6199782
## [160,]        NaN       0.2419060      -0.67854260       0.1556541
## [161,]        NaN       1.4155093      -1.19262977       2.4825512
## [162,]        NaN       0.2419060      -0.67854260      -1.3956106
## [163,]        NaN       0.2419060      -0.80706439      -0.6199782
## [164,]        NaN       0.2419060       0.09258815      -0.6199782
## [165,]        NaN       0.2419060      -1.32115156      -0.6199782
## [166,]        NaN      -0.9316973       1.24928427       1.7069188
## [167,]        NaN       0.2419060       0.22110994      -0.6199782
## [168,]        NaN       0.2419060       0.09258815      -0.6199782
## [169,]        NaN      -0.9316973       0.09258815      -0.6199782
## [170,]        NaN      -0.9316973      -0.42149902      -0.6199782
## [171,]        NaN       0.2419060      -0.67854260       0.1556541
## [172,]        NaN      -0.9316973      -1.32115156       1.7069188
## [173,]        NaN      -0.9316973       0.22110994       0.1556541
## [174,]        NaN       1.4155093       0.09258815       0.9312865
```

194

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## [175,]        NaN       0.2419060    -0.29297723      0.1556541
## [176,]        NaN       0.2419060     0.99224069      0.1556541
## [177,]        NaN      -0.9316973    -0.93558618     -0.6199782
## [178,]        NaN      -0.9316973    -1.32115156      0.1556541
## [179,]        NaN       2.5891126     1.63484965     -0.6199782
## [180,]        NaN      -0.9316973    -1.19262977      0.1556541
## [181,]        NaN       0.2419060    -0.55002081     -2.1712429
## [182,]        NaN      -0.9316973    -0.29297723      0.1556541
## [183,]        NaN      -0.9316973    -0.93558618      1.7069188
## [184,]        NaN       0.2419060    -0.80706439     -0.6199782
## [185,]        NaN       1.4155093    -0.80706439      0.1556541
## [186,]        NaN       0.2419060    -0.42149902      1.7069188
## [187,]        NaN       0.2419060     1.24928427     -0.6199782
## [188,]        NaN      -0.9316973     3.17711114      0.1556541
## [189,]        NaN      -0.9316973    -0.16445544     -0.6199782
## [190,]        NaN      -0.9316973     1.24928427      2.4825512
## [191,]        NaN       0.2419060     2.92006756      1.7069188
## [192,]        NaN      -0.9316973    -0.55002081     -0.6199782
## [193,]        NaN      -0.9316973    -0.42149902     -1.3956106
## [194,]        NaN       2.5891126    -0.55002081      0.1556541
## [195,]        NaN       0.2419060     1.37780606     -1.3956106
## [196,]        NaN       0.2419060    -0.42149902      0.1556541
## [197,]        NaN      -0.9316973    -0.16445544      1.7069188
## [198,]        NaN       0.2419060    -0.03593364      1.7069188
## [199,]        NaN      -0.9316973     0.34963173      0.1556541
## [200,]        NaN       0.2419060    -0.29297723      0.1556541
## [201,]        NaN       0.2419060    -0.67854260     -1.3956106
## [202,]        NaN       1.4155093    -0.55002081     -2.1712429
## [203,]        NaN       0.2419060    -0.80706439      0.9312865
## [204,]        NaN       0.2419060     0.47815352     -0.6199782
## [205,]        NaN      -0.9316973     0.73519711     -0.6199782
## [206,]        NaN       2.5891126    -0.16445544      0.1556541
## [207,]        NaN       0.2419060    -0.93558618     -0.6199782
## [208,]        NaN      -0.9316973    -0.42149902     -0.6199782
## [209,]        NaN       0.2419060    -0.80706439      1.7069188
## [210,]        NaN       0.2419060     0.73519711      0.1556541
## [211,]        NaN      -0.9316973     0.34963173     -0.6199782
## [212,]        NaN      -0.9316973     0.09258815     -0.6199782
## [213,]        NaN      -0.9316973    -0.55002081     -0.6199782
## [214,]        NaN       1.4155093     0.60667531      1.7069188
## [215,]        NaN      -0.9316973    -0.42149902      1.7069188
## [216,]        NaN      -0.9316973     0.60667531      0.1556541
## [217,]        NaN      -0.9316973    -0.29297723      1.7069188
## [218,]        NaN      -0.9316973    -0.55002081     -1.3956106
## [219,]        NaN      -0.9316973     1.50632785     -0.6199782
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## [221,]        NaN      -0.9316973     0.60667531      0.1556541
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## [223,]        NaN       2.5891126    -0.16445544     -1.3956106
## [224,]        NaN       1.4155093     0.73519711      2.4825512
## [225,]        NaN       0.2419060    -0.67854260     -0.6199782
## [226,]        NaN       0.2419060    -0.55002081      2.4825512
## [227,]        NaN       0.2419060     0.22110994     -0.6199782
## [228,]        NaN       0.2419060    -0.03593364      1.7069188
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## [229,]          NaN     -0.9316973     -0.16445544      0.1556541
## [230,]          NaN     -0.9316973     -0.93558618      0.1556541
## [231,]          NaN     -0.9316973     -0.67854260      0.1556541
## [232,]          NaN     -0.9316973      1.37780606      0.1556541
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## [238,]          NaN     -0.9316973      2.79154577     -0.6199782
## [239,]          NaN      0.2419060     -0.67854260      1.7069188
## [240,]          NaN     -0.9316973     -0.93558618     -0.6199782
## [241,]          NaN      2.5891126     -0.55002081     -1.3956106
## [242,]          NaN     -0.9316973     -0.93558618     -0.6199782
## [243,]          NaN      1.4155093      0.73519711     -0.6199782
## [244,]          NaN      1.4155093     -0.29297723      0.1556541
## [245,]          NaN      0.2419060      1.76337144     -0.6199782
## [246,]          NaN      0.2419060     -0.29297723      0.1556541
## [247,]          NaN      0.2419060     -1.19262977     -0.6199782
## [248,]          NaN      0.2419060      0.22110994      0.1556541
## [249,]          NaN      0.2419060      0.73519711     -0.6199782
## [250,]          NaN      0.2419060     -0.29297723     -1.3956106
## [251,]          NaN      1.4155093      0.73519711      1.7069188
## [252,]          NaN     -0.9316973      1.12076248     -1.3956106
## [253,]          NaN     -0.9316973     -0.67854260     -1.3956106
## [254,]          NaN     -0.9316973     -0.16445544     -1.3956106
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## [258,]          NaN      0.2419060      1.37780606      1.7069188
## [259,]          NaN     -0.9316973     -1.32115156     -2.1712429
## [260,]          NaN     -0.9316973     -0.67854260     -0.6199782
## [261,]          NaN     -0.9316973     -0.80706439      0.1556541
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## [264,]          NaN      0.2419060      2.14893681     -0.6199782
## [265,]          NaN     -0.9316973     -0.80706439      1.7069188
## [266,]          NaN      1.4155093     -0.16445544     -0.6199782
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## [268,]          NaN      1.4155093     -0.67854260     -0.6199782
## [269,]          NaN     -0.9316973      1.24928427     -0.6199782
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## [274,]          NaN      0.2419060     -0.55002081      1.7069188
## [275,]          NaN     -0.9316973     -1.06410798      0.9312865
## [276,]          NaN      1.4155093      0.47815352     -0.6199782
## [277,]          NaN      0.2419060     -0.16445544      2.4825512
## [278,]          NaN      0.2419060     -0.42149902      0.1556541
## [279,]          NaN      0.2419060     -0.67854260      2.4825512
## [280,]          NaN      1.4155093      2.14893681      0.9312865
## [281,]          NaN      2.5891126      1.24928427      1.7069188
## [282,]          NaN     -0.9316973      1.12076248      0.1556541
```

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## [283,]         NaN      -0.9316973     -0.16445544      0.1556541
## [284,]         NaN       0.2419060      0.09258815      0.9312865
## [285,]         NaN       0.2419060     -0.80706439      0.1556541
## [286,]         NaN      -0.9316973      0.73519711      0.1556541
## [287,]         NaN       0.2419060      0.99224069     -2.1712429
## [288,]         NaN       0.2419060     -0.16445544     -0.6199782
## [289,]         NaN       0.2419060     -0.80706439     -0.6199782
## [290,]         NaN      -0.9316973     -0.80706439      0.1556541
## [291,]         NaN      -0.9316973      1.37780606      0.9312865
## [292,]         NaN      -0.9316973     -0.16445544     -0.6199782
## [293,]         NaN       0.2419060     -1.19262977      1.7069188
## [294,]         NaN      -0.9316973     -0.42149902     -2.1712429
## [295,]         NaN       2.5891126     -0.93558618      0.1556541
## [296,]         NaN       0.2419060      1.50632785     -0.6199782
## [297,]         NaN      -0.9316973     -1.44967335     -0.6199782
## [298,]         NaN       1.4155093      0.09258815      0.1556541
## [299,]         NaN       1.4155093     -0.93558618     -0.6199782
## [300,]         NaN       0.2419060      0.22110994      0.1556541
## [301,]         NaN      -0.9316973      1.37780606     -0.6199782
## [302,]         NaN      -0.9316973     -1.44967335     -0.6199782
## [303,]         NaN      -0.9316973     -0.29297723     -0.6199782
## [304,]         NaN       0.2419060     -0.16445544      0.1556541
## [305,]         NaN       2.5891126      0.99224069      1.7069188
## [306,]         NaN       0.2419060     -0.03593364      0.1556541
## [307,]         NaN       0.2419060      0.22110994      0.1556541
## [308,]         NaN       0.2419060      0.99224069     -0.6199782
## [309,]         NaN       0.2419060      0.09258815     -0.6199782
## [310,]         NaN       0.2419060     -0.67854260      0.9312865
## [311,]         NaN      -0.9316973     -0.29297723     -1.3956106
## [312,]         NaN       0.2419060      1.63484965     -0.6199782
## [313,]         NaN       0.2419060     -1.06410798     -0.6199782
## [314,]         NaN       1.4155093      0.09258815     -0.6199782
## [315,]         NaN      -0.9316973      1.24928427      0.1556541
## [316,]         NaN      -0.9316973     -0.29297723      1.7069188
## [317,]         NaN      -0.9316973      1.76337144     -0.6199782
## [318,]         NaN      -0.9316973     -0.03593364      0.1556541
## [319,]         NaN      -0.9316973     -0.93558618     -0.6199782
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## [321,]         NaN      -0.9316973     -0.80706439      0.1556541
## [322,]         NaN       2.5891126      0.22110994      0.1556541
## [323,]         NaN      -0.9316973     -0.16445544     -2.1712429
## [324,]         NaN      -0.9316973     -0.80706439      0.9312865
## [325,]         NaN       1.4155093     -0.03593364     -0.6199782
## [326,]         NaN       0.2419060     -0.16445544     -0.6199782
## [327,]         NaN       0.2419060      1.24928427     -0.6199782
## [328,]         NaN      -0.9316973      0.09258815      0.1556541
## [329,]         NaN      -0.9316973     -0.29297723      2.4825512
## [330,]         NaN       0.2419060      1.24928427     -0.6199782
## [331,]         NaN       0.2419060     -0.29297723      0.1556541
## [332,]         NaN       0.2419060     -0.67854260     -2.1712429
## [333,]         NaN      -0.9316973      1.12076248      0.9312865
## [334,]         NaN       0.2419060     -0.16445544     -1.3956106
## [335,]         NaN       1.4155093      0.09258815      0.1556541
## [336,]         NaN       2.5891126     -0.67854260     -0.6199782
```

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## [337,]         NaN    -0.9316973    -0.55002081     0.9312865
## [338,]         NaN    -0.9316973    -0.93558618    -0.6199782
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## [342,]         NaN     0.2419060     0.09258815     0.1556541
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## [347,]         NaN    -0.9316973    -0.42149902     0.1556541
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## [352,]         NaN     0.2419060    -0.42149902     0.9312865
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## [355,]         NaN     0.2419060    -0.93558618    -0.6199782
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## [357,]         NaN    -0.9316973     0.34963173     2.4825512
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## [363,]         NaN    -0.9316973    -1.06410798     0.1556541
## [364,]         NaN    -0.9316973    -1.32115156    -0.6199782
## [365,]         NaN     0.2419060     0.73519711     0.1556541
## [366,]         NaN    -0.9316973    -0.55002081    -0.6199782
## [367,]         NaN    -0.9316973    -0.42149902     1.7069188
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## [390,]         NaN    -0.9316973     0.86371890    -0.6199782
```

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## [402,]          NaN      2.5891126     3.17711114     -2.1712429
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## [442,]          NaN      0.2419060    -0.42149902      0.9312865
## [443,]          NaN     -0.9316973    -0.16445544      0.1556541
## [444,]          NaN     -0.9316973    -0.93558618      0.1556541
```

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## [445,]       NaN       0.2419060     0.34963173     -0.6199782
## [446,]       NaN      -0.9316973     3.30563293     -0.6199782
## [447,]       NaN      -0.9316973     0.60667531      0.1556541
## [448,]       NaN      -0.9316973     0.47815352     -0.6199782
## [449,]       NaN      -0.9316973     1.37780606      0.1556541
## [450,]       NaN       0.2419060    -0.42149902      0.1556541
## [451,]       NaN      -0.9316973    -0.16445544     -0.6199782
## [452,]       NaN       0.2419060    -0.16445544      1.7069188
## [453,]       NaN       0.2419060    -0.29297723      0.1556541
## [454,]       NaN       0.2419060    -0.42149902     -0.6199782
## [455,]       NaN       1.4155093    -0.42149902     -0.6199782
## [456,]       NaN       0.2419060    -0.16445544     -0.6199782
## [457,]       NaN       0.2419060    -0.16445544      0.1556541
## [458,]       NaN      -0.9316973    -1.44967335      0.1556541
## [459,]       NaN       0.2419060     1.12076248     -0.6199782
## [460,]       NaN      -0.9316973    -0.16445544      0.1556541
## [461,]       NaN       1.4155093    -0.42149902      1.7069188
## [462,]       NaN      -0.9316973    -0.80706439      0.1556541
## [463,]       NaN      -0.9316973    -0.16445544      0.1556541
## [464,]       NaN      -0.9316973    -1.32115156      0.1556541
## [465,]       NaN      -0.9316973     0.09258815      0.1556541
## [466,]       NaN      -0.9316973     2.14893681      0.1556541
## [467,]       NaN       0.2419060     1.37780606     -0.6199782
## [468,]       NaN       0.2419060    -0.29297723      2.4825512
## [469,]       NaN       1.4155093     0.86371890      0.1556541
## [470,]       NaN      -0.9316973    -0.67854260     -0.6199782
## [471,]       NaN       1.4155093    -1.06410798      0.1556541
## [472,]       NaN       0.2419060     0.86371890      0.9312865
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## [476,]       NaN       1.4155093    -0.67854260      1.7069188
## [477,]       NaN       0.2419060    -1.32115156     -0.6199782
## [478,]       NaN       0.2419060     2.66302398     -0.6199782
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## [480,]       NaN       0.2419060    -0.67854260      0.9312865
## [481,]       NaN       0.2419060    -1.32115156     -0.6199782
## [482,]       NaN       0.2419060    -0.67854260      0.1556541
## [483,]       NaN      -0.9316973    -0.29297723     -0.6199782
## [484,]       NaN      -0.9316973    -0.29297723      0.1556541
## [485,]       NaN       1.4155093     0.22110994      0.9312865
## [486,]       NaN       1.4155093    -0.67854260      1.7069188
## [487,]       NaN       0.2419060     0.73519711      0.1556541
## [488,]       NaN      -0.9316973    -1.32115156     -2.1712429
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## [494,]       NaN      -0.9316973    -0.16445544     -1.3956106
## [495,]       NaN       1.4155093    -0.42149902      0.1556541
## [496,]       NaN       0.2419060    -0.80706439      0.1556541
## [497,]       NaN      -0.9316973    -1.06410798     -0.6199782
## [498,]       NaN       0.2419060     1.89189323     -0.6199782
```

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## [502,]           NaN      0.2419060    -1.32115156       -0.6199782
## [503,]           NaN     -0.9316973     0.86371890       -0.6199782
## [504,]           NaN      0.2419060    -0.16445544        0.9312865
## [505,]           NaN      1.4155093    -0.80706439        0.9312865
## [506,]           NaN      0.2419060    -1.06410798       -0.6199782
## [507,]           NaN      0.2419060    -0.16445544       -0.6199782
## [508,]           NaN      0.2419060    -0.67854260        1.7069188
## [509,]           NaN     -0.9316973     0.73519711        0.1556541
## [510,]           NaN      0.2419060     0.47815352       -0.6199782
## [511,]           NaN      0.2419060     0.60667531       -1.3956106
## [512,]           NaN      0.2419060     0.22110994       -0.6199782
## [513,]           NaN     -0.9316973    -0.80706439       -2.1712429
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## [518,]           NaN      0.2419060    -0.93558618        0.9312865
## [519,]           NaN     -0.9316973    -0.42149902       -0.6199782
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## [523,]           NaN     -0.9316973    -0.93558618       -0.6199782
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## [525,]           NaN     -0.9316973    -0.29297723        0.1556541
## [526,]           NaN     -0.9316973    -0.93558618        0.1556541
## [527,]           NaN     -0.9316973     1.12076248        0.9312865
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## [529,]           NaN      0.2419060     0.86371890        0.9312865
## [530,]           NaN     -0.9316973    -0.16445544        0.9312865
## [531,]           NaN     -0.9316973    -0.29297723        0.1556541
## [532,]           NaN     -0.9316973    -0.16445544        2.4825512
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## [536,]           NaN      2.5891126     1.50632785       -0.6199782
## [537,]           NaN     -0.9316973    -0.16445544       -1.3956106
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## [539,]           NaN      0.2419060     1.37780606        0.1556541
## [540,]           NaN      0.2419060    -0.93558618       -0.6199782
## [541,]           NaN     -0.9316973    -0.16445544        0.9312865
## [542,]           NaN      0.2419060    -0.16445544       -0.6199782
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## [546,]           NaN      0.2419060    -0.16445544       -0.6199782
## [547,]           NaN     -0.9316973    -1.32115156        2.4825512
## [548,]           NaN     -0.9316973    -0.55002081       -0.6199782
## [549,]           NaN      0.2419060    -0.55002081        1.7069188
## [550,]           NaN     -0.9316973    -0.16445544       -0.6199782
## [551,]           NaN      0.2419060    -0.80706439       -0.6199782
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```

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## [555,]        NaN     -0.9316973     -0.29297723      -0.6199782
## [556,]        NaN      1.4155093     -1.19262977      -0.6199782
## [557,]        NaN     -0.9316973      0.99224069       0.9312865
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## [559,]        NaN      1.4155093     -0.16445544      -0.6199782
## [560,]        NaN      0.2419060     -0.67854260      -2.1712429
## [561,]        NaN      0.2419060     -0.55002081       0.1556541
## [562,]        NaN     -0.9316973      2.92006756       0.1556541
## [563,]        NaN     -0.9316973     -0.16445544      -0.6199782
## [564,]        NaN     -0.9316973     -0.67854260       1.7069188
## [565,]        NaN     -0.9316973     -0.29297723       0.1556541
## [566,]        NaN     -0.9316973     -1.19262977       0.1556541
## [567,]        NaN     -0.9316973     -0.42149902      -0.6199782
## [568,]        NaN     -0.9316973     -0.67854260       1.7069188
## [569,]        NaN      0.2419060      1.63484965      -0.6199782
## [570,]        NaN     -0.9316973     -0.16445544      -1.3956106
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## [573,]        NaN      0.2419060     -0.03593364       0.1556541
## [574,]        NaN     -0.9316973     -0.67854260      -0.6199782
## [575,]        NaN     -0.9316973     -0.16445544      -0.6199782
## [576,]        NaN      1.4155093     -0.29297723       0.9312865
## [577,]        NaN      0.2419060     -0.80706439       0.1556541
## [578,]        NaN      1.4155093     -0.67854260       0.1556541
## [579,]        NaN     -0.9316973      0.73519711      -0.6199782
## [580,]        NaN     -0.9316973     -0.67854260       0.1556541
## [581,]        NaN      0.2419060     -1.06410798      -1.3956106
## [582,]        NaN      1.4155093     -0.55002081      -0.6199782
## [583,]        NaN      0.2419060     -0.42149902      -0.6199782
## [584,]        NaN      0.2419060     -0.67854260      -1.3956106
## [585,]        NaN      0.2419060      1.63484965       0.9312865
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## [589,]        NaN     -0.9316973      2.40598039       0.1556541
## [590,]        NaN      0.2419060     -1.32115156      -1.3956106
## [591,]        NaN     -0.9316973      0.34963173       0.1556541
## [592,]        NaN     -0.9316973     -0.67854260       0.1556541
## [593,]        NaN      0.2419060      1.89189323       0.1556541
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## [595,]        NaN      0.2419060     -0.16445544       0.1556541
## [596,]        NaN     -0.9316973      3.69119831      -0.6199782
## [597,]        NaN     -0.9316973     -0.55002081      -2.1712429
## [598,]        NaN      0.2419060     -0.42149902       0.9312865
## [599,]        NaN     -0.9316973     -0.80706439       0.1556541
## [600,]        NaN      0.2419060     -0.42149902      -0.6199782
## [601,]        NaN      0.2419060      0.34963173       0.1556541
## [602,]        NaN     -0.9316973     -0.16445544       2.4825512
## [603,]        NaN     -0.9316973      0.09258815       0.9312865
## [604,]        NaN     -0.9316973     -1.32115156       0.1556541
## [605,]        NaN      0.2419060     -0.16445544       0.1556541
## [606,]        NaN      0.2419060      0.22110994       0.1556541
```

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## [607,]          NaN    -0.9316973    -0.67854260     0.1556541
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## [612,]          NaN    -0.9316973     0.73519711     0.1556541
## [613,]          NaN    -0.9316973    -0.42149902    -0.6199782
## [614,]          NaN     0.2419060    -0.93558618    -1.3956106
## [615,]          NaN     0.2419060    -0.42149902    -0.6199782
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## [617,]          NaN     0.2419060     2.27745860    -0.6199782
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## [619,]          NaN    -0.9316973    -0.67854260     0.1556541
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## [631,]          NaN     1.4155093    -0.93558618    -0.6199782
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## [633,]          NaN    -0.9316973    -0.42149902    -0.6199782
## [634,]          NaN    -0.9316973    -0.67854260     0.1556541
## [635,]          NaN    -0.9316973    -0.80706439     0.1556541
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## [637,]          NaN     0.2419060    -0.16445544     0.1556541
## [638,]          NaN     0.2419060    -0.93558618    -0.6199782
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## [640,]          NaN     0.2419060    -0.55002081    -0.6199782
## [641,]          NaN    -0.9316973    -0.67854260    -0.6199782
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## [645,]          NaN     0.2419060    -0.42149902    -0.6199782
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## [660,]          NaN    -0.9316973    -0.93558618     0.1556541
```

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## [662,]         NaN      0.2419060    -0.93558618     -0.6199782
## [663,]         NaN     -0.9316973    -1.19262977      0.1556541
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## [668,]         NaN      0.2419060    -0.16445544     -1.3956106
## [669,]         NaN      0.2419060    -0.67854260     -0.6199782
## [670,]         NaN     -0.9316973    -0.42149902     -0.6199782
## [671,]         NaN     -0.9316973    -1.32115156     -0.6199782
## [672,]         NaN      1.4155093    -1.32115156      0.1556541
## [673,]         NaN     -0.9316973    -0.16445544      2.4825512
## [674,]         NaN     -0.9316973    -0.67854260     -1.3956106
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## [676,]         NaN     -0.9316973     0.22110994     -0.6199782
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## [680,]         NaN      0.2419060    -0.29297723     -0.6199782
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## [704,]         NaN     -0.9316973    -0.67854260     -1.3956106
## [705,]         NaN      0.2419060     0.09258815     -0.6199782
## [706,]         NaN     -0.9316973    -0.29297723      0.1556541
## [707,]         NaN     -0.9316973     1.37780606     -0.6199782
## [708,]         NaN     -0.9316973     1.12076248      0.1556541
## [709,]         NaN      1.4155093     0.09258815      0.1556541
## [710,]         NaN     -0.9316973    -0.93558618     -2.1712429
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## [712,]         NaN     -0.9316973    -1.06410798      1.7069188
## [713,]         NaN     -0.9316973    -0.80706439      0.9312865
## [714,]         NaN      1.4155093    -0.42149902     -0.6199782
```

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## [718,]        NaN      0.2419060    -0.93558618    -0.6199782
## [719,]        NaN      0.2419060    -0.29297723    -0.6199782
## [720,]        NaN     -0.9316973    -0.29297723    -2.1712429
## [721,]        NaN     -0.9316973    -0.55002081    -0.6199782
## [722,]        NaN      0.2419060     1.37780606    -0.6199782
## [723,]        NaN      0.2419060    -1.06410798    -2.1712429
## [724,]        NaN      0.2419060     0.22110994     0.1556541
## [725,]        NaN      1.4155093    -0.80706439     2.4825512
## [726,]        NaN      0.2419060    -0.80706439    -0.6199782
## [727,]        NaN      0.2419060    -0.93558618    -1.3956106
## [728,]        NaN     -0.9316973    -1.44967335    -0.6199782
## [729,]        NaN      0.2419060     1.37780606    -0.6199782
## [730,]        NaN      0.2419060     0.60667531     0.1556541
## [731,]        NaN      2.5891126    -0.29297723     0.9312865
## [732,]        NaN     -0.9316973    -1.32115156    -0.6199782
## [733,]        NaN     -0.9316973    -0.93558618     0.1556541
## [734,]        NaN     -0.9316973    -0.42149902    -0.6199782
## [735,]        NaN      0.2419060    -0.93558618     0.1556541
## [736,]        NaN     -0.9316973     0.99224069    -2.1712429
## [737,]        NaN     -0.9316973     2.02041502     0.1556541
## [738,]        NaN     -0.9316973    -0.42149902     2.4825512
## [739,]        NaN      0.2419060     1.24928427     0.1556541
## [740,]        NaN      0.2419060    -0.93558618    -0.6199782
## [741,]        NaN      0.2419060    -1.06410798     0.9312865
## [742,]        NaN     -0.9316973     1.24928427     0.1556541
## [743,]        NaN     -0.9316973    -0.42149902     1.7069188
## [744,]        NaN     -0.9316973     2.40598039     0.9312865
## [745,]        NaN     -0.9316973     0.47815352    -0.6199782
## [746,]        NaN      1.4155093     0.73519711     0.1556541
## [747,]        NaN      1.4155093     1.24928427     0.1556541
## [748,]        NaN     -0.9316973     0.99224069    -1.3956106
## [749,]        NaN     -0.9316973    -0.55002081     2.4825512
## [750,]        NaN      0.2419060     2.79154577     0.1556541
## [751,]        NaN      0.2419060     1.50632785    -0.6199782
## [752,]        NaN      0.2419060     0.99224069     0.1556541
## [753,]        NaN     -0.9316973     0.86371890    -1.3956106
## [754,]        NaN     -0.9316973     1.24928427    -0.6199782
## [755,]        NaN     -0.9316973    -1.06410798    -0.6199782
## [756,]        NaN      0.2419060     1.89189323     0.9312865
## [757,]        NaN     -0.9316973    -0.16445544    -0.6199782
## [758,]        NaN      0.2419060     0.60667531    -0.6199782
## [759,]        NaN      0.2419060     0.34963173    -1.3956106
## [760,]        NaN     -0.9316973    -0.67854260     0.1556541
## [761,]        NaN      0.2419060     2.40598039    -0.6199782
## [762,]        NaN      0.2419060    -0.29297723     0.1556541
## [763,]        NaN      0.2419060    -0.67854260    -0.6199782
## [764,]        NaN      0.2419060    -1.32115156    -0.6199782
## [765,]        NaN     -0.9316973    -1.32115156     1.7069188
## [766,]        NaN      0.2419060    -0.42149902    -0.6199782
## [767,]        NaN      0.2419060     2.27745860    -0.6199782
## [768,]        NaN     -0.9316973    -0.42149902     0.1556541
```

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## [769,]          NaN       0.2419060    -0.42149902         0.1556541
## [770,]          NaN       1.4155093    -0.80706439         1.7069188
## [771,]          NaN       1.4155093     1.50632785        -2.1712429
## [772,]          NaN       0.2419060     0.22110994         0.9312865
## [773,]          NaN       0.2419060     0.86371890         0.9312865
## [774,]          NaN      -0.9316973     0.47815352        -0.6199782
## [775,]          NaN      -0.9316973     2.53450219         0.1556541
## [776,]          NaN       0.2419060     0.86371890         1.7069188
## [777,]          NaN      -0.9316973    -1.19262977         0.1556541
## [778,]          NaN      -0.9316973    -1.32115156         2.4825512
## [779,]          NaN       2.5891126     0.99224069        -0.6199782
## [780,]          NaN       2.5891126     0.86371890        -0.6199782
## [781,]          NaN      -0.9316973    -0.16445544        -0.6199782
## [782,]          NaN       1.4155093    -0.67854260        -0.6199782
## [783,]          NaN       0.2419060    -0.55002081        -1.3956106
## [784,]          NaN      -0.9316973    -0.16445544         0.1556541
## [785,]          NaN       0.2419060     1.12076248         0.9312865
## [786,]          NaN       0.2419060     0.34963173         2.4825512
## [787,]          NaN       2.5891126    -1.06410798         0.9312865
## [788,]          NaN       0.2419060     1.50632785         0.9312865
## [789,]          NaN      -0.9316973    -0.16445544         0.9312865
## [790,]          NaN       0.2419060     1.63484965        -1.3956106
## [791,]          NaN       0.2419060    -0.29297723        -0.6199782
## [792,]          NaN      -0.9316973    -0.29297723        -0.6199782
## [793,]          NaN      -0.9316973     0.34963173         0.9312865
## [794,]          NaN       0.2419060    -0.93558618         1.7069188
## [795,]          NaN      -0.9316973    -0.55002081        -1.3956106
## [796,]          NaN       2.5891126    -0.42149902         1.7069188
## [797,]          NaN       0.2419060    -0.55002081         0.1556541
## [798,]          NaN       0.2419060    -1.32115156        -2.1712429
## [799,]          NaN      -0.9316973    -0.80706439        -2.1712429
## [800,]          NaN       0.2419060     1.50632785         0.1556541
## [801,]          NaN       1.4155093    -1.32115156        -0.6199782
## [802,]          NaN      -0.9316973    -0.80706439         0.9312865
## [803,]          NaN       0.2419060    -0.93558618         0.1556541
## [804,]          NaN       2.5891126    -0.67854260        -0.6199782
## [805,]          NaN      -0.9316973     2.02041502         0.1556541
## [806,]          NaN       0.2419060     0.47815352        -0.6199782
## [807,]          NaN      -0.9316973     0.86371890         0.9312865
## [808,]          NaN       1.4155093    -0.29297723        -0.6199782
## [809,]          NaN       0.2419060    -0.03593364        -1.3956106
## [810,]          NaN       2.5891126    -0.16445544         0.1556541
## [811,]          NaN       0.2419060     1.50632785         0.1556541
## [812,]          NaN      -0.9316973    -0.16445544        -0.6199782
## [813,]          NaN       0.2419060     0.86371890        -1.3956106
## [814,]          NaN       2.5891126     1.24928427         0.9312865
## [815,]          NaN      -0.9316973     1.24928427        -0.6199782
## [816,]          NaN      -0.9316973    -1.19262977         2.4825512
## [817,]          NaN      -0.9316973    -0.29297723        -0.6199782
## [818,]          NaN      -0.9316973     0.86371890        -2.1712429
## [819,]          NaN       0.2419060    -1.06410798         0.9312865
## [820,]          NaN      -0.9316973    -0.67854260        -0.6199782
## [821,]          NaN       0.2419060    -0.80706439         0.1556541
## [822,]          NaN       0.2419060     1.37780606         0.1556541
```

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## [823,]          NaN    -0.9316973    -0.80706439     0.1556541
## [824,]          NaN     1.4155093    -0.42149902    -0.6199782
## [825,]          NaN    -0.9316973     0.60667531     0.1556541
## [826,]          NaN     0.2419060    -0.16445544    -0.6199782
## [827,]          NaN     0.2419060    -0.55002081    -0.6199782
## [828,]          NaN     0.2419060    -1.06410798    -0.6199782
## [829,]          NaN    -0.9316973    -1.44967335    -2.1712429
## [830,]          NaN    -0.9316973    -0.67854260     0.1556541
## [831,]          NaN     0.2419060    -0.67854260     0.9312865
## [832,]          NaN     0.2419060    -1.19262977     1.7069188
## [833,]          NaN     1.4155093    -0.29297723    -0.6199782
## [834,]          NaN     0.2419060    -0.93558618    -2.1712429
## [835,]          NaN    -0.9316973    -0.67854260     0.1556541
## [836,]          NaN    -0.9316973    -0.67854260    -0.6199782
## [837,]          NaN     0.2419060    -0.03593364     0.1556541
## [838,]          NaN    -0.9316973     1.12076248     0.1556541
## [839,]          NaN    -0.9316973     1.37780606    -0.6199782
## [840,]          NaN    -0.9316973    -0.29297723     0.1556541
## [841,]          NaN     0.2419060    -0.16445544    -0.6199782
## [842,]          NaN    -0.9316973    -0.67854260    -0.6199782
## [843,]          NaN    -0.9316973    -1.32115156     0.9312865
## [844,]          NaN     0.2419060    -0.42149902    -0.6199782
## [845,]          NaN     0.2419060    -0.16445544     0.1556541
## [846,]          NaN     0.2419060     0.60667531     0.1556541
## [847,]          NaN     0.2419060     0.47815352    -0.6199782
## [848,]          NaN    -0.9316973     0.34963173     0.1556541
## [849,]          NaN     0.2419060    -1.19262977    -0.6199782
## [850,]          NaN    -0.9316973    -0.55002081    -0.6199782
## [851,]          NaN     2.5891126    -1.32115156     0.1556541
## [852,]          NaN     0.2419060     2.14893681    -0.6199782
## [853,]          NaN     0.2419060    -0.16445544     1.7069188
## [854,]          NaN    -0.9316973    -1.32115156     0.9312865
## [855,]          NaN     0.2419060    -0.55002081    -0.6199782
## [856,]          NaN     0.2419060     0.34963173    -0.6199782
## [857,]          NaN    -0.9316973    -1.19262977    -0.6199782
## [858,]          NaN    -0.9316973    -0.67854260     0.9312865
## [859,]          NaN     0.2419060     1.89189323     2.4825512
## [860,]          NaN     0.2419060    -0.67854260    -0.6199782
## [861,]          NaN     0.2419060    -1.32115156     1.7069188
## [862,]          NaN    -0.9316973     2.14893681    -0.6199782
## [863,]          NaN    -0.9316973    -0.67854260     0.1556541
## [864,]          NaN     0.2419060    -0.80706439    -0.6199782
## [865,]          NaN     0.2419060    -0.80706439    -0.6199782
## [866,]          NaN     2.5891126    -0.42149902     0.1556541
## [867,]          NaN     2.5891126    -0.80706439    -0.6199782
## [868,]          NaN     0.2419060     2.66302398     0.1556541
## [869,]          NaN     2.5891126    -0.67854260    -0.6199782
## [870,]          NaN     0.2419060     1.76337144    -0.6199782
## [871,]          NaN     2.5891126     0.47815352    -0.6199782
## [872,]          NaN     0.2419060    -1.32115156     0.1556541
## [873,]          NaN     0.2419060    -0.16445544     0.1556541
## [874,]          NaN     0.2419060    -0.55002081     0.9312865
## [875,]          NaN     2.5891126    -0.16445544     0.9312865
## [876,]          NaN    -0.9316973     1.12076248     0.1556541
```

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## [877,]        NaN    -0.9316973    -1.19262977    -0.6199782
## [878,]        NaN     0.2419060     0.09258815     0.1556541
## [879,]        NaN     0.2419060    -0.16445544     0.1556541
## [880,]        NaN     0.2419060     0.09258815     0.1556541
## [881,]        NaN     0.2419060    -1.19262977    -0.6199782
## [882,]        NaN    -0.9316973    -0.16445544    -0.6199782
## [883,]        NaN     0.2419060     0.73519711    -0.6199782
## [884,]        NaN     0.2419060     0.47815352     1.7069188
## [885,]        NaN     0.2419060    -0.55002081    -0.6199782
## [886,]        NaN    -0.9316973    -0.80706439     0.9312865
## [887,]        NaN     0.2419060     0.09258815    -0.6199782
## [888,]        NaN    -0.9316973     1.12076248     2.4825512
## [889,]        NaN     0.2419060     0.60667531     2.4825512
## [890,]        NaN     1.4155093    -0.29297723     0.1556541
## [891,]        NaN     0.2419060     2.79154577    -0.6199782
## [892,]        NaN     0.2419060    -0.16445544     1.7069188
## [893,]        NaN    -0.9316973    -1.32115156    -0.6199782
## [894,]        NaN     2.5891126    -1.06410798     1.7069188
## [895,]        NaN    -0.9316973     3.17711114    -0.6199782
## [896,]        NaN    -0.9316973    -0.67854260    -0.6199782
## [897,]        NaN    -0.9316973    -0.16445544    -0.6199782
## [898,]        NaN    -0.9316973     0.22110994    -0.6199782
## [899,]        NaN     0.2419060     1.76337144    -0.6199782
## [900,]        NaN     0.2419060     1.50632785    -0.6199782
## [901,]        NaN    -0.9316973     0.09258815    -0.6199782
## [902,]        NaN    -0.9316973    -0.55002081     0.9312865
## [903,]        NaN     2.5891126    -0.80706439    -0.6199782
## [904,]        NaN     1.4155093    -0.67854260    -0.6199782
## [905,]        NaN    -0.9316973     1.76337144     0.1556541
## [906,]        NaN     1.4155093    -0.29297723    -0.6199782
## [907,]        NaN    -0.9316973    -1.19262977     1.7069188
## [908,]        NaN     0.2419060     1.89189323     1.7069188
## [909,]        NaN     1.4155093    -0.16445544     0.1556541
## [910,]        NaN    -0.9316973    -1.32115156    -0.6199782
## [911,]        NaN     0.2419060    -1.32115156    -0.6199782
## [912,]        NaN    -0.9316973    -1.32115156     0.9312865
## [913,]        NaN    -0.9316973    -0.42149902    -0.6199782
## [914,]        NaN    -0.9316973     1.89189323    -0.6199782
## [915,]        NaN     0.2419060     2.92006756     0.1556541
## [916,]        NaN    -0.9316973    -1.19262977    -0.6199782
## [917,]        NaN     0.2419060     1.89189323    -0.6199782
## [918,]        NaN    -0.9316973    -0.93558618     0.1556541
## [919,]        NaN     0.2419060     2.53450219     1.7069188
## [920,]        NaN    -0.9316973     1.76337144     2.4825512
## [921,]        NaN     1.4155093     0.47815352    -0.6199782
## [922,]        NaN    -0.9316973    -0.80706439    -0.6199782
## [923,]        NaN     1.4155093     1.89189323     0.9312865
## [924,]        NaN     1.4155093     0.34963173     1.7069188
## [925,]        NaN    -0.9316973    -0.93558618     0.1556541
## [926,]        NaN    -0.9316973     0.86371890    -0.6199782
## [927,]        NaN    -0.9316973     1.50632785     0.1556541
## [928,]        NaN    -0.9316973     0.86371890    -0.6199782
## [929,]        NaN     0.2419060    -0.16445544    -0.6199782
## [930,]        NaN     0.2419060    -1.19262977    -0.6199782
```

```
## [931,]        NaN    -0.9316973    -0.42149902     2.4825512
## [932,]        NaN    -0.9316973    -0.16445544     0.1556541
## [933,]        NaN     1.4155093    -0.16445544    -0.6199782
## [934,]        NaN    -0.9316973    -0.80706439    -0.6199782
## [935,]        NaN    -0.9316973    -1.19262977     0.1556541
## [936,]        NaN     1.4155093    -0.16445544     0.9312865
## [937,]        NaN    -0.9316973     1.37780606     0.9312865
## [938,]        NaN     1.4155093     1.24928427     0.9312865
## [939,]        NaN     1.4155093    -1.19262977     0.1556541
## [940,]        NaN     0.2419060    -0.16445544     0.1556541
## [941,]        NaN    -0.9316973    -0.67854260    -0.6199782
## [942,]        NaN     0.2419060    -0.16445544     2.4825512
## [943,]        NaN    -0.9316973    -0.16445544    -2.1712429
## [944,]        NaN    -0.9316973    -0.16445544     0.1556541
## [945,]        NaN     2.5891126    -0.16445544     2.4825512
## [946,]        NaN    -0.9316973     1.76337144    -0.6199782
## [947,]        NaN    -0.9316973    -0.29297723    -0.6199782
## [948,]        NaN    -0.9316973    -0.16445544    -0.6199782
## [949,]        NaN     1.4155093    -0.29297723    -0.6199782
## [950,]        NaN    -0.9316973    -0.29297723     2.4825512
## [951,]        NaN     0.2419060    -0.16445544     1.7069188
## [952,]        NaN    -0.9316973     0.99224069     0.9312865
## [953,]        NaN    -0.9316973    -1.06410798    -0.6199782
## [954,]        NaN    -0.9316973    -0.16445544     0.9312865
## [955,]        NaN    -0.9316973     1.24928427     0.1556541
## [956,]        NaN     0.2419060     1.50632785     1.7069188
## [957,]        NaN    -0.9316973     3.17711114     0.9312865
## [958,]        NaN     0.2419060    -0.67854260    -2.1712429
## [959,]        NaN     0.2419060    -0.16445544    -2.1712429
## [960,]        NaN    -0.9316973    -0.29297723     0.9312865
## [961,]        NaN     0.2419060    -0.16445544    -0.6199782
## [962,]        NaN    -0.9316973    -0.29297723     0.1556541
## [963,]        NaN     0.2419060     2.79154577    -0.6199782
## [964,]        NaN     0.2419060    -0.03593364     0.1556541
## [965,]        NaN    -0.9316973    -0.16445544     2.4825512
## [966,]        NaN     2.5891126    -0.55002081     2.4825512
## [967,]        NaN    -0.9316973     2.53450219    -2.1712429
## [968,]        NaN     0.2419060    -0.55002081     0.1556541
## [969,]        NaN     0.2419060     0.73519711    -0.6199782
## [970,]        NaN    -0.9316973    -0.03593364    -0.6199782
## [971,]        NaN     0.2419060    -0.80706439     0.9312865
## [972,]        NaN    -0.9316973     2.27745860    -1.3956106
## [973,]        NaN    -0.9316973    -1.44967335     1.7069188
## [974,]        NaN     0.2419060    -0.16445544    -2.1712429
## [975,]        NaN    -0.9316973    -0.42149902     0.1556541
## [976,]        NaN    -0.9316973     1.63484965    -0.6199782
## [977,]        NaN     0.2419060     2.79154577    -2.1712429
## [978,]        NaN     2.5891126    -0.80706439    -0.6199782
## [979,]        NaN     2.5891126     0.47815352    -2.1712429
## [980,]        NaN     1.4155093    -0.16445544    -1.3956106
## [981,]        NaN    -0.9316973    -1.06410798     0.1556541
## [982,]        NaN     0.2419060    -0.80706439    -2.1712429
## [983,]        NaN     2.5891126    -0.93558618    -0.6199782
## [984,]        NaN    -0.9316973     0.34963173    -0.6199782
```

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## [985,]       NaN      0.2419060    -0.80706439    -2.1712429
## [986,]       NaN      1.4155093    -0.16445544     0.1556541
## [987,]       NaN      1.4155093    -0.42149902    -0.6199782
## [988,]       NaN     -0.9316973     0.34963173     1.7069188
## [989,]       NaN      1.4155093     0.09258815     0.9312865
## [990,]       NaN     -0.9316973    -0.42149902    -0.6199782
## [991,]       NaN     -0.9316973    -0.42149902    -0.6199782
## [992,]       NaN      2.5891126    -0.93558618     0.1556541
## [993,]       NaN      0.2419060     0.22110994    -0.6199782
## [994,]       NaN     -0.9316973    -0.67854260     0.1556541
## [995,]       NaN      0.2419060     1.63484965     0.1556541
## [996,]       NaN     -0.9316973     1.12076248     0.1556541
## [997,]       NaN     -0.9316973    -0.67854260     0.1556541
## [998,]       NaN     -0.9316973    -0.42149902    -0.6199782
## [999,]       NaN     -0.9316973    -0.80706439    -0.6199782
## [1000,]      NaN      0.2419060     1.24928427     1.7069188
## [1001,]      NaN     -0.9316973     0.09258815    -0.6199782
## [1002,]      NaN     -0.9316973    -0.42149902     2.4825512
## [1003,]      NaN     -0.9316973    -0.16445544    -0.6199782
## [1004,]      NaN      0.2419060    -0.55002081    -0.6199782
## [1005,]      NaN     -0.9316973    -0.42149902    -0.6199782
## [1006,]      NaN     -0.9316973    -0.16445544     0.1556541
## [1007,]      NaN     -0.9316973     1.12076248    -0.6199782
## [1008,]      NaN     -0.9316973    -0.29297723    -1.3956106
## [1009,]      NaN     -0.9316973     2.27745860     0.1556541
## [1010,]      NaN      0.2419060     2.66302398     0.1556541
## [1011,]      NaN      1.4155093     2.53450219     0.9312865
## [1012,]      NaN     -0.9316973     0.47815352     0.1556541
## [1013,]      NaN     -0.9316973    -1.32115156     0.1556541
## [1014,]      NaN      1.4155093    -0.42149902     0.1556541
## [1015,]      NaN     -0.9316973    -0.29297723     0.1556541
## [1016,]      NaN      1.4155093    -0.16445544    -0.6199782
## [1017,]      NaN     -0.9316973    -1.32115156     0.1556541
## [1018,]      NaN     -0.9316973    -0.67854260     0.1556541
## [1019,]      NaN     -0.9316973    -0.16445544    -0.6199782
## [1020,]      NaN      1.4155093    -0.03593364     0.1556541
## [1021,]      NaN      0.2419060     0.73519711    -0.6199782
## [1022,]      NaN     -0.9316973    -0.67854260    -0.6199782
## [1023,]      NaN     -0.9316973    -0.55002081    -0.6199782
## [1024,]      NaN      0.2419060    -0.80706439     0.1556541
## [1025,]      NaN      1.4155093     1.89189323    -0.6199782
## [1026,]      NaN      1.4155093    -0.80706439     0.1556541
## [1027,]      NaN      0.2419060    -0.55002081     0.1556541
## [1028,]      NaN      0.2419060    -0.55002081    -0.6199782
## [1029,]      NaN     -0.9316973    -0.55002081     1.7069188
## [1030,]      NaN      1.4155093    -0.03593364    -0.6199782
## [1031,]      NaN      0.2419060     0.22110994     1.7069188
## [1032,]      NaN      0.2419060     2.14893681    -1.3956106
## [1033,]      NaN     -0.9316973    -0.03593364    -0.6199782
## [1034,]      NaN     -0.9316973    -0.16445544    -0.6199782
## [1035,]      NaN      0.2419060     1.63484965    -0.6199782
## [1036,]      NaN     -0.9316973    -0.42149902     0.1556541
## [1037,]      NaN      0.2419060    -0.55002081    -0.6199782
## [1038,]      NaN      1.4155093    -0.16445544     0.9312865
```

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## [1039,]         NaN       2.5891126        0.47815352         0.1556541
## [1040,]         NaN      -0.9316973       -1.19262977        -2.1712429
## [1041,]         NaN       0.2419060        0.60667531         1.7069188
## [1042,]         NaN      -0.9316973       -0.67854260         0.9312865
## [1043,]         NaN      -0.9316973       -0.55002081         1.7069188
## [1044,]         NaN      -0.9316973        3.04858935        -0.6199782
## [1045,]         NaN       0.2419060        1.12076248        -2.1712429
## [1046,]         NaN       0.2419060       -0.42149902         0.1556541
## [1047,]         NaN      -0.9316973       -0.67854260         0.1556541
## [1048,]         NaN       1.4155093       -0.80706439        -0.6199782
## [1049,]         NaN      -0.9316973        0.47815352        -0.6199782
## [1050,]         NaN       1.4155093       -0.93558618        -0.6199782
## [1051,]         NaN      -0.9316973        0.09258815         0.1556541
## [1052,]         NaN       0.2419060       -0.03593364         0.9312865
## [1053,]         NaN       1.4155093       -1.32115156        -0.6199782
## [1054,]         NaN       0.2419060        0.22110994        -0.6199782
## [1055,]         NaN       1.4155093        2.27745860         0.1556541
## [1056,]         NaN       1.4155093        0.60667531         0.1556541
## [1057,]         NaN       0.2419060       -0.80706439         0.1556541
## [1058,]         NaN      -0.9316973       -0.55002081         0.9312865
## [1059,]         NaN      -0.9316973        0.60667531        -0.6199782
## [1060,]         NaN       0.2419060       -1.32115156         0.1556541
## [1061,]         NaN      -0.9316973       -0.93558618        -0.6199782
## [1062,]         NaN       0.2419060       -1.32115156        -0.6199782
## [1063,]         NaN      -0.9316973        0.60667531        -0.6199782
## [1064,]         NaN       1.4155093       -0.16445544         0.1556541
## [1065,]         NaN       0.2419060       -0.67854260         0.1556541
## [1066,]         NaN      -0.9316973       -0.93558618        -0.6199782
## [1067,]         NaN      -0.9316973       -0.42149902         1.7069188
## [1068,]         NaN       0.2419060       -0.03593364         0.9312865
## [1069,]         NaN      -0.9316973       -0.42149902        -0.6199782
## [1070,]         NaN       0.2419060       -1.32115156        -0.6199782
## [1071,]         NaN      -0.9316973       -0.80706439         1.7069188
## [1072,]         NaN       0.2419060       -0.16445544         0.1556541
## [1073,]         NaN       2.5891126       -0.93558618         0.1556541
## [1074,]         NaN       1.4155093       -0.42149902        -0.6199782
## [1075,]         NaN      -0.9316973        0.34963173         2.4825512
## [1076,]         NaN      -0.9316973       -0.16445544         1.7069188
## [1077,]         NaN       0.2419060        1.89189323        -0.6199782
## [1078,]         NaN      -0.9316973       -0.03593364        -0.6199782
## [1079,]         NaN       0.2419060        1.63484965        -1.3956106
## [1080,]         NaN      -0.9316973       -0.29297723         0.1556541
## [1081,]         NaN       0.2419060        1.50632785        -0.6199782
## [1082,]         NaN      -0.9316973       -0.03593364         0.1556541
## [1083,]         NaN      -0.9316973       -0.80706439        -0.6199782
## [1084,]         NaN      -0.9316973        0.47815352         0.1556541
## [1085,]         NaN      -0.9316973       -0.16445544         0.1556541
## [1086,]         NaN      -0.9316973       -0.55002081        -0.6199782
## [1087,]         NaN      -0.9316973        2.66302398        -0.6199782
## [1088,]         NaN       0.2419060        0.09258815         0.9312865
## [1089,]         NaN       0.2419060       -0.93558618         0.1556541
## [1090,]         NaN      -0.9316973       -0.16445544        -0.6199782
## [1091,]         NaN       0.2419060       -0.29297723         0.1556541
## [1092,]         NaN      -0.9316973       -0.80706439        -0.6199782
```

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## [1093,]        NaN     0.2419060    -0.42149902     0.1556541
## [1094,]        NaN     0.2419060     1.63484965     0.1556541
## [1095,]        NaN    -0.9316973    -0.29297723     1.7069188
## [1096,]        NaN     0.2419060     0.47815352     0.1556541
## [1097,]        NaN    -0.9316973     1.24928427    -0.6199782
## [1098,]        NaN     2.5891126    -1.19262977     0.1556541
## [1099,]        NaN    -0.9316973    -0.42149902    -0.6199782
## [1100,]        NaN     2.5891126    -0.16445544     0.9312865
## [1101,]        NaN     1.4155093    -0.67854260     1.7069188
## [1102,]        NaN     0.2419060     0.09258815    -0.6199782
## [1103,]        NaN    -0.9316973    -0.55002081     0.1556541
## [1104,]        NaN     0.2419060     0.86371890    -0.6199782
## [1105,]        NaN     1.4155093    -0.80706439    -0.6199782
## [1106,]        NaN     0.2419060    -0.42149902     2.4825512
## [1107,]        NaN     0.2419060    -0.16445544     0.9312865
## [1108,]        NaN    -0.9316973    -0.16445544    -0.6199782
## [1109,]        NaN    -0.9316973    -1.06410798     0.1556541
## [1110,]        NaN     0.2419060    -0.29297723     0.1556541
## [1111,]        NaN     0.2419060    -1.32115156    -0.6199782
## [1112,]        NaN     0.2419060     2.92006756     0.9312865
## [1113,]        NaN     1.4155093    -0.55002081    -0.6199782
## [1114,]        NaN     0.2419060    -0.29297723     0.1556541
## [1115,]        NaN     0.2419060    -0.16445544     0.1556541
## [1116,]        NaN    -0.9316973    -1.32115156     0.9312865
## [1117,]        NaN     0.2419060     3.17711114     0.1556541
## [1118,]        NaN     0.2419060    -0.29297723     0.1556541
## [1119,]        NaN    -0.9316973    -1.32115156     1.7069188
## [1120,]        NaN     0.2419060    -0.16445544     0.1556541
## [1121,]        NaN    -0.9316973    -0.42149902     1.7069188
## [1122,]        NaN    -0.9316973     0.47815352     1.7069188
## [1123,]        NaN    -0.9316973    -0.16445544     0.1556541
## [1124,]        NaN    -0.9316973    -0.16445544     0.9312865
## [1125,]        NaN     0.2419060    -0.03593364     0.1556541
## [1126,]        NaN     0.2419060    -0.67854260    -2.1712429
## [1127,]        NaN     0.2419060     2.02041502    -0.6199782
## [1128,]        NaN     0.2419060    -0.93558618    -0.6199782
## [1129,]        NaN     0.2419060    -0.29297723     0.1556541
## [1130,]        NaN    -0.9316973     1.63484965    -0.6199782
## [1131,]        NaN     1.4155093    -0.16445544     0.1556541
## [1132,]        NaN     0.2419060    -0.42149902     0.1556541
## [1133,]        NaN     0.2419060    -0.80706439    -0.6199782
## [1134,]        NaN     0.2419060    -0.42149902    -2.1712429
## [1135,]        NaN     0.2419060    -1.32115156     1.7069188
## [1136,]        NaN    -0.9316973     2.02041502     1.7069188
## [1137,]        NaN     2.5891126    -1.32115156     0.1556541
## [1138,]        NaN    -0.9316973    -0.93558618    -0.6199782
## [1139,]        NaN     0.2419060     2.66302398     0.1556541
## [1140,]        NaN     1.4155093    -0.67854260     0.1556541
## [1141,]        NaN     0.2419060     1.50632785     0.9312865
## [1142,]        NaN     0.2419060    -0.67854260     0.1556541
## [1143,]        NaN    -0.9316973    -0.16445544     0.1556541
## [1144,]        NaN     0.2419060    -0.16445544    -0.6199782
## [1145,]        NaN    -0.9316973    -0.16445544     0.1556541
## [1146,]        NaN     1.4155093    -0.55002081    -0.6199782
```

```
## [1147,]         NaN    0.2419060   -0.29297723    0.1556541
## [1148,]         NaN    0.2419060   -0.16445544    0.1556541
## [1149,]         NaN    2.5891126   -0.16445544    0.1556541
## [1150,]         NaN    1.4155093   -0.55002081    0.1556541
## [1151,]         NaN   -0.9316973    0.60667531   -0.6199782
## [1152,]         NaN    0.2419060   -0.67854260    1.7069188
## [1153,]         NaN   -0.9316973   -1.06410798   -0.6199782
## [1154,]         NaN   -0.9316973   -1.44967335   -0.6199782
## [1155,]         NaN    0.2419060    2.02041502   -0.6199782
## [1156,]         NaN    0.2419060   -0.03593364    0.1556541
## [1157,]         NaN    1.4155093    0.86371890   -0.6199782
## [1158,]         NaN    0.2419060    0.47815352    1.7069188
## [1159,]         NaN    2.5891126   -0.29297723   -0.6199782
## [1160,]         NaN   -0.9316973   -0.16445544   -0.6199782
## [1161,]         NaN    1.4155093   -0.16445544    0.1556541
## [1162,]         NaN    0.2419060   -0.16445544    2.4825512
## [1163,]         NaN   -0.9316973    0.47815352    0.1556541
## [1164,]         NaN    0.2419060   -0.42149902   -0.6199782
## [1165,]         NaN   -0.9316973    0.86371890   -0.6199782
## [1166,]         NaN   -0.9316973    0.34963173    0.1556541
## [1167,]         NaN    0.2419060    1.50632785    0.1556541
## [1168,]         NaN    1.4155093   -0.55002081   -0.6199782
## [1169,]         NaN   -0.9316973   -0.67854260   -0.6199782
## [1170,]         NaN   -0.9316973   -0.80706439   -2.1712429
## [1171,]         NaN   -0.9316973   -0.67854260   -2.1712429
## [1172,]         NaN   -0.9316973   -0.16445544    0.1556541
## [1173,]         NaN   -0.9316973   -0.42149902   -0.6199782
## [1174,]         NaN    1.4155093   -0.29297723    2.4825512
## [1175,]         NaN    1.4155093   -0.55002081    2.4825512
## [1176,]         NaN   -0.9316973   -0.55002081    0.1556541
## [1177,]         NaN    1.4155093    2.02041502   -0.6199782
## [1178,]         NaN    2.5891126    0.99224069    0.1556541
## [1179,]         NaN   -0.9316973   -1.19262977    0.1556541
## [1180,]         NaN    0.2419060   -0.03593364   -0.6199782
## [1181,]         NaN   -0.9316973    0.47815352    0.9312865
## [1182,]         NaN    0.2419060    2.40598039    0.1556541
## [1183,]         NaN   -0.9316973   -0.93558618    2.4825512
## [1184,]         NaN    0.2419060    0.22110994    0.1556541
## [1185,]         NaN    0.2419060    3.17711114    2.4825512
## [1186,]         NaN    0.2419060    0.34963173    0.1556541
## [1187,]         NaN   -0.9316973    0.22110994   -0.6199782
## [1188,]         NaN    1.4155093    0.99224069    0.9312865
## [1189,]         NaN    0.2419060   -0.16445544    0.1556541
## [1190,]         NaN    1.4155093   -0.67854260    1.7069188
## [1191,]         NaN    1.4155093   -0.16445544    0.9312865
## [1192,]         NaN    1.4155093   -0.16445544   -0.6199782
## [1193,]         NaN    0.2419060    0.73519711   -0.6199782
## [1194,]         NaN   -0.9316973   -0.93558618    0.1556541
## [1195,]         NaN    2.5891126    2.27745860   -0.6199782
## [1196,]         NaN   -0.9316973    1.50632785   -0.6199782
## [1197,]         NaN   -0.9316973    1.24928427   -0.6199782
## [1198,]         NaN   -0.9316973   -1.19262977    0.1556541
## [1199,]         NaN    0.2419060   -0.55002081   -0.6199782
## [1200,]         NaN    1.4155093   -0.16445544   -0.6199782
```

```
## [1201,]        NaN      2.5891126     -0.42149902        -0.6199782
## [1202,]        NaN     -0.9316973     -0.80706439        -0.6199782
## [1203,]        NaN      0.2419060     -0.55002081         1.7069188
## [1204,]        NaN     -0.9316973     -0.03593364        -0.6199782
## [1205,]        NaN      1.4155093      0.99224069         0.1556541
## [1206,]        NaN     -0.9316973     -1.32115156        -0.6199782
## [1207,]        NaN     -0.9316973     -0.55002081         1.7069188
## [1208,]        NaN      0.2419060     -0.42149902        -1.3956106
## [1209,]        NaN      0.2419060      0.47815352         0.1556541
## [1210,]        NaN      0.2419060      0.99224069        -0.6199782
## [1211,]        NaN      2.5891126      0.34963173         2.4825512
## [1212,]        NaN      1.4155093     -0.67854260        -0.6199782
## [1213,]        NaN     -0.9316973     -0.16445544         0.1556541
## [1214,]        NaN      0.2419060     -1.06410798        -0.6199782
## [1215,]        NaN      0.2419060     -0.29297723        -0.6199782
## [1216,]        NaN     -0.9316973     -0.67854260        -0.6199782
## [1217,]        NaN      0.2419060     -0.16445544         0.1556541
## [1218,]        NaN      0.2419060     -0.80706439        -1.3956106
## [1219,]        NaN     -0.9316973     -0.16445544         0.1556541
## [1220,]        NaN      0.2419060     -0.29297723        -0.6199782
## [1221,]        NaN     -0.9316973      0.73519711        -0.6199782
## [1222,]        NaN      0.2419060      1.76337144         0.1556541
## [1223,]        NaN      0.2419060     -1.32115156        -0.6199782
## [1224,]        NaN     -0.9316973      1.76337144         0.1556541
## [1225,]        NaN      2.5891126     -1.06410798         0.1556541
## [1226,]        NaN     -0.9316973      1.24928427        -0.6199782
## [1227,]        NaN      0.2419060     -0.16445544         0.1556541
## [1228,]        NaN      0.2419060     -0.67854260        -0.6199782
## [1229,]        NaN      0.2419060     -0.16445544         0.9312865
## [1230,]        NaN      0.2419060      0.86371890         0.1556541
## [1231,]        NaN      2.5891126     -0.67854260        -0.6199782
## [1232,]        NaN     -0.9316973      0.99224069         0.1556541
## [1233,]        NaN      0.2419060      0.73519711         0.1556541
## [1234,]        NaN      0.2419060     -0.16445544        -0.6199782
## [1235,]        NaN      0.2419060     -0.93558618         0.1556541
## [1236,]        NaN      0.2419060      0.22110994         1.7069188
## [1237,]        NaN      2.5891126      0.60667531         0.1556541
## [1238,]        NaN     -0.9316973     -0.16445544        -0.6199782
## [1239,]        NaN     -0.9316973     -1.06410798         0.1556541
## [1240,]        NaN     -0.9316973     -0.29297723         0.1556541
## [1241,]        NaN      0.2419060     -0.29297723        -0.6199782
## [1242,]        NaN      0.2419060     -0.16445544        -0.6199782
## [1243,]        NaN     -0.9316973      1.24928427         0.1556541
## [1244,]        NaN      1.4155093     -0.29297723        -0.6199782
## [1245,]        NaN     -0.9316973     -0.16445544        -0.6199782
## [1246,]        NaN      0.2419060     -1.06410798        -0.6199782
## [1247,]        NaN      0.2419060     -0.67854260        -2.1712429
## [1248,]        NaN      0.2419060     -0.67854260         0.1556541
## [1249,]        NaN     -0.9316973     -0.67854260         1.7069188
## [1250,]        NaN     -0.9316973     -1.19262977         0.1556541
## [1251,]        NaN     -0.9316973     -0.16445544         1.7069188
## [1252,]        NaN      0.2419060      0.09258815        -0.6199782
## [1253,]        NaN      2.5891126     -0.67854260         0.1556541
## [1254,]        NaN     -0.9316973      0.22110994        -0.6199782
```

```
## [1255,]          NaN      -0.9316973      -0.42149902      -1.3956106
## [1256,]          NaN      -0.9316973      -0.03593364      -0.6199782
## [1257,]          NaN       0.2419060      -0.29297723       0.9312865
## [1258,]          NaN       2.5891126      -0.16445544      -0.6199782
## [1259,]          NaN       0.2419060      -1.32115156      -0.6199782
## [1260,]          NaN       0.2419060      -0.16445544       0.1556541
## [1261,]          NaN      -0.9316973       0.09258815       0.1556541
## [1262,]          NaN       0.2419060       0.47815352      -0.6199782
## [1263,]          NaN       0.2419060      -0.67854260       0.9312865
## [1264,]          NaN       2.5891126      -0.55002081       2.4825512
## [1265,]          NaN       2.5891126       2.92006756      -0.6199782
## [1266,]          NaN       1.4155093      -0.03593364      -0.6199782
## [1267,]          NaN       1.4155093      -0.80706439      -0.6199782
## [1268,]          NaN       0.2419060       0.47815352       0.1556541
## [1269,]          NaN       2.5891126       2.02041502      -0.6199782
## [1270,]          NaN      -0.9316973      -0.16445544       1.7069188
## [1271,]          NaN      -0.9316973      -0.67854260       0.1556541
## [1272,]          NaN      -0.9316973      -1.32115156       0.1556541
## [1273,]          NaN       0.2419060      -0.80706439       0.1556541
## [1274,]          NaN      -0.9316973      -1.32115156       2.4825512
## [1275,]          NaN       1.4155093       0.22110994       0.1556541
## [1276,]          NaN      -0.9316973       0.47815352      -0.6199782
## [1277,]          NaN       1.4155093      -0.80706439      -0.6199782
## [1278,]          NaN       0.2419060       1.63484965       0.1556541
## [1279,]          NaN       0.2419060       0.47815352      -1.3956106
## [1280,]          NaN       2.5891126      -0.67854260      -0.6199782
## [1281,]          NaN      -0.9316973       0.99224069       0.9312865
## [1282,]          NaN      -0.9316973      -0.16445544      -0.6199782
## [1283,]          NaN       0.2419060       0.34963173      -1.3956106
## [1284,]          NaN       0.2419060      -0.80706439       2.4825512
## [1285,]          NaN      -0.9316973      -0.29297723       0.1556541
## [1286,]          NaN      -0.9316973      -0.67854260       0.1556541
## [1287,]          NaN       0.2419060      -0.55002081       1.7069188
## [1288,]          NaN       1.4155093      -0.16445544      -0.6199782
## [1289,]          NaN       0.2419060       0.47815352       2.4825512
## [1290,]          NaN       2.5891126       0.22110994       0.1556541
## [1291,]          NaN       0.2419060      -0.03593364       0.1556541
## [1292,]          NaN      -0.9316973      -0.16445544       0.9312865
## [1293,]          NaN       0.2419060      -0.55002081       2.4825512
## [1294,]          NaN      -0.9316973      -0.55002081      -0.6199782
## [1295,]          NaN      -0.9316973      -0.03593364       0.1556541
## [1296,]          NaN       0.2419060       1.50632785       0.1556541
## [1297,]          NaN      -0.9316973      -0.29297723       0.1556541
## [1298,]          NaN      -0.9316973      -0.67854260       0.1556541
## [1299,]          NaN       0.2419060       0.22110994      -0.6199782
## [1300,]          NaN       0.2419060       0.09258815       0.1556541
## [1301,]          NaN       1.4155093      -0.16445544       1.7069188
## [1302,]          NaN       0.2419060       3.30563293      -2.1712429
## [1303,]          NaN       0.2419060      -0.67854260      -0.6199782
## [1304,]          NaN       0.2419060       2.14893681       0.9312865
## [1305,]          NaN       0.2419060       0.47815352       0.1556541
## [1306,]          NaN       0.2419060       0.34963173      -0.6199782
## [1307,]          NaN       1.4155093      -0.29297723       0.1556541
## [1308,]          NaN       0.2419060      -1.06410798       0.1556541
```

```
## [1309,]        NaN         1.4155093         1.12076248          0.9312865
## [1310,]        NaN        -0.9316973        -0.80706439          0.9312865
## [1311,]        NaN        -0.9316973         1.50632785          0.1556541
## [1312,]        NaN        -0.9316973        -1.44967335          0.9312865
## [1313,]        NaN        -0.9316973        -1.19262977          0.9312865
## [1314,]        NaN         2.5891126        -0.93558618          0.1556541
## [1315,]        NaN         1.4155093        -0.16445544          0.1556541
## [1316,]        NaN         0.2419060         0.47815352         -0.6199782
## [1317,]        NaN         0.2419060        -0.55002081          1.7069188
## [1318,]        NaN        -0.9316973        -0.67854260          0.1556541
## [1319,]        NaN        -0.9316973        -0.03593364          0.1556541
## [1320,]        NaN        -0.9316973        -0.93558618         -0.6199782
## [1321,]        NaN         1.4155093        -0.16445544         -1.3956106
## [1322,]        NaN        -0.9316973        -0.55002081         -0.6199782
## [1323,]        NaN         0.2419060         0.09258815          0.9312865
## [1324,]        NaN         0.2419060        -1.06410798         -0.6199782
## [1325,]        NaN         1.4155093        -0.03593364          0.1556541
## [1326,]        NaN        -0.9316973        -0.42149902          0.1556541
## [1327,]        NaN        -0.9316973        -0.55002081          0.1556541
## [1328,]        NaN         0.2419060         1.76337144          1.7069188
## [1329,]        NaN         0.2419060        -0.29297723          1.7069188
## [1330,]        NaN        -0.9316973        -1.32115156          0.1556541
## [1331,]        NaN        -0.9316973         1.24928427         -0.6199782
## [1332,]        NaN        -0.9316973         2.27745860          0.1556541
## [1333,]        NaN        -0.9316973        -1.32115156          0.1556541
## [1334,]        NaN         2.5891126         0.34963173         -0.6199782
## [1335,]        NaN         0.2419060        -0.42149902         -0.6199782
## [1336,]        NaN         2.5891126        -0.55002081         -0.6199782
## [1337,]        NaN         0.2419060         0.99224069         -0.6199782
## [1338,]        NaN         0.2419060        -1.32115156          0.1556541
## [1339,]        NaN        -0.9316973        -1.32115156          0.1556541
## [1340,]        NaN        -0.9316973        -1.32115156         -0.6199782
## [1341,]        NaN         0.2419060        -0.16445544          0.9312865
## [1342,]        NaN         0.2419060        -0.16445544         -0.6199782
## [1343,]        NaN         2.5891126        -0.29297723          0.1556541
## [1344,]        NaN        -0.9316973        -0.03593364         -0.6199782
## [1345,]        NaN         0.2419060         0.60667531         -0.6199782
## [1346,]        NaN        -0.9316973        -0.93558618         -0.6199782
## [1347,]        NaN         1.4155093        -0.16445544         -0.6199782
## [1348,]        NaN        -0.9316973        -0.16445544         -0.6199782
## [1349,]        NaN         0.2419060         1.37780606          0.1556541
## [1350,]        NaN         0.2419060        -1.32115156          0.1556541
## [1351,]        NaN        -0.9316973        -0.29297723          1.7069188
## [1352,]        NaN         0.2419060         1.63484965          0.1556541
## [1353,]        NaN         0.2419060        -0.16445544          1.7069188
## [1354,]        NaN         0.2419060        -0.80706439         -0.6199782
## [1355,]        NaN        -0.9316973        -0.80706439          0.1556541
## [1356,]        NaN         1.4155093         0.09258815         -1.3956106
## [1357,]        NaN         0.2419060         0.34963173          0.1556541
## [1358,]        NaN         0.2419060         0.86371890          0.1556541
## [1359,]        NaN         0.2419060        -0.42149902         -0.6199782
## [1360,]        NaN        -0.9316973        -0.29297723          0.1556541
## [1361,]        NaN         0.2419060        -0.93558618         -2.1712429
## [1362,]        NaN         0.2419060        -0.42149902          0.1556541
```

```
## [1363,]        NaN    -0.9316973    0.09258815    0.1556541
## [1364,]        NaN    -0.9316973   -0.16445544   -0.6199782
## [1365,]        NaN     0.2419060   -0.55002081   -0.6199782
## [1366,]        NaN    -0.9316973   -1.32115156    0.1556541
## [1367,]        NaN     0.2419060   -0.16445544   -1.3956106
## [1368,]        NaN     0.2419060   -0.67854260    0.1556541
## [1369,]        NaN    -0.9316973    0.60667531    0.1556541
## [1370,]        NaN    -0.9316973   -0.67854260   -2.1712429
## [1371,]        NaN     0.2419060    0.60667531    0.9312865
## [1372,]        NaN     0.2419060   -0.67854260    0.1556541
## [1373,]        NaN     0.2419060   -0.16445544    0.1556541
## [1374,]        NaN     0.2419060    1.12076248    0.1556541
## [1375,]        NaN     0.2419060    2.27745860   -0.6199782
## [1376,]        NaN    -0.9316973   -0.42149902   -0.6199782
## [1377,]        NaN     1.4155093   -0.16445544   -2.1712429
## [1378,]        NaN    -0.9316973    2.14893681    0.1556541
## [1379,]        NaN     1.4155093    0.34963173    0.9312865
## [1380,]        NaN    -0.9316973   -1.32115156   -0.6199782
## [1381,]        NaN     0.2419060   -0.67854260   -0.6199782
## [1382,]        NaN    -0.9316973   -0.80706439    0.1556541
## [1383,]        NaN     0.2419060   -0.93558618    0.1556541
## [1384,]        NaN    -0.9316973   -0.80706439    0.1556541
## [1385,]        NaN    -0.9316973    0.34963173    0.1556541
## [1386,]        NaN     0.2419060   -0.29297723   -0.6199782
## [1387,]        NaN    -0.9316973   -0.42149902    2.4825512
## [1388,]        NaN     0.2419060   -0.67854260    1.7069188
## [1389,]        NaN     0.2419060   -0.29297723    2.4825512
## [1390,]        NaN    -0.9316973   -0.16445544    2.4825512
## [1391,]        NaN     0.2419060   -0.67854260   -0.6199782
## [1392,]        NaN    -0.9316973    1.12076248    0.1556541
## [1393,]        NaN    -0.9316973   -0.16445544   -0.6199782
## [1394,]        NaN    -0.9316973   -0.55002081    1.7069188
## [1395,]        NaN    -0.9316973   -0.42149902   -1.3956106
## [1396,]        NaN    -0.9316973   -0.16445544    0.9312865
## [1397,]        NaN    -0.9316973    0.47815352   -0.6199782
## [1398,]        NaN     1.4155093   -0.29297723    2.4825512
## [1399,]        NaN     2.5891126   -0.29297723   -0.6199782
## [1400,]        NaN     0.2419060   -0.16445544   -1.3956106
## [1401,]        NaN     0.2419060   -0.55002081   -0.6199782
## [1402,]        NaN     0.2419060    3.04858935   -2.1712429
## [1403,]        NaN     2.5891126   -1.32115156    0.9312865
## [1404,]        NaN    -0.9316973    1.24928427    0.1556541
## [1405,]        NaN    -0.9316973    1.12076248   -0.6199782
## [1406,]        NaN     0.2419060    0.22110994   -0.6199782
## [1407,]        NaN    -0.9316973   -0.29297723    0.1556541
## [1408,]        NaN    -0.9316973   -0.93558618   -0.6199782
## [1409,]        NaN    -0.9316973   -0.80706439    2.4825512
## [1410,]        NaN     0.2419060   -0.16445544   -0.6199782
## [1411,]        NaN     0.2419060    0.47815352    0.9312865
## [1412,]        NaN    -0.9316973   -0.67854260    0.1556541
## [1413,]        NaN    -0.9316973    0.09258815    2.4825512
## [1414,]        NaN     0.2419060   -0.55002081   -0.6199782
## [1415,]        NaN    -0.9316973    1.76337144    0.1556541
## [1416,]        NaN     2.5891126   -1.32115156   -0.6199782
```

```
## [1417,]        NaN      1.4155093     0.60667531       0.1556541
## [1418,]        NaN      0.2419060    -1.06410798      -1.3956106
## [1419,]        NaN      0.2419060    -0.16445544      -1.3956106
## [1420,]        NaN      0.2419060    -0.29297723       0.1556541
## [1421,]        NaN      0.2419060     0.09258815       0.1556541
## [1422,]        NaN      1.4155093     0.34963173       0.1556541
## [1423,]        NaN      0.2419060    -0.80706439       0.1556541
## [1424,]        NaN     -0.9316973    -0.93558618      -0.6199782
## [1425,]        NaN     -0.9316973    -0.16445544       1.7069188
## [1426,]        NaN      0.2419060    -0.16445544       2.4825512
## [1427,]        NaN     -0.9316973    -0.67854260       0.1556541
## [1428,]        NaN      1.4155093    -0.42149902       0.1556541
## [1429,]        NaN      0.2419060    -1.06410798      -0.6199782
## [1430,]        NaN     -0.9316973     0.86371890      -0.6199782
## [1431,]        NaN      0.2419060     1.12076248       0.1556541
## [1432,]        NaN      1.4155093     0.34963173       0.1556541
## [1433,]        NaN      0.2419060     0.60667531      -0.6199782
## [1434,]        NaN      0.2419060    -0.67854260       0.1556541
## [1435,]        NaN      1.4155093     0.60667531       0.1556541
## [1436,]        NaN     -0.9316973    -0.67854260      -0.6199782
## [1437,]        NaN     -0.9316973    -1.19262977       2.4825512
## [1438,]        NaN     -0.9316973     1.24928427       0.1556541
## [1439,]        NaN      0.2419060    -1.32115156       0.1556541
## [1440,]        NaN      1.4155093    -0.16445544      -0.6199782
## [1441,]        NaN      2.5891126     0.86371890       0.1556541
## [1442,]        NaN      0.2419060     0.22110994      -0.6199782
## [1443,]        NaN      2.5891126    -0.93558618       0.1556541
## [1444,]        NaN     -0.9316973     1.63484965      -0.6199782
## [1445,]        NaN      0.2419060     0.34963173       0.9312865
## [1446,]        NaN      0.2419060     1.24928427       0.1556541
## [1447,]        NaN      1.4155093    -0.42149902      -0.6199782
## [1448,]        NaN      0.2419060     0.47815352       0.9312865
## [1449,]        NaN      0.2419060     0.34963173       1.7069188
## [1450,]        NaN     -0.9316973    -0.93558618       0.9312865
## [1451,]        NaN     -0.9316973    -0.29297723      -0.6199782
## [1452,]        NaN      0.2419060    -0.16445544      -1.3956106
## [1453,]        NaN      1.4155093     0.09258815       0.1556541
## [1454,]        NaN      0.2419060    -0.42149902      -0.6199782
## [1455,]        NaN     -0.9316973    -0.42149902       0.1556541
## [1456,]        NaN     -0.9316973    -0.42149902      -0.6199782
## [1457,]        NaN      1.4155093    -0.16445544      -0.6199782
## [1458,]        NaN      2.5891126     1.12076248      -0.6199782
## [1459,]        NaN      0.2419060    -0.93558618       1.7069188
## [1460,]        NaN      0.2419060    -0.16445544      -0.6199782
## [1461,]        NaN     -0.9316973    -0.80706439       0.1556541
## [1462,]        NaN      0.2419060     1.12076248       0.1556541
## [1463,]        NaN      0.2419060     1.24928427      -0.6199782
## [1464,]        NaN     -0.9316973    -0.16445544      -0.6199782
## [1465,]        NaN     -0.9316973    -0.80706439      -0.6199782
## [1466,]        NaN      0.2419060     0.73519711       0.1556541
## [1467,]        NaN      0.2419060    -0.29297723       1.7069188
## [1468,]        NaN      0.2419060    -0.67854260      -2.1712429
## [1469,]        NaN     -0.9316973     0.73519711       0.1556541
## [1470,]        NaN     -0.9316973    -0.67854260       0.1556541
```

```
##      WorkLifeBalance YearsAtCompany YearsInCurrentRole
##  [1,]      -2.4929720    -0.164557109        -0.06327437
##  [2,]       0.3379811     0.488341541         0.76473737
##  [3,]       0.3379811    -1.143905083        -1.16729002
##  [4,]       0.3379811     0.161892216         0.76473737
##  [5,]       0.3379811    -0.817455758        -0.61528219
##  [6,]      -1.0774954    -0.001332446         0.76473737
##  [7,]      -1.0774954    -0.980680421        -1.16729002
##  [8,]       0.3379811    -0.980680421        -1.16729002
##  [9,]       0.3379811     0.325116879         0.76473737
## [10,]      -1.0774954    -0.001332446         0.76473737
## [11,]       0.3379811    -0.327781771        -0.06327437
## [12,]       0.3379811     0.325116879         0.21272955
## [13,]      -1.0774954    -0.327781771        -0.61528219
## [14,]       0.3379811    -0.817455758        -0.61528219
## [15,]       0.3379811    -0.491006434        -0.61528219
## [16,]       0.3379811     0.488341541         1.31674520
## [17,]      -1.0774954    -0.164557109        -0.61528219
## [18,]      -1.0774954    -0.980680421        -1.16729002
## [19,]       0.3379811     2.936711478         1.04074129
## [20,]       0.3379811    -0.654231096        -0.61528219
## [21,]      -1.0774954    -0.491006434        -0.61528219
## [22,]       0.3379811    -0.327781771        -0.33927828
## [23,]       0.3379811     0.814790866         0.48873346
## [24,]       0.3379811    -1.143905083        -1.16729002
## [25,]       0.3379811    -0.491006434        -0.61528219
## [26,]      -1.0774954     1.141240191         2.42076085
## [27,]       0.3379811     0.488341541        -0.61528219
## [28,]       0.3379811     0.325116879         0.76473737
## [29,]       0.3379811     2.447037491         0.48873346
## [30,]      -1.0774954    -0.817455758        -0.61528219
## [31,]       0.3379811    -0.980680421        -0.89128611
## [32,]       1.7534577    -0.491006434        -0.61528219
## [33,]       0.3379811     0.488341541        -1.16729002
## [34,]       1.7534577    -0.980680421        -1.16729002
## [35,]      -1.0774954    -0.817455758        -1.16729002
## [36,]      -1.0774954    -0.327781771        -0.33927828
## [37,]       0.3379811    -0.654231096        -0.61528219
## [38,]       0.3379811    -0.817455758        -0.61528219
## [39,]       1.7534577    -0.980680421        -0.89128611
## [40,]       0.3379811    -0.327781771        -0.33927828
## [41,]       0.3379811    -0.980680421        -1.16729002
## [42,]       0.3379811    -0.980680421        -1.16729002
## [43,]      -1.0774954    -0.980680421        -1.16729002
## [44,]       0.3379811     0.325116879         1.04074129
## [45,]       0.3379811     0.814790866         1.04074129
## [46,]       0.3379811     2.447037491         2.97276868
## [47,]       0.3379811     0.325116879         0.21272955
## [48,]       0.3379811    -0.980680421        -1.16729002
## [49,]       0.3379811     0.325116879         0.48873346
## [50,]       0.3379811    -0.980680421        -1.16729002
## [51,]       0.3379811    -0.980680421        -1.16729002
## [52,]      -1.0774954    -0.817455758        -0.61528219
## [53,]      -1.0774954    -0.491006434        -0.33927828
```

```
##  [54,]     0.3379811  -0.491006434    -1.16729002
##  [55,]    -1.0774954  -0.817455758    -0.61528219
##  [56,]     0.3379811   1.304464853     2.69676477
##  [57,]    -1.0774954   0.325116879     1.04074129
##  [58,]     0.3379811  -0.817455758    -0.61528219
##  [59,]    -1.0774954  -0.001332446     0.76473737
##  [60,]     1.7534577  -0.001332446     0.21272955
##  [61,]     0.3379811   0.325116879     1.04074129
##  [62,]     0.3379811   0.488341541    -0.33927828
##  [63,]    -1.0774954   3.263160803    -0.33927828
##  [64,]    -1.0774954   2.283812828     3.24877259
##  [65,]     0.3379811   1.630914178     2.69676477
##  [66,]     0.3379811  -0.327781771    -1.16729002
##  [67,]     0.3379811  -0.164557109     0.21272955
##  [68,]     0.3379811  -0.980680421    -1.16729002
##  [69,]    -1.0774954  -0.654231096    -0.61528219
##  [70,]    -1.0774954  -0.980680421    -1.16729002
##  [71,]    -1.0774954  -0.491006434    -0.33927828
##  [72,]     0.3379811  -0.327781771    -0.06327437
##  [73,]     0.3379811  -0.980680421    -0.89128611
##  [74,]     0.3379811   0.488341541    -0.06327437
##  [75,]     0.3379811  -0.980680421    -1.16729002
##  [76,]     0.3379811   0.651566204     0.76473737
##  [77,]     0.3379811   1.304464853     2.42076085
##  [78,]     1.7534577  -1.143905083    -1.16729002
##  [79,]     1.7534577  -0.327781771    -0.61528219
##  [80,]     0.3379811  -0.491006434    -0.61528219
##  [81,]    -1.0774954   0.488341541     1.04074129
##  [82,]     0.3379811  -0.164557109    -0.06327437
##  [83,]     0.3379811  -0.980680421    -1.16729002
##  [84,]     0.3379811   0.978015528     1.86875303
##  [85,]     0.3379811  -0.327781771    -0.61528219
##  [86,]    -1.0774954  -0.164557109    -0.06327437
##  [87,]     0.3379811  -1.143905083    -1.16729002
##  [88,]     0.3379811  -0.491006434    -0.61528219
##  [89,]     0.3379811   0.651566204     1.59274911
##  [90,]     0.3379811   0.325116879     1.04074129
##  [91,]    -1.0774954   2.447037491    -0.33927828
##  [92,]    -2.4929720   0.488341541     0.76473737
##  [93,]    -1.0774954   0.651566204     1.04074129
##  [94,]    -1.0774954   0.488341541     1.31674520
##  [95,]     0.3379811   0.651566204     1.04074129
##  [96,]    -2.4929720  -0.491006434    -0.33927828
##  [97,]    -1.0774954  -0.654231096    -0.61528219
##  [98,]     1.7534577  -0.327781771    -0.06327437
##  [99,]    -1.0774954   4.895407427     1.59274911
## [100,]     1.7534577  -0.654231096    -0.61528219
## [101,]     0.3379811  -0.654231096    -0.61528219
## [102,]     0.3379811  -0.980680421    -1.16729002
## [103,]     0.3379811  -0.980680421    -1.16729002
## [104,]     0.3379811   1.467689516     2.42076085
## [105,]     1.7534577  -0.980680421    -1.16729002
## [106,]     0.3379811  -0.654231096    -0.61528219
## [107,]    -1.0774954   0.161892216    -0.33927828
```

```
## [108,]     0.3379811  -0.164557109   -0.06327437
## [109,]     0.3379811  -0.817455758   -0.61528219
## [110,]     0.3379811  -1.143905083   -1.16729002
## [111,]    -1.0774954   0.978015528    2.14475694
## [112,]     0.3379811   0.325116879    0.76473737
## [113,]     0.3379811  -0.327781771   -0.33927828
## [114,]     0.3379811  -0.327781771   -0.33927828
## [115,]     0.3379811  -0.980680421   -1.16729002
## [116,]     0.3379811  -0.327781771   -0.33927828
## [117,]     0.3379811   0.651566204    1.59274911
## [118,]     0.3379811   0.325116879    0.76473737
## [119,]     0.3379811  -0.980680421   -1.16729002
## [120,]     1.7534577   2.936711478    2.14475694
## [121,]    -1.0774954   0.488341541    0.76473737
## [122,]     1.7534577  -0.001332446    0.76473737
## [123,]     0.3379811  -0.327781771   -0.06327437
## [124,]     0.3379811   2.120588166    3.80078042
## [125,]    -1.0774954  -0.001332446    0.76473737
## [126,]    -1.0774954  -0.327781771   -0.06327437
## [127,]    -1.0774954   5.385081415    1.59274911
## [128,]    -1.0774954  -1.143905083   -1.16729002
## [129,]     0.3379811  -0.817455758   -0.89128611
## [130,]    -1.0774954   1.304464853    1.86875303
## [131,]     0.3379811  -0.654231096   -0.61528219
## [132,]     0.3379811  -0.817455758   -0.61528219
## [133,]     0.3379811  -0.817455758   -0.61528219
## [134,]     0.3379811   0.325116879    0.76473737
## [135,]     0.3379811   0.161892216    0.76473737
## [136,]     0.3379811  -0.654231096   -0.61528219
## [137,]     0.3379811  -0.491006434   -0.61528219
## [138,]     1.7534577   1.304464853    1.86875303
## [139,]     0.3379811  -0.817455758   -0.61528219
## [140,]    -2.4929720   0.651566204    1.31674520
## [141,]     1.7534577  -0.327781771   -0.06327437
## [142,]    -1.0774954  -0.164557109    0.21272955
## [143,]     0.3379811  -0.654231096   -0.61528219
## [144,]    -1.0774954  -0.327781771   -0.06327437
## [145,]     1.7534577   0.161892216    0.76473737
## [146,]     0.3379811  -0.654231096   -0.61528219
## [147,]     0.3379811  -0.327781771   -0.33927828
## [148,]    -1.0774954  -0.001332446    0.48873346
## [149,]     0.3379811  -0.327781771   -1.16729002
## [150,]     0.3379811  -0.980680421   -1.16729002
## [151,]     0.3379811   2.120588166    0.76473737
## [152,]     0.3379811   0.488341541    1.04074129
## [153,]    -2.4929720  -0.001332446    0.76473737
## [154,]    -2.4929720   1.630914178    1.31674520
## [155,]     0.3379811   0.325116879    1.04074129
## [156,]     0.3379811   0.488341541    0.76473737
## [157,]     0.3379811  -0.980680421   -1.16729002
## [158,]    -1.0774954  -0.980680421   -1.16729002
## [159,]    -1.0774954   0.814790866    1.86875303
## [160,]     0.3379811  -0.491006434   -0.33927828
## [161,]     0.3379811  -0.817455758   -0.61528219
```

```
## [162,]     -2.4929720  -0.817455758     -0.61528219
## [163,]     -2.4929720  -0.327781771     -0.61528219
## [164,]     -2.4929720  -0.327781771     -0.33927828
## [165,]     -1.0774954  -0.980680421     -0.89128611
## [166,]      0.3379811  -0.327781771     -0.06327437
## [167,]      0.3379811   0.325116879      1.04074129
## [168,]      0.3379811   0.488341541      1.31674520
## [169,]      1.7534577   0.161892216     -0.33927828
## [170,]      0.3379811  -0.327781771     -0.06327437
## [171,]     -1.0774954  -0.327781771     -0.61528219
## [172,]      1.7534577  -1.143905083     -1.16729002
## [173,]     -1.0774954   0.161892216      0.76473737
## [174,]      0.3379811   0.814790866      1.31674520
## [175,]      1.7534577  -0.327781771     -0.06327437
## [176,]      0.3379811  -0.817455758     -0.61528219
## [177,]      1.7534577  -0.654231096     -0.89128611
## [178,]     -1.0774954  -0.980680421     -1.16729002
## [179,]      0.3379811   2.773486815      2.42076085
## [180,]      0.3379811  -0.817455758     -0.61528219
## [181,]      0.3379811  -0.491006434     -0.61528219
## [182,]      0.3379811  -0.654231096     -0.61528219
## [183,]     -1.0774954  -0.491006434     -0.33927828
## [184,]     -1.0774954  -0.654231096     -0.61528219
## [185,]      0.3379811  -0.491006434     -0.61528219
## [186,]      0.3379811   0.161892216      0.76473737
## [187,]      0.3379811   2.120588166      1.04074129
## [188,]      0.3379811   2.773486815      2.97276868
## [189,]     -1.0774954   0.488341541      1.31674520
## [190,]      0.3379811  -0.001332446      0.76473737
## [191,]      0.3379811   4.242508778      3.80078042
## [192,]     -1.0774954  -0.001332446      0.76473737
## [193,]      0.3379811  -0.980680421     -1.16729002
## [194,]      1.7534577  -0.327781771     -0.06327437
## [195,]      0.3379811   2.120588166      1.04074129
## [196,]     -1.0774954   0.161892216      0.76473737
## [197,]      0.3379811  -0.164557109     -0.61528219
## [198,]      0.3379811  -0.327781771     -0.33927828
## [199,]      0.3379811  -0.980680421     -1.16729002
## [200,]     -2.4929720  -0.001332446      0.76473737
## [201,]      0.3379811  -0.817455758     -0.61528219
## [202,]      0.3379811  -0.001332446      0.76473737
## [203,]      1.7534577  -0.327781771     -0.33927828
## [204,]      1.7534577  -0.001332446     -0.61528219
## [205,]      0.3379811  -0.980680421     -1.16729002
## [206,]     -1.0774954   0.488341541     -0.06327437
## [207,]     -1.0774954  -0.491006434     -0.61528219
## [208,]      0.3379811   0.161892216     -0.89128611
## [209,]     -2.4929720  -0.654231096     -0.61528219
## [210,]      0.3379811  -0.491006434     -0.61528219
## [211,]     -1.0774954   1.141240191      1.04074129
## [212,]      0.3379811   0.651566204      1.04074129
## [213,]      0.3379811  -0.001332446      0.76473737
## [214,]     -2.4929720   0.488341541      1.31674520
## [215,]      0.3379811  -0.327781771     -0.61528219
```

```
##  [216,]     0.3379811    -0.980680421    -1.16729002
##  [217,]    -1.0774954    -0.164557109    -0.33927828
##  [218,]    -1.0774954    -0.164557109    -0.61528219
##  [219,]     0.3379811     1.957363503     0.76473737
##  [220,]     0.3379811    -0.164557109    -0.61528219
##  [221,]     1.7534577     0.978015528     1.86875303
##  [222,]     0.3379811    -0.654231096    -0.61528219
##  [223,]     0.3379811     0.488341541     1.04074129
##  [224,]    -1.0774954     1.467689516     1.59274911
##  [225,]     0.3379811    -0.327781771    -0.06327437
##  [226,]     0.3379811    -0.980680421    -1.16729002
##  [227,]     0.3379811     0.325116879     1.04074129
##  [228,]     0.3379811     0.651566204     1.59274911
##  [229,]     1.7534577     0.488341541     0.76473737
##  [230,]    -1.0774954    -0.491006434    -0.33927828
##  [231,]    -1.0774954    -0.817455758    -0.61528219
##  [232,]     0.3379811     2.447037491     3.52477651
##  [233,]    -1.0774954    -0.817455758    -0.61528219
##  [234,]    -1.0774954    -0.001332446    -1.16729002
##  [235,]    -2.4929720    -0.327781771    -0.06327437
##  [236,]     0.3379811     1.630914178     2.42076085
##  [237,]     1.7534577     0.325116879     0.76473737
##  [238,]     1.7534577     4.242508778     0.76473737
##  [239,]     0.3379811    -0.491006434    -0.33927828
##  [240,]    -2.4929720    -0.654231096    -0.61528219
##  [241,]     0.3379811    -0.654231096    -0.61528219
##  [242,]     0.3379811    -0.654231096    -0.61528219
##  [243,]    -1.0774954    -0.980680421    -1.16729002
##  [244,]     0.3379811     0.325116879     1.04074129
##  [245,]     0.3379811     2.773486815    -1.16729002
##  [246,]     0.3379811    -0.817455758    -0.61528219
##  [247,]    -1.0774954    -0.817455758    -0.61528219
##  [248,]     0.3379811     0.651566204     1.31674520
##  [249,]    -1.0774954    -0.654231096    -0.89128611
##  [250,]     0.3379811    -0.654231096    -0.61528219
##  [251,]     0.3379811    -0.980680421    -1.16729002
##  [252,]     0.3379811     1.957363503     0.48873346
##  [253,]     0.3379811    -0.164557109     0.21272955
##  [254,]     0.3379811    -0.654231096    -0.61528219
##  [255,]     0.3379811    -0.654231096    -0.61528219
##  [256,]     0.3379811    -0.491006434    -0.61528219
##  [257,]     0.3379811     0.325116879     0.48873346
##  [258,]     0.3379811     2.283812828     0.76473737
##  [259,]    -1.0774954    -0.980680421    -1.16729002
##  [260,]     1.7534577    -0.327781771    -0.06327437
##  [261,]    -2.4929720    -0.327781771    -0.89128611
##  [262,]     0.3379811     0.161892216     0.76473737
##  [263,]     0.3379811    -0.164557109    -0.61528219
##  [264,]    -1.0774954    -0.001332446     0.76473737
##  [265,]    -2.4929720    -1.143905083    -1.16729002
##  [266,]     0.3379811    -1.143905083    -1.16729002
##  [267,]     0.3379811     0.325116879    -1.16729002
##  [268,]     0.3379811    -0.164557109    -0.33927828
##  [269,]     0.3379811     2.120588166     0.76473737
```

```
## [270,]      0.3379811    1.304464853     2.42076085
## [271,]      0.3379811    4.732182765     1.59274911
## [272,]     -1.0774954    0.488341541     0.76473737
## [273,]     -1.0774954   -0.327781771    -0.61528219
## [274,]      1.7534577   -0.327781771    -0.06327437
## [275,]      1.7534577   -0.654231096    -0.61528219
## [276,]      0.3379811   -0.327781771    -0.61528219
## [277,]     -1.0774954   -0.001332446     0.76473737
## [278,]      0.3379811    0.161892216    -1.16729002
## [279,]     -2.4929720   -0.164557109     0.21272955
## [280,]     -1.0774954    0.488341541    -0.06327437
## [281,]     -1.0774954   -0.327781771    -0.33927828
## [282,]      0.3379811    2.120588166     3.24877259
## [283,]     -1.0774954    0.488341541     0.76473737
## [284,]      0.3379811    0.488341541     0.76473737
## [285,]      0.3379811   -0.327781771    -0.33927828
## [286,]      0.3379811    1.630914178     2.14475694
## [287,]     -2.4929720   -0.980680421    -1.16729002
## [288,]      0.3379811   -0.817455758    -0.61528219
## [289,]      0.3379811   -0.654231096    -0.61528219
## [290,]      0.3379811   -0.327781771    -0.33927828
## [291,]      0.3379811   -0.654231096    -0.61528219
## [292,]      0.3379811    0.161892216    -1.16729002
## [293,]     -1.0774954   -0.817455758    -0.61528219
## [294,]      0.3379811    0.161892216     0.76473737
## [295,]     -1.0774954   -0.491006434    -0.61528219
## [296,]      1.7534577    2.120588166    -0.06327437
## [297,]      0.3379811   -1.143905083    -1.16729002
## [298,]     -1.0774954    0.651566204     1.31674520
## [299,]      0.3379811   -0.980680421    -1.16729002
## [300,]      0.3379811   -0.491006434    -0.89128611
## [301,]      0.3379811    2.447037491     1.59274911
## [302,]      0.3379811   -1.143905083    -1.16729002
## [303,]      0.3379811    0.161892216    -0.33927828
## [304,]     -1.0774954    0.161892216     0.76473737
## [305,]     -1.0774954    1.794138841     1.59274911
## [306,]      0.3379811    0.325116879     1.04074129
## [307,]     -1.0774954    0.978015528     1.04074129
## [308,]      0.3379811    0.488341541     1.04074129
## [309,]      0.3379811   -0.327781771    -0.33927828
## [310,]      0.3379811   -0.327781771    -0.61528219
## [311,]      0.3379811   -0.817455758    -0.61528219
## [312,]      0.3379811    2.773486815     1.31674520
## [313,]     -2.4929720   -0.817455758    -0.61528219
## [314,]      0.3379811    0.488341541     0.48873346
## [315,]      0.3379811    2.283812828     1.31674520
## [316,]      0.3379811    0.161892216     0.76473737
## [317,]      0.3379811   -0.001332446    -0.89128611
## [318,]     -1.0774954    0.161892216    -0.61528219
## [319,]     -1.0774954   -0.491006434    -0.33927828
## [320,]      0.3379811    0.978015528     2.14475694
## [321,]      0.3379811   -0.327781771    -0.06327437
## [322,]      0.3379811   -0.001332446     0.76473737
## [323,]     -1.0774954   -0.001332446     0.76473737
```

```
## [324,]    -1.0774954   -0.654231096      -0.61528219
## [325,]     0.3379811    0.488341541       1.04074129
## [326,]     0.3379811    0.488341541       1.31674520
## [327,]     0.3379811    2.283812828       1.31674520
## [328,]    -1.0774954   -0.980680421      -1.16729002
## [329,]    -1.0774954   -0.001332446       0.76473737
## [330,]     0.3379811   -0.654231096      -0.61528219
## [331,]     1.7534577    0.325116879       0.76473737
## [332,]     0.3379811   -0.327781771      -0.06327437
## [333,]    -1.0774954   -0.491006434      -0.33927828
## [334,]    -1.0774954   -0.980680421      -1.16729002
## [335,]     0.3379811    0.488341541       1.31674520
## [336,]    -1.0774954   -0.491006434      -0.33927828
## [337,]    -1.0774954   -0.001332446       0.76473737
## [338,]     0.3379811   -0.654231096      -0.61528219
## [339,]     0.3379811    0.488341541       1.31674520
## [340,]     0.3379811    0.161892216       0.76473737
## [341,]    -1.0774954   -0.164557109      -0.61528219
## [342,]     0.3379811    0.651566204       1.59274911
## [343,]    -1.0774954    0.651566204       1.31674520
## [344,]     0.3379811   -0.001332446       0.76473737
## [345,]     0.3379811    1.467689516       0.48873346
## [346,]    -1.0774954   -0.491006434      -0.61528219
## [347,]     0.3379811   -0.327781771      -0.06327437
## [348,]     0.3379811   -1.143905083      -1.16729002
## [349,]     0.3379811   -0.980680421      -1.16729002
## [350,]    -1.0774954   -0.491006434      -0.33927828
## [351,]     0.3379811   -0.654231096      -0.61528219
## [352,]     0.3379811    0.161892216      -1.16729002
## [353,]    -2.4929720   -1.143905083      -1.16729002
## [354,]     0.3379811   -0.001332446       0.76473737
## [355,]     1.7534577   -0.817455758      -0.61528219
## [356,]     0.3379811    0.161892216       0.76473737
## [357,]     0.3379811   -0.980680421      -1.16729002
## [358,]     0.3379811   -0.654231096      -0.61528219
## [359,]     0.3379811   -0.980680421      -1.16729002
## [360,]     0.3379811    0.978015528       1.31674520
## [361,]     0.3379811   -0.654231096      -0.61528219
## [362,]     0.3379811   -0.001332446       0.76473737
## [363,]    -1.0774954   -0.654231096      -0.61528219
## [364,]     0.3379811   -0.980680421      -1.16729002
## [365,]     0.3379811   -0.327781771      -0.06327437
## [366,]     1.7534577   -0.980680421      -1.16729002
## [367,]     0.3379811    0.161892216       0.76473737
## [368,]     0.3379811   -0.491006434      -0.33927828
## [369,]     0.3379811   -0.164557109      -0.06327437
## [370,]     0.3379811   -0.817455758      -0.61528219
## [371,]     0.3379811   -0.980680421      -1.16729002
## [372,]     0.3379811   -0.654231096      -0.61528219
## [373,]     0.3379811   -0.980680421      -0.89128611
## [374,]     0.3379811   -0.327781771      -0.61528219
## [375,]     0.3379811   -0.001332446       0.21272955
## [376,]     0.3379811   -0.327781771      -0.61528219
## [377,]    -1.0774954   -0.001332446       0.76473737
```

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## [378,]      0.3379811   -0.817455758      -0.61528219
## [379,]     -1.0774954   -0.327781771      -0.61528219
## [380,]      0.3379811   -0.327781771      -0.06327437
## [381,]      1.7534577   -0.327781771      -0.61528219
## [382,]      0.3379811   -0.980680421      -1.16729002
## [383,]      0.3379811   -0.164557109      -0.06327437
## [384,]      0.3379811   -0.817455758      -0.89128611
## [385,]      0.3379811    0.488341541       1.31674520
## [386,]      0.3379811   -0.980680421      -1.16729002
## [387,]     -1.0774954    1.794138841       0.76473737
## [388,]      0.3379811   -0.327781771      -0.06327437
## [389,]      0.3379811   -0.327781771      -0.61528219
## [390,]     -1.0774954   -0.980680421      -1.16729002
## [391,]      0.3379811    2.936711478       1.59274911
## [392,]      0.3379811   -0.980680421      -1.16729002
## [393,]     -1.0774954   -0.491006434      -0.61528219
## [394,]      0.3379811   -0.654231096      -0.61528219
## [395,]     -2.4929720    0.978015528       1.59274911
## [396,]      0.3379811   -0.654231096      -0.61528219
## [397,]      0.3379811   -0.327781771      -0.61528219
## [398,]      0.3379811   -0.327781771      -0.06327437
## [399,]      0.3379811    0.978015528       1.86875303
## [400,]      0.3379811   -0.491006434      -0.61528219
## [401,]      0.3379811    2.283812828       1.04074129
## [402,]     -1.0774954   -0.001332446       0.76473737
## [403,]      0.3379811   -0.327781771      -0.06327437
## [404,]      0.3379811    0.488341541       0.76473737
## [405,]      0.3379811    0.488341541      -1.16729002
## [406,]      0.3379811   -0.817455758      -0.61528219
## [407,]      0.3379811   -0.327781771      -0.06327437
## [408,]     -1.0774954   -0.817455758      -0.61528219
## [409,]     -2.4929720   -0.327781771      -0.61528219
## [410,]      0.3379811   -0.327781771      -0.06327437
## [411,]      0.3379811   -0.327781771      -0.06327437
## [412,]     -2.4929720    3.589610128       1.04074129
## [413,]     -1.0774954    0.488341541       0.76473737
## [414,]      1.7534577   -0.164557109       0.21272955
## [415,]      0.3379811   -0.327781771      -0.33927828
## [416,]     -1.0774954   -0.817455758      -0.61528219
## [417,]      0.3379811   -0.980680421      -1.16729002
## [418,]      0.3379811    2.120588166       2.97276868
## [419,]     -2.4929720   -0.654231096      -0.61528219
## [420,]     -2.4929720   -0.327781771      -0.33927828
## [421,]      0.3379811    0.488341541      -0.61528219
## [422,]      1.7534577   -0.817455758      -0.61528219
## [423,]      1.7534577   -0.980680421      -1.16729002
## [424,]      0.3379811    0.325116879       1.04074129
## [425,]     -1.0774954   -0.980680421      -1.16729002
## [426,]      0.3379811    3.263160803       1.59274911
## [427,]     -1.0774954    0.651566204       0.76473737
## [428,]      1.7534577    1.794138841       2.42076085
## [429,]      0.3379811   -0.327781771      -1.16729002
## [430,]     -2.4929720   -0.654231096      -0.61528219
## [431,]      0.3379811   -0.327781771      -0.06327437
```

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## [432,]    0.3379811   -0.980680421    -1.16729002
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## [434,]    0.3379811   -0.654231096    -0.61528219
## [435,]    1.7534577    0.978015528     1.04074129
## [436,]    1.7534577   -0.001332446     0.48873346
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## [438,]    0.3379811   -0.654231096    -0.61528219
## [439,]    0.3379811    0.161892216     0.76473737
## [440,]    0.3379811   -0.980680421    -1.16729002
## [441,]    0.3379811   -0.654231096    -0.61528219
## [442,]    0.3379811   -0.817455758    -0.61528219
## [443,]   -1.0774954    0.488341541    -0.33927828
## [444,]    0.3379811   -0.817455758    -0.61528219
## [445,]    0.3379811    0.325116879     0.76473737
## [446,]    0.3379811    0.488341541     1.31674520
## [447,]    0.3379811    1.141240191    -0.33927828
## [448,]    0.3379811    0.651566204     1.31674520
## [449,]    0.3379811    2.120588166     0.48873346
## [450,]    0.3379811    0.161892216    -0.33927828
## [451,]    1.7534577   -0.164557109     0.21272955
## [452,]   -1.0774954    0.488341541     1.31674520
## [453,]    1.7534577    0.161892216     0.76473737
## [454,]   -1.0774954   -0.001332446     0.76473737
## [455,]    1.7534577   -0.654231096    -0.61528219
## [456,]    0.3379811   -0.164557109    -0.89128611
## [457,]   -1.0774954   -0.327781771    -0.06327437
## [458,]    0.3379811   -1.143905083    -1.16729002
## [459,]    0.3379811   -0.980680421    -1.16729002
## [460,]    0.3379811    0.161892216     0.76473737
## [461,]    0.3379811   -1.143905083    -1.16729002
## [462,]    0.3379811   -0.327781771    -0.06327437
## [463,]    0.3379811    0.488341541     0.76473737
## [464,]   -2.4929720   -0.980680421    -1.16729002
## [465,]    1.7534577   -0.164557109     0.21272955
## [466,]   -1.0774954   -0.817455758    -0.61528219
## [467,]    0.3379811    1.794138841     3.24877259
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## [471,]    0.3379811   -0.817455758    -0.61528219
## [472,]    0.3379811   -0.980680421    -1.16729002
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## [474,]    0.3379811    3.916059453     1.31674520
## [475,]    0.3379811   -0.164557109     0.21272955
## [476,]    1.7534577   -0.327781771    -0.33927828
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## [479,]    0.3379811   -0.001332446    -0.06327437
## [480,]    0.3379811   -0.164557109    -0.33927828
## [481,]    1.7534577   -0.980680421    -1.16729002
## [482,]    0.3379811   -0.164557109     0.21272955
## [483,]   -2.4929720   -0.654231096    -0.89128611
## [484,]    0.3379811   -0.654231096    -0.61528219
## [485,]    1.7534577   -0.001332446     0.76473737
```

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## [486,]    -1.0774954   -0.327781771    -0.33927828
## [487,]    -1.0774954   -0.654231096    -1.16729002
## [488,]     1.7534577   -0.980680421    -1.16729002
## [489,]     0.3379811    0.488341541    -0.61528219
## [490,]    -1.0774954   -0.980680421    -1.16729002
## [491,]    -1.0774954   -1.143905083    -1.16729002
## [492,]     0.3379811    0.161892216     0.76473737
## [493,]    -2.4929720   -0.654231096    -0.61528219
## [494,]     1.7534577   -0.817455758    -0.61528219
## [495,]     0.3379811    0.161892216    -0.61528219
## [496,]     0.3379811   -0.491006434    -0.33927828
## [497,]     0.3379811   -0.654231096    -0.61528219
## [498,]     1.7534577   -0.817455758    -0.61528219
## [499,]     0.3379811   -0.817455758    -0.61528219
## [500,]     0.3379811   -0.327781771    -1.16729002
## [501,]    -1.0774954   -0.164557109    -0.06327437
## [502,]     0.3379811   -0.980680421    -1.16729002
## [503,]     1.7534577    1.141240191     0.76473737
## [504,]    -1.0774954    0.488341541     1.31674520
## [505,]     0.3379811   -0.980680421    -0.89128611
## [506,]     0.3379811   -0.654231096    -0.61528219
## [507,]     0.3379811    0.488341541     0.76473737
## [508,]    -1.0774954   -0.164557109    -1.16729002
## [509,]     0.3379811    1.630914178     1.86875303
## [510,]    -2.4929720    0.978015528     1.86875303
## [511,]     1.7534577    0.325116879     0.76473737
## [512,]     0.3379811   -0.654231096    -0.61528219
## [513,]     0.3379811   -0.491006434    -0.61528219
## [514,]     0.3379811   -0.980680421    -1.16729002
## [515,]     0.3379811    0.488341541     1.04074129
## [516,]     0.3379811   -0.980680421    -1.16729002
## [517,]     1.7534577   -0.654231096    -0.61528219
## [518,]     0.3379811   -0.654231096    -0.61528219
## [519,]     0.3379811   -0.001332446     0.76473737
## [520,]     0.3379811    0.488341541     0.76473737
## [521,]     0.3379811   -0.817455758    -0.61528219
## [522,]     0.3379811   -0.164557109     0.21272955
## [523,]     0.3379811   -0.980680421    -1.16729002
## [524,]     0.3379811    2.120588166     1.04074129
## [525,]     1.7534577    0.161892216     0.76473737
## [526,]     0.3379811   -0.817455758    -0.61528219
## [527,]     0.3379811    2.120588166     0.76473737
## [528,]    -1.0774954    0.488341541     0.76473737
## [529,]     0.3379811   -0.491006434    -0.33927828
## [530,]    -1.0774954    0.325116879     0.76473737
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## [532,]     0.3379811   -0.001332446     0.76473737
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## [535,]     0.3379811   -0.327781771    -0.89128611
## [536,]    -1.0774954    2.283812828     0.48873346
## [537,]     0.3379811   -0.817455758    -0.61528219
## [538,]    -1.0774954    0.325116879     0.76473737
## [539,]     0.3379811    2.447037491     0.76473737
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##    [540,]        0.3379811    -0.817455758        -0.61528219
##    [541,]        0.3379811    -0.001332446         0.76473737
##    [542,]        0.3379811     0.161892216         0.76473737
##    [543,]        1.7534577    -0.980680421        -1.16729002
##    [544,]        0.3379811    -0.327781771        -0.61528219
##    [545,]       -1.0774954     2.447037491        -0.61528219
##    [546,]       -1.0774954     0.161892216         0.76473737
##    [547,]        0.3379811    -0.980680421        -1.16729002
##    [548,]        0.3379811    -0.817455758        -0.61528219
##    [549,]        0.3379811    -0.817455758        -0.61528219
##    [550,]        0.3379811    -0.327781771        -0.89128611
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##    [553,]       -1.0774954     0.488341541         0.76473737
##    [554,]       -1.0774954    -0.491006434        -0.61528219
##    [555,]       -2.4929720    -0.001332446         0.48873346
##    [556,]        0.3379811    -0.817455758        -0.61528219
##    [557,]        0.3379811    -0.817455758        -0.61528219
##    [558,]        1.7534577    -0.980680421        -1.16729002
##    [559,]        0.3379811     0.488341541         1.04074129
##    [560,]       -2.4929720    -0.980680421        -1.16729002
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##    [562,]        1.7534577     4.405733440         0.48873346
##    [563,]       -1.0774954     0.488341541         1.31674520
##    [564,]       -1.0774954    -0.164557109         0.21272955
##    [565,]        0.3379811     0.161892216         0.76473737
##    [566,]        0.3379811    -0.817455758        -0.61528219
##    [567,]        0.3379811    -0.327781771        -0.06327437
##    [568,]        0.3379811    -0.164557109         0.21272955
##    [569,]        0.3379811    -0.327781771        -0.61528219
##    [570,]        0.3379811     0.488341541         0.76473737
##    [571,]        0.3379811    -0.491006434        -0.33927828
##    [572,]        0.3379811    -0.817455758        -0.61528219
##    [573,]       -1.0774954     0.161892216         0.76473737
##    [574,]       -1.0774954    -0.491006434        -0.33927828
##    [575,]        0.3379811    -0.491006434        -0.61528219
##    [576,]        0.3379811    -0.327781771        -0.33927828
##    [577,]        0.3379811    -0.491006434        -0.61528219
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##    [580,]        0.3379811    -0.164557109         0.21272955
##    [581,]       -1.0774954    -0.654231096        -0.61528219
##    [582,]        0.3379811    -0.817455758        -0.61528219
##    [583,]        0.3379811     0.161892216         0.76473737
##    [584,]        0.3379811    -0.654231096        -0.61528219
##    [585,]       -1.0774954     2.773486815         0.76473737
##    [586,]        0.3379811    -1.143905083        -1.16729002
##    [587,]        0.3379811    -0.980680421        -1.16729002
##    [588,]        0.3379811    -0.327781771        -0.61528219
##    [589,]        0.3379811    -0.491006434        -0.33927828
##    [590,]        0.3379811    -0.980680421        -1.16729002
##    [591,]        1.7534577     0.978015528         1.31674520
##    [592,]        0.3379811    -0.654231096        -0.61528219
##    [593,]       -1.0774954     3.099936140         2.69676477
```

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## [594,]      0.3379811    0.325116879     0.76473737
## [595,]      0.3379811    0.488341541     0.76473737
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## [597,]      0.3379811   -0.817455758    -0.61528219
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## [600,]      0.3379811   -0.327781771    -0.61528219
## [601,]      0.3379811    1.141240191     2.42076085
## [602,]      0.3379811   -0.980680421    -1.16729002
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## [605,]     -1.0774954    0.325116879     1.04074129
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## [608,]      1.7534577    0.325116879     1.04074129
## [609,]     -1.0774954    0.325116879     0.76473737
## [610,]      0.3379811   -0.491006434    -0.89128611
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## [612,]      1.7534577    0.161892216     0.21272955
## [613,]      0.3379811    0.161892216     0.76473737
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## [616,]     -1.0774954   -1.143905083    -1.16729002
## [617,]     -1.0774954    2.120588166     0.48873346
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## [621,]     -1.0774954   -0.164557109     0.21272955
## [622,]     -1.0774954    1.794138841     2.69676477
## [623,]     -1.0774954   -0.327781771    -0.61528219
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## [625,]      0.3379811   -0.327781771    -0.61528219
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## [633,]      0.3379811   -0.817455758    -0.89128611
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## [642,]      0.3379811    0.488341541     1.04074129
## [643,]      0.3379811   -0.817455758    -0.61528219
## [644,]     -1.0774954   -0.327781771    -0.33927828
## [645,]      0.3379811   -0.164557109    -0.06327437
## [646,]      0.3379811   -0.654231096    -0.61528219
## [647,]      0.3379811   -0.817455758    -1.16729002
```

```
## [648,]      0.3379811   0.978015528    1.59274911
## [649,]      0.3379811  -0.327781771   -0.06327437
## [650,]      0.3379811   0.814790866    1.31674520
## [651,]     -1.0774954  -0.327781771   -0.61528219
## [652,]      0.3379811  -0.001332446    0.48873346
## [653,]      0.3379811   0.488341541   -1.16729002
## [654,]      0.3379811   3.916059453    0.48873346
## [655,]      0.3379811  -0.327781771   -0.06327437
## [656,]      1.7534577  -0.491006434   -0.33927828
## [657,]     -2.4929720  -0.980680421   -1.16729002
## [658,]      0.3379811  -0.491006434   -0.33927828
## [659,]      0.3379811   0.161892216    0.76473737
## [660,]      0.3379811  -0.491006434   -0.61528219
## [661,]     -1.0774954  -0.980680421   -1.16729002
## [662,]      1.7534577  -0.980680421   -1.16729002
## [663,]     -1.0774954  -0.817455758   -0.61528219
## [664,]     -1.0774954  -0.980680421   -1.16729002
## [665,]     -1.0774954   1.467689516    1.04074129
## [666,]     -1.0774954  -0.654231096   -0.61528219
## [667,]      1.7534577  -0.654231096   -0.61528219
## [668,]     -1.0774954  -0.001332446    0.76473737
## [669,]      0.3379811  -0.817455758   -0.61528219
## [670,]     -2.4929720  -0.817455758   -0.61528219
## [671,]      0.3379811  -0.980680421   -0.89128611
## [672,]      0.3379811  -0.980680421   -1.16729002
## [673,]      0.3379811  -0.327781771   -0.06327437
## [674,]      0.3379811  -0.654231096   -0.61528219
## [675,]      0.3379811  -0.164557109   -1.16729002
## [676,]      1.7534577  -0.001332446    0.76473737
## [677,]     -2.4929720   0.488341541    0.48873346
## [678,]     -1.0774954   3.099936140    1.31674520
## [679,]     -1.0774954  -1.143905083   -1.16729002
## [680,]     -1.0774954   0.325116879    1.04074129
## [681,]      0.3379811  -0.164557109   -0.61528219
## [682,]      0.3379811   1.304464853    2.14475694
## [683,]      0.3379811  -0.654231096   -1.16729002
## [684,]      0.3379811  -0.980680421   -1.16729002
## [685,]     -1.0774954  -0.980680421   -1.16729002
## [686,]      0.3379811  -0.001332446    0.76473737
## [687,]      0.3379811   1.794138841    2.42076085
## [688,]      0.3379811   0.651566204    1.04074129
## [689,]      1.7534577  -0.980680421   -1.16729002
## [690,]      0.3379811  -0.980680421   -1.16729002
## [691,]     -2.4929720   0.325116879    0.76473737
## [692,]      0.3379811  -0.980680421   -0.89128611
## [693,]      1.7534577   0.161892216    0.76473737
## [694,]      0.3379811   1.467689516    0.76473737
## [695,]      0.3379811  -0.327781771   -1.16729002
## [696,]     -2.4929720   1.141240191   -0.89128611
## [697,]     -1.0774954   0.325116879    0.76473737
## [698,]      0.3379811  -0.654231096   -0.89128611
## [699,]      0.3379811  -0.327781771   -0.61528219
## [700,]     -1.0774954   0.325116879    1.04074129
## [701,]      0.3379811  -0.980680421   -1.16729002
```

```
## [702,]      1.7534577    1.630914178     2.42076085
## [703,]      1.7534577    0.161892216    -0.06327437
## [704,]      0.3379811   -0.327781771    -0.33927828
## [705,]      0.3379811    0.488341541     1.31674520
## [706,]      0.3379811    0.161892216     0.76473737
## [707,]     -1.0774954   -0.980680421    -1.16729002
## [708,]      1.7534577    1.957363503     1.59274911
## [709,]      0.3379811   -0.001332446     0.76473737
## [710,]      0.3379811   -0.654231096    -0.61528219
## [711,]      0.3379811    0.488341541     1.04074129
## [712,]      0.3379811   -1.143905083    -1.16729002
## [713,]      0.3379811   -0.654231096    -0.61528219
## [714,]      0.3379811   -0.327781771    -0.33927828
## [715,]     -1.0774954   -0.327781771    -0.06327437
## [716,]      0.3379811   -0.164557109     0.21272955
## [717,]      1.7534577    1.794138841     3.24877259
## [718,]      0.3379811   -0.817455758    -0.61528219
## [719,]      0.3379811    0.325116879     1.04074129
## [720,]      0.3379811    0.325116879    -1.16729002
## [721,]      0.3379811   -0.327781771    -0.61528219
## [722,]      0.3379811    0.814790866     1.86875303
## [723,]     -1.0774954   -0.817455758    -0.89128611
## [724,]      0.3379811    0.161892216     0.76473737
## [725,]      0.3379811   -0.491006434    -0.61528219
## [726,]     -2.4929720   -0.491006434    -0.61528219
## [727,]      0.3379811   -0.491006434    -0.33927828
## [728,]      0.3379811   -1.143905083    -1.16729002
## [729,]      0.3379811    0.488341541     0.76473737
## [730,]     -1.0774954    1.467689516     1.59274911
## [731,]     -1.0774954    0.161892216     0.76473737
## [732,]      0.3379811   -0.980680421    -1.16729002
## [733,]      0.3379811   -0.654231096    -0.61528219
## [734,]      0.3379811    0.161892216     0.76473737
## [735,]     -1.0774954   -0.491006434    -0.33927828
## [736,]      0.3379811   -0.817455758    -0.61528219
## [737,]      0.3379811    1.304464853     1.86875303
## [738,]      0.3379811   -0.817455758    -0.61528219
## [739,]      0.3379811    2.283812828     0.48873346
## [740,]      0.3379811   -0.654231096    -0.61528219
## [741,]     -1.0774954   -0.654231096    -0.61528219
## [742,]      1.7534577   -0.980680421    -1.16729002
## [743,]      0.3379811   -0.980680421    -1.16729002
## [744,]      0.3379811   -0.327781771    -0.33927828
## [745,]     -2.4929720   -0.980680421    -1.16729002
## [746,]      0.3379811    0.161892216     0.76473737
## [747,]      0.3379811    2.283812828     3.24877259
## [748,]      0.3379811   -0.980680421    -1.16729002
## [749,]      0.3379811   -0.817455758    -0.61528219
## [750,]      0.3379811    4.079284115     2.69676477
## [751,]      0.3379811    0.814790866     1.86875303
## [752,]      0.3379811    1.794138841     0.76473737
## [753,]      0.3379811    1.630914178     2.42076085
## [754,]      0.3379811    2.283812828     0.48873346
## [755,]     -1.0774954   -0.817455758    -0.61528219
```

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```
## [756,]      1.7534577     0.325116879       -0.33927828
## [757,]      0.3379811     0.161892216        0.76473737
## [758,]     -1.0774954     1.304464853       -0.89128611
## [759,]     -2.4929720    -0.164557109       -0.06327437
## [760,]      0.3379811    -0.164557109       -0.33927828
## [761,]      0.3379811     1.304464853        0.76473737
## [762,]     -1.0774954    -0.980680421       -1.16729002
## [763,]      0.3379811    -0.654231096       -0.61528219
## [764,]      0.3379811    -0.980680421       -0.89128611
## [765,]      0.3379811    -0.980680421       -1.16729002
## [766,]      0.3379811    -0.817455758       -0.61528219
## [767,]     -1.0774954     0.161892216       -0.89128611
## [768,]     -1.0774954    -0.491006434       -0.33927828
## [769,]     -1.0774954    -0.001332446        0.76473737
## [770,]      0.3379811    -0.327781771       -0.33927828
## [771,]      0.3379811    -0.817455758       -0.61528219
## [772,]      0.3379811     0.325116879       -0.06327437
## [773,]      0.3379811    -0.327781771       -0.06327437
## [774,]     -1.0774954     1.141240191        1.04074129
## [775,]      1.7534577     0.325116879        0.76473737
## [776,]      0.3379811    -0.980680421       -1.16729002
## [777,]      0.3379811    -0.817455758       -0.61528219
## [778,]     -1.0774954    -0.980680421       -1.16729002
## [779,]      0.3379811     1.467689516        2.42076085
## [780,]      1.7534577     0.488341541       -1.16729002
## [781,]     -1.0774954     0.488341541        0.76473737
## [782,]      0.3379811    -0.327781771       -0.33927828
## [783,]     -1.0774954    -0.164557109       -0.61528219
## [784,]      0.3379811     0.488341541        0.48873346
## [785,]     -1.0774954     1.957363503        1.31674520
## [786,]      0.3379811     0.651566204        1.59274911
## [787,]      0.3379811    -0.654231096       -0.61528219
## [788,]      0.3379811    -0.654231096       -0.61528219
## [789,]      1.7534577     0.161892216        0.76473737
## [790,]      0.3379811     2.120588166        0.48873346
## [791,]      0.3379811    -0.654231096       -0.61528219
## [792,]      0.3379811     0.161892216        0.76473737
## [793,]      0.3379811     0.978015528        0.76473737
## [794,]     -1.0774954    -0.491006434       -0.61528219
## [795,]     -1.0774954    -0.164557109       -0.61528219
## [796,]      0.3379811    -0.980680421       -1.16729002
## [797,]      1.7534577    -0.001332446        0.76473737
## [798,]     -1.0774954    -0.980680421       -0.89128611
## [799,]      0.3379811    -0.817455758       -0.61528219
## [800,]      0.3379811     2.447037491        0.48873346
## [801,]      0.3379811    -0.980680421       -1.16729002
## [802,]      0.3379811    -1.143905083       -1.16729002
## [803,]      0.3379811    -0.654231096       -0.61528219
## [804,]      0.3379811    -1.143905083       -1.16729002
## [805,]     -1.0774954    -0.327781771       -0.06327437
## [806,]      0.3379811     1.304464853        1.59274911
## [807,]      0.3379811     0.161892216        0.48873346
## [808,]      0.3379811     0.161892216        0.76473737
## [809,]      0.3379811    -0.001332446        0.21272955
```

```
## [810,]    -1.0774954    0.325116879     0.76473737
## [811,]     0.3379811    0.814790866     1.31674520
## [812,]     0.3379811   -0.980680421    -1.16729002
## [813,]     0.3379811    0.161892216     0.76473737
## [814,]     0.3379811    1.794138841     0.76473737
## [815,]     1.7534577    2.120588166     0.76473737
## [816,]     1.7534577   -0.817455758    -0.61528219
## [817,]    -1.0774954   -0.327781771    -0.06327437
## [818,]     0.3379811    0.651566204     1.31674520
## [819,]     0.3379811   -0.817455758    -0.61528219
## [820,]    -2.4929720   -0.327781771    -0.33927828
## [821,]     0.3379811   -0.327781771    -0.61528219
## [822,]     0.3379811    0.325116879     1.04074129
## [823,]    -1.0774954   -0.654231096    -0.61528219
## [824,]    -1.0774954   -0.001332446     0.21272955
## [825,]     0.3379811   -0.980680421    -1.16729002
## [826,]    -1.0774954    0.488341541     0.76473737
## [827,]     1.7534577   -0.001332446     0.48873346
## [828,]     0.3379811   -0.654231096    -0.89128611
## [829,]     0.3379811   -1.143905083    -1.16729002
## [830,]     0.3379811   -0.327781771    -0.61528219
## [831,]     0.3379811   -0.980680421    -1.16729002
## [832,]    -1.0774954   -0.817455758    -0.61528219
## [833,]     0.3379811   -0.164557109    -0.61528219
## [834,]     0.3379811   -0.491006434    -0.61528219
## [835,]    -1.0774954   -0.164557109     0.21272955
## [836,]    -2.4929720   -0.327781771    -0.06327437
## [837,]    -2.4929720    0.651566204     1.04074129
## [838,]    -1.0774954    1.794138841     0.76473737
## [839,]    -1.0774954    2.283812828     1.31674520
## [840,]     1.7534577   -0.164557109    -0.06327437
## [841,]     0.3379811    0.161892216    -1.16729002
## [842,]     0.3379811   -0.491006434    -0.33927828
## [843,]    -1.0774954   -0.980680421    -0.89128611
## [844,]     0.3379811    0.161892216     0.76473737
## [845,]     0.3379811    0.488341541    -0.33927828
## [846,]    -2.4929720   -0.980680421    -0.89128611
## [847,]     1.7534577   -0.001332446     0.76473737
## [848,]     0.3379811    0.978015528     1.31674520
## [849,]     1.7534577   -0.817455758    -0.61528219
## [850,]    -1.0774954   -0.491006434    -0.33927828
## [851,]     0.3379811   -0.980680421    -1.16729002
## [852,]     0.3379811   -0.327781771    -0.61528219
## [853,]     0.3379811    0.488341541     1.04074129
## [854,]     0.3379811   -0.980680421    -0.89128611
## [855,]    -1.0774954   -0.654231096    -0.61528219
## [856,]    -1.0774954    1.141240191     1.04074129
## [857,]    -1.0774954   -0.817455758    -0.61528219
## [858,]     0.3379811   -0.164557109    -0.06327437
## [859,]     0.3379811   -0.001332446     0.76473737
## [860,]    -1.0774954   -0.327781771    -0.06327437
## [861,]     0.3379811   -1.143905083    -1.16729002
## [862,]     0.3379811    3.099936140     2.97276868
## [863,]     0.3379811   -1.143905083    -1.16729002
```

```
## [864,]     0.3379811   -0.327781771   -0.06327437
## [865,]    -2.4929720   -0.980680421   -1.16729002
## [866,]     0.3379811   -0.491006434   -0.33927828
## [867,]     0.3379811   -1.143905083   -1.16729002
## [868,]     0.3379811   -0.817455758   -0.61528219
## [869,]     0.3379811   -0.164557109    0.21272955
## [870,]     0.3379811   -0.491006434   -0.61528219
## [871,]     0.3379811   -0.001332446    0.76473737
## [872,]    -2.4929720   -0.980680421   -1.16729002
## [873,]    -1.0774954    0.488341541    0.76473737
## [874,]     0.3379811   -0.001332446    0.76473737
## [875,]    -1.0774954    0.488341541    0.76473737
## [876,]     0.3379811    2.120588166    1.86875303
## [877,]     0.3379811   -0.817455758   -0.89128611
## [878,]    -1.0774954   -0.164557109   -0.33927828
## [879,]     1.7534577   -0.491006434   -0.33927828
## [880,]     0.3379811    0.651566204    0.76473737
## [881,]     0.3379811   -0.817455758   -0.61528219
## [882,]     0.3379811    0.161892216    0.76473737
## [883,]     0.3379811   -0.001332446    0.76473737
## [884,]     0.3379811    1.141240191    1.59274911
## [885,]     1.7534577   -0.327781771   -0.89128611
## [886,]     0.3379811   -0.491006434   -0.33927828
## [887,]     0.3379811    0.651566204    1.31674520
## [888,]     0.3379811   -0.980680421   -1.16729002
## [889,]    -1.0774954    0.978015528   -0.61528219
## [890,]    -1.0774954    0.325116879    0.76473737
## [891,]    -2.4929720   -0.327781771   -0.06327437
## [892,]     0.3379811    0.488341541    0.21272955
## [893,]     1.7534577   -0.980680421   -0.89128611
## [894,]     0.3379811   -0.654231096   -0.61528219
## [895,]     0.3379811    0.488341541    1.31674520
## [896,]    -1.0774954   -0.164557109    0.21272955
## [897,]     0.3379811    0.488341541    1.31674520
## [898,]     0.3379811   -0.164557109   -0.89128611
## [899,]     0.3379811    0.161892216    0.76473737
## [900,]     1.7534577   -0.980680421   -1.16729002
## [901,]    -1.0774954    0.651566204    1.59274911
## [902,]    -1.0774954   -0.980680421   -1.16729002
## [903,]     0.3379811   -0.327781771   -0.33927828
## [904,]     0.3379811   -0.164557109   -1.16729002
## [905,]     1.7534577   -0.980680421   -1.16729002
## [906,]    -1.0774954   -0.001332446    0.76473737
## [907,]    -1.0774954   -0.980680421   -1.16729002
## [908,]     0.3379811    2.447037491    1.31674520
## [909,]     0.3379811    0.325116879    1.04074129
## [910,]     0.3379811   -0.980680421   -1.16729002
## [911,]     0.3379811   -0.980680421   -1.16729002
## [912,]     0.3379811   -0.980680421   -1.16729002
## [913,]    -1.0774954    0.161892216    0.21272955
## [914,]     0.3379811    2.773486815    1.59274911
## [915,]     0.3379811    4.242508778    1.31674520
## [916,]    -2.4929720   -0.817455758   -0.61528219
## [917,]     0.3379811    0.651566204   -0.06327437
```

```
## [918,]    0.3379811  -0.654231096   -0.61528219
## [919,]   -1.0774954   3.589610128    1.59274911
## [920,]   -1.0774954   0.325116879    0.76473737
## [921,]    1.7534577   0.651566204    1.04074129
## [922,]   -1.0774954  -0.491006434   -0.61528219
## [923,]   -1.0774954   2.936711478    1.31674520
## [924,]    1.7534577   0.488341541    1.31674520
## [925,]    0.3379811  -0.654231096   -0.61528219
## [926,]    0.3379811  -0.980680421   -1.16729002
## [927,]    1.7534577   2.283812828    0.76473737
## [928,]    0.3379811   1.467689516    2.69676477
## [929,]    0.3379811   0.488341541    0.76473737
## [930,]    0.3379811  -0.817455758   -0.61528219
## [931,]   -1.0774954  -0.001332446   -1.16729002
## [932,]    0.3379811   0.161892216   -0.06327437
## [933,]    0.3379811  -0.001332446    0.76473737
## [934,]   -1.0774954  -0.654231096   -0.61528219
## [935,]   -1.0774954  -0.817455758   -0.61528219
## [936,]    1.7534577   0.488341541    0.76473737
## [937,]    0.3379811  -1.143905083   -1.16729002
## [938,]    0.3379811   1.957363503    1.31674520
## [939,]    0.3379811  -0.817455758   -0.61528219
## [940,]    0.3379811   0.488341541   -0.06327437
## [941,]    0.3379811  -0.327781771   -0.61528219
## [942,]    0.3379811   0.325116879   -0.61528219
## [943,]    0.3379811  -0.001332446    0.76473737
## [944,]    1.7534577  -0.001332446    0.48873346
## [945,]    0.3379811   0.325116879    1.04074129
## [946,]    0.3379811  -0.654231096   -0.61528219
## [947,]    0.3379811  -0.327781771   -0.06327437
## [948,]   -1.0774954   0.161892216    0.76473737
## [949,]    0.3379811   0.325116879   -0.89128611
## [950,]    0.3379811   0.161892216    0.76473737
## [951,]   -1.0774954   0.488341541    1.04074129
## [952,]    0.3379811   1.957363503   -0.61528219
## [953,]    1.7534577  -0.654231096   -0.61528219
## [954,]    1.7534577  -0.654231096   -0.61528219
## [955,]   -1.0774954   2.120588166    1.04074129
## [956,]    0.3379811   1.957363503    1.31674520
## [957,]    0.3379811  -0.001332446   -0.33927828
## [958,]    0.3379811  -0.491006434   -0.61528219
## [959,]   -1.0774954   0.325116879    0.76473737
## [960,]    0.3379811   0.325116879    1.04074129
## [961,]    0.3379811   0.325116879   -0.33927828
## [962,]    0.3379811   0.325116879    0.48873346
## [963,]    0.3379811   4.242508778    1.31674520
## [964,]    0.3379811  -0.001332446    0.76473737
## [965,]    1.7534577   0.488341541    1.04074129
## [966,]   -1.0774954  -0.654231096   -0.61528219
## [967,]   -1.0774954   0.488341541    1.31674520
## [968,]    0.3379811  -0.491006434   -0.61528219
## [969,]   -1.0774954   1.304464853    0.76473737
## [970,]    0.3379811   0.488341541    1.31674520
## [971,]    0.3379811  -0.980680421   -1.16729002
```

```
## [972,]    -1.0774954   -0.327781771   -0.61528219
## [973,]     1.7534577   -1.143905083   -1.16729002
## [974,]     0.3379811    0.325116879    0.76473737
## [975,]     0.3379811   -0.164557109   -0.61528219
## [976,]    -1.0774954    1.957363503    0.76473737
## [977,]     0.3379811    1.957363503    3.24877259
## [978,]     0.3379811   -0.327781771   -0.06327437
## [979,]     0.3379811    0.814790866    1.86875303
## [980,]     0.3379811    0.161892216    0.76473737
## [981,]     1.7534577   -0.980680421   -1.16729002
## [982,]    -1.0774954   -0.491006434   -0.61528219
## [983,]     0.3379811   -0.491006434   -0.61528219
## [984,]     1.7534577    1.141240191    1.86875303
## [985,]     0.3379811   -0.327781771   -0.33927828
## [986,]    -1.0774954    0.488341541   -0.61528219
## [987,]     1.7534577   -0.327781771   -0.06327437
## [988,]     0.3379811   -0.491006434   -0.61528219
## [989,]    -1.0774954   -0.164557109   -0.61528219
## [990,]     0.3379811   -0.164557109   -0.06327437
## [991,]     1.7534577   -0.327781771   -0.06327437
## [992,]    -1.0774954   -0.654231096   -0.61528219
## [993,]     0.3379811   -0.164557109   -0.06327437
## [994,]    -1.0774954   -0.654231096   -0.61528219
## [995,]    -1.0774954   -0.327781771   -0.33927828
## [996,]    -2.4929720    2.120588166    0.76473737
## [997,]     0.3379811   -0.164557109   -0.61528219
## [998,]     0.3379811    0.161892216   -0.61528219
## [999,]     0.3379811   -0.491006434   -0.33927828
## [1000,]    0.3379811    2.120588166    0.76473737
## [1001,]   -2.4929720   -0.327781771   -0.06327437
## [1002,]    0.3379811   -0.654231096   -0.61528219
## [1003,]    0.3379811   -0.817455758   -0.61528219
## [1004,]   -1.0774954   -0.654231096   -0.61528219
## [1005,]    0.3379811   -0.001332446    0.76473737
## [1006,]   -1.0774954    0.488341541    1.31674520
## [1007,]    0.3379811   -0.491006434   -0.33927828
## [1008,]    0.3379811    0.161892216    0.76473737
## [1009,]   -1.0774954    2.120588166    0.76473737
## [1010,]    0.3379811    0.325116879    1.04074129
## [1011,]    1.7534577   -0.001332446    0.76473737
## [1012,]    0.3379811   -0.327781771   -0.06327437
## [1013,]    0.3379811   -0.980680421   -1.16729002
## [1014,]    0.3379811   -0.654231096   -0.61528219
## [1015,]    1.7534577   -0.654231096   -0.61528219
## [1016,]    0.3379811   -0.491006434   -0.33927828
## [1017,]    1.7534577   -0.980680421   -1.16729002
## [1018,]    1.7534577   -0.327781771   -1.16729002
## [1019,]   -1.0774954    0.488341541   -0.06327437
## [1020,]   -1.0774954   -0.654231096   -0.61528219
## [1021,]   -1.0774954   -0.164557109    0.21272955
## [1022,]    0.3379811   -0.654231096   -0.61528219
## [1023,]   -2.4929720   -0.164557109    0.21272955
## [1024,]    1.7534577   -0.654231096   -0.61528219
## [1025,]    1.7534577    2.120588166    3.52477651
```

```
## [1026,]     0.3379811   -0.327781771   -0.06327437
## [1027,]    -1.0774954   -0.491006434   -0.33927828
## [1028,]    -1.0774954   -0.327781771   -0.06327437
## [1029,]    -1.0774954   -0.491006434   -0.61528219
## [1030,]     1.7534577    0.161892216    0.76473737
## [1031,]     0.3379811    0.978015528    0.76473737
## [1032,]     1.7534577   -0.001332446    0.76473737
## [1033,]     1.7534577   -0.980680421   -1.16729002
## [1034,]     0.3379811    0.488341541    1.04074129
## [1035,]     0.3379811   -0.001332446    0.76473737
## [1036,]     0.3379811   -0.654231096   -0.61528219
## [1037,]    -2.4929720   -0.817455758   -0.61528219
## [1038,]     1.7534577   -0.654231096   -0.89128611
## [1039,]     0.3379811   -0.817455758   -0.61528219
## [1040,]     0.3379811   -0.817455758   -0.61528219
## [1041,]     0.3379811    0.325116879    1.04074129
## [1042,]     0.3379811   -0.327781771   -0.06327437
## [1043,]     0.3379811   -0.327781771   -0.61528219
## [1044,]    -1.0774954    0.325116879    1.04074129
## [1045,]    -1.0774954   -0.654231096   -0.61528219
## [1046,]     1.7534577   -0.654231096   -0.89128611
## [1047,]    -1.0774954   -0.327781771   -0.61528219
## [1048,]     0.3379811   -0.491006434   -0.33927828
## [1049,]     0.3379811    0.978015528    1.31674520
## [1050,]    -1.0774954   -0.817455758   -0.89128611
## [1051,]     0.3379811    0.814790866    1.31674520
## [1052,]    -1.0774954   -0.980680421   -1.16729002
## [1053,]    -1.0774954   -0.980680421   -1.16729002
## [1054,]    -1.0774954    0.814790866    1.31674520
## [1055,]     0.3379811    0.161892216    0.76473737
## [1056,]    -1.0774954    1.141240191    1.04074129
## [1057,]     1.7534577   -0.654231096   -0.61528219
## [1058,]    -2.4929720   -0.327781771   -0.33927828
## [1059,]     1.7534577    1.304464853    1.31674520
## [1060,]     0.3379811   -0.980680421   -1.16729002
## [1061,]    -1.0774954   -1.143905083   -1.16729002
## [1062,]     0.3379811   -0.980680421   -1.16729002
## [1063,]    -1.0774954   -0.817455758   -0.61528219
## [1064,]     0.3379811    0.488341541    0.76473737
## [1065,]     1.7534577   -0.327781771   -0.33927828
## [1066,]     0.3379811   -0.654231096   -0.61528219
## [1067,]     0.3379811   -0.327781771   -0.06327437
## [1068,]    -1.0774954   -0.327781771   -0.06327437
## [1069,]    -1.0774954   -1.143905083   -1.16729002
## [1070,]    -2.4929720   -0.980680421   -1.16729002
## [1071,]     0.3379811   -0.491006434   -0.61528219
## [1072,]     0.3379811   -0.654231096   -0.61528219
## [1073,]     0.3379811   -0.654231096   -0.61528219
## [1074,]    -1.0774954    0.161892216    0.48873346
## [1075,]     0.3379811   -1.143905083   -1.16729002
## [1076,]     1.7534577   -0.327781771   -0.61528219
## [1077,]     0.3379811    1.141240191    1.31674520
## [1078,]    -2.4929720    0.325116879    0.76473737
## [1079,]     1.7534577    2.120588166    0.48873346
```

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## [1080,]     0.3379811  -0.817455758   -1.16729002
## [1081,]     1.7534577   0.978015528    2.14475694
## [1082,]    -2.4929720   0.651566204    1.04074129
## [1083,]     0.3379811  -0.491006434   -0.33927828
## [1084,]    -2.4929720  -0.327781771   -0.06327437
## [1085,]     0.3379811   0.488341541    1.31674520
## [1086,]    -2.4929720  -0.001332446   -0.61528219
## [1087,]     0.3379811   4.079284115    0.48873346
## [1088,]     0.3379811   0.651566204    1.59274911
## [1089,]     0.3379811  -0.980680421   -1.16729002
## [1090,]     0.3379811   0.488341541    1.04074129
## [1091,]     0.3379811  -0.001332446    0.76473737
## [1092,]     0.3379811  -0.327781771   -0.33927828
## [1093,]     0.3379811  -0.327781771   -0.06327437
## [1094,]    -2.4929720   2.120588166    1.04074129
## [1095,]     1.7534577   0.161892216   -0.06327437
## [1096,]     0.3379811   1.304464853    2.69676477
## [1097,]     0.3379811   2.283812828    0.76473737
## [1098,]     0.3379811  -0.980680421   -0.89128611
## [1099,]     0.3379811  -0.817455758   -0.61528219
## [1100,]     0.3379811   0.488341541    1.04074129
## [1101,]     0.3379811  -0.327781771   -0.33927828
## [1102,]     0.3379811  -0.001332446   -0.89128611
## [1103,]    -1.0774954  -0.654231096   -0.61528219
## [1104,]     0.3379811   0.161892216    0.76473737
## [1105,]    -1.0774954  -0.980680421   -1.16729002
## [1106,]    -2.4929720  -0.817455758   -0.61528219
## [1107,]     0.3379811   0.488341541    1.04074129
## [1108,]     0.3379811  -0.164557109   -0.33927828
## [1109,]     0.3379811  -0.654231096   -1.16729002
## [1110,]     0.3379811  -0.491006434   -0.61528219
## [1111,]     0.3379811  -0.980680421   -1.16729002
## [1112,]     0.3379811   4.242508778    0.76473737
## [1113,]     0.3379811  -0.327781771   -0.61528219
## [1114,]    -1.0774954  -0.164557109    0.21272955
## [1115,]    -1.0774954   0.161892216   -0.61528219
## [1116,]    -2.4929720  -0.980680421   -1.16729002
## [1117,]     0.3379811   4.732182765    0.48873346
## [1118,]    -1.0774954  -0.817455758   -0.61528219
## [1119,]     0.3379811  -0.980680421   -1.16729002
## [1120,]     0.3379811   0.325116879    1.04074129
## [1121,]     1.7534577  -0.654231096   -0.61528219
## [1122,]     0.3379811  -0.980680421   -1.16729002
## [1123,]     0.3379811   0.488341541    1.31674520
## [1124,]     0.3379811  -0.327781771   -0.61528219
## [1125,]     0.3379811  -0.001332446    0.48873346
## [1126,]     1.7534577  -0.164557109   -0.06327437
## [1127,]     0.3379811  -0.980680421   -1.16729002
## [1128,]     0.3379811  -0.817455758   -0.61528219
## [1129,]     0.3379811  -0.654231096   -0.61528219
## [1130,]     0.3379811  -0.980680421   -1.16729002
## [1131,]    -1.0774954   0.488341541    1.31674520
## [1132,]    -1.0774954   0.161892216   -0.61528219
## [1133,]     0.3379811  -0.327781771   -0.06327437
```

```
## [1134,]     0.3379811   -0.164557109    -0.06327437
## [1135,]    -1.0774954   -0.980680421    -1.16729002
## [1136,]    -2.4929720    3.099936140    -1.16729002
## [1137,]     0.3379811   -0.980680421    -0.89128611
## [1138,]    -1.0774954   -0.491006434    -0.61528219
## [1139,]     0.3379811    3.752834790     1.04074129
## [1140,]     0.3379811   -0.654231096    -0.61528219
## [1141,]    -1.0774954    2.447037491     0.76473737
## [1142,]    -1.0774954   -0.164557109    -0.06327437
## [1143,]     0.3379811    0.488341541     0.76473737
## [1144,]     0.3379811    0.488341541     0.76473737
## [1145,]     0.3379811   -0.327781771    -0.61528219
## [1146,]     0.3379811   -0.654231096    -0.61528219
## [1147,]     0.3379811    0.325116879     0.76473737
## [1148,]    -1.0774954    0.325116879     0.48873346
## [1149,]     0.3379811   -0.001332446     0.76473737
## [1150,]     0.3379811   -0.001332446     0.76473737
## [1151,]     0.3379811    1.467689516     2.97276868
## [1152,]    -1.0774954   -0.327781771    -0.33927828
## [1153,]     0.3379811   -0.817455758    -0.61528219
## [1154,]     1.7534577   -1.143905083    -1.16729002
## [1155,]     0.3379811   -0.327781771    -0.61528219
## [1156,]     0.3379811    0.488341541     1.04074129
## [1157,]     0.3379811    1.794138841     2.97276868
## [1158,]     0.3379811    1.141240191     1.86875303
## [1159,]    -1.0774954   -0.491006434    -0.33927828
## [1160,]    -2.4929720    0.325116879    -0.61528219
## [1161,]     0.3379811    0.488341541     0.76473737
## [1162,]     1.7534577   -0.327781771    -0.06327437
## [1163,]     0.3379811    0.978015528     2.14475694
## [1164,]    -2.4929720    0.161892216    -0.06327437
## [1165,]    -1.0774954   -0.491006434    -0.61528219
## [1166,]     0.3379811    0.488341541     0.76473737
## [1167,]     0.3379811   -0.817455758    -0.61528219
## [1168,]    -1.0774954   -0.817455758    -0.61528219
## [1169,]     0.3379811   -0.164557109    -0.33927828
## [1170,]     0.3379811   -0.654231096    -0.61528219
## [1171,]    -1.0774954   -0.491006434    -0.61528219
## [1172,]    -2.4929720   -0.491006434    -0.61528219
## [1173,]     0.3379811   -0.327781771    -0.61528219
## [1174,]     0.3379811   -0.654231096    -0.61528219
## [1175,]     0.3379811   -0.001332446     0.76473737
## [1176,]     0.3379811   -0.327781771    -0.06327437
## [1177,]     0.3379811   -0.491006434    -0.61528219
## [1178,]     0.3379811    1.141240191     1.86875303
## [1179,]     0.3379811   -0.817455758    -0.61528219
## [1180,]     0.3379811    0.651566204     1.04074129
## [1181,]     0.3379811   -0.491006434    -0.33927828
## [1182,]     0.3379811    1.304464853     1.86875303
## [1183,]     0.3379811   -0.654231096    -0.61528219
## [1184,]     0.3379811   -0.327781771    -0.06327437
## [1185,]     0.3379811    0.488341541     1.04074129
## [1186,]     0.3379811    1.141240191     1.59274911
## [1187,]     1.7534577    0.651566204     1.31674520
```

```
## [1188,]      1.7534577     0.978015528       1.86875303
## [1189,]     -1.0774954     0.488341541      -1.16729002
## [1190,]      0.3379811    -0.164557109      -0.61528219
## [1191,]     -1.0774954     0.325116879       0.21272955
## [1192,]      0.3379811     0.488341541      -1.16729002
## [1193,]     -1.0774954    -0.817455758      -0.61528219
## [1194,]      0.3379811    -0.491006434      -0.33927828
## [1195,]      0.3379811    -0.654231096      -0.61528219
## [1196,]      0.3379811     0.161892216       0.76473737
## [1197,]      0.3379811    -0.817455758      -1.16729002
## [1198,]      0.3379811    -0.817455758      -0.61528219
## [1199,]      0.3379811    -0.164557109       0.21272955
## [1200,]     -1.0774954    -0.654231096      -0.61528219
## [1201,]      0.3379811    -0.817455758      -0.61528219
## [1202,]      0.3379811    -0.327781771      -0.06327437
## [1203,]     -1.0774954    -1.143905083      -1.16729002
## [1204,]      0.3379811    -0.491006434      -0.33927828
## [1205,]      0.3379811     0.325116879       0.76473737
## [1206,]      0.3379811    -0.980680421      -1.16729002
## [1207,]      0.3379811    -0.001332446       0.76473737
## [1208,]      0.3379811    -0.491006434      -0.61528219
## [1209,]      1.7534577     1.304464853       1.59274911
## [1210,]      1.7534577    -0.980680421      -1.16729002
## [1211,]      0.3379811     1.141240191       1.86875303
## [1212,]     -1.0774954    -0.164557109      -0.33927828
## [1213,]      0.3379811     0.488341541       1.31674520
## [1214,]      0.3379811    -0.654231096      -0.61528219
## [1215,]      0.3379811     0.161892216       0.76473737
## [1216,]      1.7534577    -0.327781771      -0.06327437
## [1217,]      0.3379811     0.488341541       1.31674520
## [1218,]      0.3379811    -0.327781771      -0.33927828
## [1219,]      0.3379811     0.488341541       1.04074129
## [1220,]      0.3379811    -0.327781771      -0.33927828
## [1221,]     -1.0774954     0.978015528       0.76473737
## [1222,]     -1.0774954     2.610262153       2.97276868
## [1223,]      0.3379811    -0.980680421      -1.16729002
## [1224,]     -2.4929720     2.610262153       0.21272955
## [1225,]      1.7534577    -0.654231096      -0.61528219
## [1226,]      0.3379811     2.283812828       0.48873346
## [1227,]     -1.0774954    -0.327781771      -0.61528219
## [1228,]      1.7534577    -0.327781771      -0.61528219
## [1229,]      0.3379811    -0.654231096      -0.61528219
## [1230,]      0.3379811    -0.980680421      -1.16729002
## [1231,]      1.7534577    -0.164557109      -0.61528219
## [1232,]      0.3379811     0.488341541       0.76473737
## [1233,]      0.3379811    -0.001332446       0.76473737
## [1234,]     -1.0774954     0.488341541      -1.16729002
## [1235,]     -2.4929720    -0.980680421      -1.16729002
## [1236,]     -1.0774954     0.488341541       0.48873346
## [1237,]      0.3379811    -0.817455758      -0.61528219
## [1238,]      0.3379811    -1.143905083      -1.16729002
## [1239,]     -2.4929720    -0.654231096      -0.61528219
## [1240,]     -1.0774954    -0.327781771      -0.06327437
## [1241,]      0.3379811     0.325116879       1.04074129
```

```
## [1242,]        -2.4929720     -0.491006434        -0.33927828
## [1243,]        -1.0774954      2.283812828         1.04074129
## [1244,]         1.7534577     -0.327781771        -1.16729002
## [1245,]         0.3379811      0.325116879         0.76473737
## [1246,]         0.3379811     -0.817455758        -0.61528219
## [1247,]        -1.0774954     -0.491006434        -0.61528219
## [1248,]         0.3379811     -0.327781771        -0.61528219
## [1249,]        -1.0774954     -0.164557109        -0.61528219
## [1250,]         0.3379811     -0.817455758        -0.61528219
## [1251,]         1.7534577     -0.654231096        -0.61528219
## [1252,]         0.3379811     -0.001332446         0.76473737
## [1253,]         0.3379811     -0.327781771        -1.16729002
## [1254,]        -1.0774954      0.651566204         0.76473737
## [1255,]         1.7534577     -0.327781771        -0.89128611
## [1256,]        -1.0774954     -1.143905083        -1.16729002
## [1257,]        -1.0774954     -0.164557109        -0.89128611
## [1258,]         0.3379811     -0.980680421        -1.16729002
## [1259,]         0.3379811     -0.980680421        -1.16729002
## [1260,]         0.3379811     -0.001332446        -1.16729002
## [1261,]         0.3379811     -0.001332446         0.76473737
## [1262,]         0.3379811     -0.980680421        -1.16729002
## [1263,]         0.3379811     -0.980680421        -1.16729002
## [1264,]        -1.0774954     -0.327781771        -0.33927828
## [1265,]         0.3379811     -0.980680421        -1.16729002
## [1266,]        -1.0774954      0.325116879         1.04074129
## [1267,]         0.3379811     -0.327781771        -0.33927828
## [1268,]         0.3379811      1.304464853         2.69676477
## [1269,]        -1.0774954     -0.654231096        -0.61528219
## [1270,]         0.3379811      0.325116879         0.76473737
## [1271,]         0.3379811     -0.817455758        -0.61528219
## [1272,]         0.3379811     -0.980680421        -1.16729002
## [1273,]         0.3379811     -0.327781771        -0.06327437
## [1274,]         0.3379811     -0.980680421        -1.16729002
## [1275,]         0.3379811      0.814790866         0.76473737
## [1276,]         0.3379811     -0.817455758        -0.61528219
## [1277,]         0.3379811     -0.327781771        -0.61528219
## [1278,]         0.3379811     -0.817455758        -0.89128611
## [1279,]         0.3379811      0.814790866         1.04074129
## [1280,]        -1.0774954     -0.327781771        -0.33927828
## [1281,]        -1.0774954      0.488341541        -1.16729002
## [1282,]         0.3379811      0.488341541         0.76473737
## [1283,]         0.3379811      0.488341541         1.04074129
## [1284,]         1.7534577     -0.327781771        -0.33927828
## [1285,]         0.3379811     -0.491006434        -0.33927828
## [1286,]         0.3379811     -0.817455758        -0.61528219
## [1287,]        -1.0774954     -0.491006434        -0.33927828
## [1288,]        -1.0774954     -1.143905083        -1.16729002
## [1289,]         0.3379811     -0.001332446         0.76473737
## [1290,]         0.3379811      0.651566204         1.59274911
## [1291,]        -1.0774954     -0.001332446        -0.89128611
## [1292,]        -2.4929720      0.488341541        -0.33927828
## [1293,]         0.3379811     -0.817455758        -0.89128611
## [1294,]        -1.0774954     -0.654231096        -0.61528219
## [1295,]        -2.4929720     -0.654231096        -0.61528219
```

```
## [1296,]      1.7534577    2.447037491       2.69676477
## [1297,]      0.3379811   -0.001332446       0.76473737
## [1298,]      0.3379811   -0.327781771      -0.89128611
## [1299,]      1.7534577    0.325116879       0.76473737
## [1300,]      0.3379811   -0.327781771      -0.33927828
## [1301,]      0.3379811    0.488341541       1.04074129
## [1302,]     -1.0774954    1.467689516       1.31674520
## [1303,]      1.7534577   -0.327781771      -0.06327437
## [1304,]      0.3379811    2.447037491       1.86875303
## [1305,]      0.3379811   -0.001332446      -0.06327437
## [1306,]     -1.0774954   -0.001332446      -0.89128611
## [1307,]      0.3379811   -0.654231096      -0.61528219
## [1308,]      0.3379811   -0.654231096      -0.61528219
## [1309,]     -1.0774954   -0.491006434      -0.61528219
## [1310,]      0.3379811   -0.327781771      -0.33927828
## [1311,]      0.3379811   -0.817455758      -0.61528219
## [1312,]     -2.4929720   -1.143905083      -1.16729002
## [1313,]      0.3379811   -0.980680421      -1.16729002
## [1314,]      0.3379811   -0.817455758      -0.61528219
## [1315,]      1.7534577    0.161892216       0.76473737
## [1316,]      0.3379811   -0.980680421      -1.16729002
## [1317,]      0.3379811   -0.001332446       0.76473737
## [1318,]     -1.0774954   -0.327781771      -0.06327437
## [1319,]      1.7534577    0.651566204       1.04074129
## [1320,]      1.7534577   -1.143905083      -1.16729002
## [1321,]     -1.0774954   -0.164557109      -0.33927828
## [1322,]      0.3379811   -0.817455758      -0.61528219
## [1323,]     -1.0774954    0.325116879       1.04074129
## [1324,]      0.3379811   -0.654231096      -0.61528219
## [1325,]      0.3379811   -0.001332446      -1.16729002
## [1326,]      0.3379811   -1.143905083      -1.16729002
## [1327,]     -1.0774954   -0.817455758      -0.61528219
## [1328,]      0.3379811    1.957363503       3.52477651
## [1329,]      0.3379811    0.325116879       1.04074129
## [1330,]      0.3379811   -0.980680421      -1.16729002
## [1331,]      0.3379811    1.467689516       2.14475694
## [1332,]      0.3379811    2.447037491       1.59274911
## [1333,]     -1.0774954   -0.980680421      -1.16729002
## [1334,]      0.3379811    0.161892216       0.76473737
## [1335,]     -1.0774954   -0.001332446       0.48873346
## [1336,]      0.3379811   -0.817455758      -0.61528219
## [1337,]      1.7534577   -0.327781771      -0.61528219
## [1338,]      0.3379811   -0.980680421      -1.16729002
## [1339,]     -1.0774954   -0.980680421      -1.16729002
## [1340,]      0.3379811   -0.980680421      -1.16729002
## [1341,]      0.3379811    0.488341541       1.31674520
## [1342,]      0.3379811    0.488341541       1.04074129
## [1343,]      0.3379811   -0.327781771      -0.33927828
## [1344,]      0.3379811   -0.654231096      -0.61528219
## [1345,]      0.3379811   -0.327781771      -0.33927828
## [1346,]      0.3379811   -0.654231096      -0.61528219
## [1347,]     -1.0774954    0.325116879       1.04074129
## [1348,]     -1.0774954    0.488341541      -0.89128611
## [1349,]      0.3379811    1.957363503       0.76473737
```

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```
## [1350,]      -1.0774954   -0.980680421     -1.16729002
## [1351,]      -1.0774954    0.161892216      0.76473737
## [1352,]       0.3379811    2.447037491      3.52477651
## [1353,]       0.3379811   -0.817455758     -1.16729002
## [1354,]       0.3379811   -0.327781771     -0.61528219
## [1355,]       0.3379811   -0.491006434     -0.61528219
## [1356,]      -2.4929720   -0.491006434     -0.61528219
## [1357,]       0.3379811   -0.327781771     -0.06327437
## [1358,]       1.7534577    0.978015528      0.76473737
## [1359,]       0.3379811   -0.327781771     -0.61528219
## [1360,]      -1.0774954   -0.491006434     -0.61528219
## [1361,]      -1.0774954   -0.817455758     -0.61528219
## [1362,]       0.3379811   -0.001332446      0.76473737
## [1363,]       0.3379811   -0.491006434     -0.61528219
## [1364,]      -1.0774954    0.488341541     -0.06327437
## [1365,]       0.3379811   -0.001332446      0.76473737
## [1366,]       0.3379811   -0.980680421     -1.16729002
## [1367,]       0.3379811   -0.654231096     -0.61528219
## [1368,]      -1.0774954   -0.327781771     -0.33927828
## [1369,]       0.3379811    1.304464853      1.59274911
## [1370,]       0.3379811   -0.817455758     -1.16729002
## [1371,]       1.7534577    0.161892216      0.76473737
## [1372,]       0.3379811   -1.143905083     -1.16729002
## [1373,]       0.3379811    0.488341541     -1.16729002
## [1374,]       0.3379811    2.120588166      1.86875303
## [1375,]      -1.0774954   -0.980680421     -1.16729002
## [1376,]       0.3379811   -0.491006434     -0.89128611
## [1377,]       1.7534577   -0.327781771     -0.61528219
## [1378,]       0.3379811   -0.327781771     -0.06327437
## [1379,]       0.3379811   -1.143905083     -1.16729002
## [1380,]       0.3379811   -0.980680421     -1.16729002
## [1381,]      -2.4929720   -0.327781771     -0.33927828
## [1382,]      -1.0774954   -0.327781771     -0.33927828
## [1383,]       1.7534577   -0.491006434     -0.61528219
## [1384,]       0.3379811   -0.327781771     -0.06327437
## [1385,]      -1.0774954    1.141240191      1.04074129
## [1386,]      -1.0774954    0.161892216      0.76473737
## [1387,]      -1.0774954   -0.001332446      0.76473737
## [1388,]      -1.0774954   -0.327781771     -0.33927828
## [1389,]       0.3379811   -0.327781771     -0.89128611
## [1390,]       0.3379811    0.488341541      1.04074129
## [1391,]      -1.0774954   -0.491006434     -0.89128611
## [1392,]      -1.0774954   -0.980680421     -1.16729002
## [1393,]       0.3379811    0.488341541      1.04074129
## [1394,]       0.3379811   -0.001332446      0.76473737
## [1395,]       0.3379811   -0.980680421     -1.16729002
## [1396,]       0.3379811    0.488341541      0.76473737
## [1397,]      -1.0774954   -0.817455758     -0.61528219
## [1398,]      -1.0774954   -0.491006434     -0.33927828
## [1399,]       0.3379811    0.325116879      0.76473737
## [1400,]       0.3379811    0.488341541      1.31674520
## [1401,]       0.3379811   -0.164557109     -0.61528219
## [1402,]       0.3379811    0.488341541      1.31674520
## [1403,]       0.3379811   -0.980680421     -1.16729002
```

```
## [1404,]      0.3379811    2.120588166     1.04074129
## [1405,]      0.3379811    2.120588166     1.31674520
## [1406,]      1.7534577    0.651566204     0.76473737
## [1407,]      0.3379811   -0.327781771    -0.61528219
## [1408,]     -1.0774954   -0.491006434    -0.33927828
## [1409,]      1.7534577   -0.327781771    -0.61528219
## [1410,]      1.7534577    0.488341541     1.31674520
## [1411,]      0.3379811    0.651566204     1.04074129
## [1412,]      0.3379811   -0.817455758    -1.16729002
## [1413,]     -1.0774954    0.814790866     1.04074129
## [1414,]     -1.0774954   -0.817455758    -0.61528219
## [1415,]      0.3379811    1.630914178     2.69676477
## [1416,]     -1.0774954   -0.980680421    -0.89128611
## [1417,]      0.3379811    1.304464853     2.42076085
## [1418,]      0.3379811   -0.817455758    -0.61528219
## [1419,]      0.3379811    0.161892216    -0.33927828
## [1420,]     -1.0774954   -0.491006434    -0.33927828
## [1421,]      0.3379811   -0.327781771    -0.33927828
## [1422,]     -2.4929720    0.978015528     1.04074129
## [1423,]      0.3379811   -0.817455758    -0.61528219
## [1424,]      1.7534577   -0.654231096    -0.61528219
## [1425,]      0.3379811    0.488341541     0.76473737
## [1426,]      0.3379811    0.325116879     0.76473737
## [1427,]      0.3379811   -0.164557109    -0.61528219
## [1428,]     -1.0774954   -0.980680421    -1.16729002
## [1429,]      0.3379811   -0.817455758    -0.61528219
## [1430,]      0.3379811   -0.001332446     0.76473737
## [1431,]      0.3379811    1.794138841     3.24877259
## [1432,]      0.3379811    1.141240191     1.59274911
## [1433,]      0.3379811    1.467689516     1.86875303
## [1434,]     -1.0774954   -0.327781771    -0.33927828
## [1435,]     -1.0774954    0.325116879     1.04074129
## [1436,]      0.3379811   -0.491006434    -0.33927828
## [1437,]      0.3379811   -0.817455758    -0.61528219
## [1438,]     -1.0774954   -0.164557109    -1.16729002
## [1439,]     -1.0774954   -0.980680421    -1.16729002
## [1440,]      0.3379811    0.325116879     0.76473737
## [1441,]      0.3379811   -0.491006434    -0.61528219
## [1442,]     -1.0774954    0.978015528     2.14475694
## [1443,]      1.7534577   -0.817455758    -0.61528219
## [1444,]     -1.0774954    2.447037491     0.48873346
## [1445,]     -2.4929720    0.488341541     1.31674520
## [1446,]      0.3379811    2.120588166     0.76473737
## [1447,]      0.3379811    0.161892216     0.76473737
## [1448,]     -1.0774954    1.304464853     2.14475694
## [1449,]      0.3379811   -0.327781771    -0.06327437
## [1450,]      0.3379811   -0.491006434    -0.61528219
## [1451,]      0.3379811    0.325116879    -1.16729002
## [1452,]      0.3379811    0.488341541     0.76473737
## [1453,]      0.3379811   -0.164557109    -0.33927828
## [1454,]     -1.0774954   -0.164557109    -0.33927828
## [1455,]      0.3379811   -0.327781771    -0.33927828
## [1456,]      0.3379811   -0.817455758    -0.61528219
## [1457,]      1.7534577    0.488341541    -0.61528219
```

```
## [1458,]       0.3379811  -0.327781771      -0.33927828
## [1459,]       0.3379811  -0.491006434      -0.33927828
## [1460,]       0.3379811  -0.491006434      -0.33927828
## [1461,]      -2.4929720  -0.327781771      -0.06327437
## [1462,]       0.3379811  -0.654231096      -0.61528219
## [1463,]      -1.0774954   2.120588166       1.31674520
## [1464,]       0.3379811   0.325116879      -0.06327437
## [1465,]       0.3379811  -0.491006434      -0.61528219
## [1466,]       0.3379811  -0.327781771      -0.61528219
## [1467,]       0.3379811  -0.001332446       0.76473737
## [1468,]       0.3379811  -0.164557109      -0.61528219
## [1469,]      -1.0774954   0.325116879       0.48873346
## [1470,]       1.7534577  -0.491006434      -0.33927828
##         YearsSinceLastPromotion YearsWithCurrManager
##    [1,]             -0.67891464            0.2457504
##    [2,]             -0.36858985            0.8062671
##    [3,]             -0.67891464           -1.1555415
##    [4,]              0.25205973           -1.1555415
##    [5,]             -0.05826506           -0.5950247
##    [6,]              0.25205973            0.5260087
##    [7,]             -0.67891464           -1.1555415
##    [8,]             -0.67891464           -1.1555415
##    [9,]             -0.36858985            1.0865255
##   [10,]              1.49335889            0.8062671
##   [11,]             -0.67891464           -0.3147664
##   [12,]             -0.67891464            1.0865255
##   [13,]              0.56238452           -0.3147664
##   [14,]             -0.36858985           -0.5950247
##   [15,]             -0.67891464           -0.3147664
##   [16,]              1.80368368            1.0865255
##   [17,]             -0.67891464            0.2457504
##   [18,]             -0.67891464           -1.1555415
##   [19,]              0.25205973            0.8062671
##   [20,]             -0.36858985           -0.5950247
##   [21,]             -0.36858985           -0.3147664
##   [22,]             -0.67891464           -0.3147664
##   [23,]             -0.05826506            1.9273006
##   [24,]             -0.67891464           -1.1555415
##   [25,]             -0.36858985           -0.3147664
##   [26,]              0.56238452            1.0865255
##   [27,]              1.18303410            0.8062671
##   [28,]              0.56238452           -0.5950247
##   [29,]              0.87270931            3.6088508
##   [30,]             -0.05826506           -0.8752831
##   [31,]             -0.67891464           -1.1555415
##   [32,]             -0.36858985           -0.3147664
##   [33,]             -0.36858985            1.0865255
##   [34,]             -0.67891464           -1.1555415
##   [35,]             -0.05826506           -1.1555415
##   [36,]             -0.36858985           -0.0345080
##   [37,]             -0.67891464           -0.5950247
##   [38,]             -0.05826506           -0.5950247
##   [39,]             -0.67891464           -1.1555415
##   [40,]             -0.36858985           -0.3147664
```

```
##  [41,]              -0.67891464              -1.1555415
##  [42,]              -0.67891464              -1.1555415
##  [43,]              -0.67891464              -0.8752831
##  [44,]              -0.36858985               0.8062671
##  [45,]               0.25205973               0.8062671
##  [46,]               3.97595721               1.0865255
##  [47,]               1.80368368               0.8062671
##  [48,]              -0.67891464              -1.1555415
##  [49,]              -0.67891464               1.0865255
##  [50,]              -0.67891464              -0.8752831
##  [51,]              -0.67891464              -1.1555415
##  [52,]              -0.05826506              -0.5950247
##  [53,]              -0.36858985              -0.3147664
##  [54,]              -0.05826506              -0.3147664
##  [55,]              -0.67891464              -1.1555415
##  [56,]               1.80368368               2.2075589
##  [57,]              -0.36858985               1.0865255
##  [58,]              -0.05826506              -0.5950247
##  [59,]              -0.36858985               0.8062671
##  [60,]              -0.67891464               0.8062671
##  [61,]               1.49335889               1.0865255
##  [62,]               2.11400847               1.3667838
##  [63,]               3.35530763               1.0865255
##  [64,]               1.49335889               1.3667838
##  [65,]               3.04498284               1.0865255
##  [66,]              -0.67891464              -0.5950247
##  [67,]              -0.67891464              -0.3147664
##  [68,]              -0.67891464              -1.1555415
##  [69,]              -0.36858985              -0.5950247
##  [70,]              -0.67891464              -1.1555415
##  [71,]              -0.36858985              -0.3147664
##  [72,]              -0.67891464              -0.0345080
##  [73,]              -0.36858985              -1.1555415
##  [74,]              -0.67891464               1.3667838
##  [75,]              -0.67891464              -1.1555415
##  [76,]              -0.36858985               1.0865255
##  [77,]              -0.05826506               1.0865255
##  [78,]              -0.67891464              -1.1555415
##  [79,]              -0.67891464              -0.5950247
##  [80,]              -0.67891464              -0.5950247
##  [81,]               0.25205973              -1.1555415
##  [82,]              -0.67891464              -0.0345080
##  [83,]              -0.36858985              -1.1555415
##  [84,]              -0.36858985               1.3667838
##  [85,]              -0.36858985              -0.3147664
##  [86,]              -0.67891464              -0.5950247
##  [87,]              -0.67891464              -1.1555415
##  [88,]              -0.67891464              -0.3147664
##  [89,]               2.42433326               1.0865255
##  [90,]               0.56238452               0.8062671
##  [91,]               2.73465805               1.9273006
##  [92,]              -0.36858985              -1.1555415
##  [93,]              -0.05826506               0.8062671
##  [94,]               2.11400847               0.2457504
```

```
##   [95,]             0.87270931              0.8062671
##   [96,]            -0.67891464             -0.3147664
##   [97,]            -0.67891464             -0.5950247
##   [98,]            -0.67891464             -0.0345080
##   [99,]            -0.36858985              1.0865255
##  [100,]            -0.36858985             -0.5950247
##  [101,]            -0.67891464             -0.5950247
##  [102,]            -0.67891464             -1.1555415
##  [103,]            -0.36858985             -1.1555415
##  [104,]            -0.05826506              1.6470422
##  [105,]            -0.67891464             -1.1555415
##  [106,]            -0.05826506             -0.5950247
##  [107,]            -0.67891464              0.8062671
##  [108,]            -0.67891464             -0.3147664
##  [109,]            -0.05826506             -0.8752831
##  [110,]            -0.67891464             -1.1555415
##  [111,]             3.04498284              1.0865255
##  [112,]            -0.67891464              0.5260087
##  [113,]             0.56238452             -0.0345080
##  [114,]            -0.36858985             -0.5950247
##  [115,]            -0.67891464             -1.1555415
##  [116,]            -0.36858985             -0.3147664
##  [117,]             0.87270931              1.0865255
##  [118,]            -0.05826506              1.0865255
##  [119,]            -0.67891464             -1.1555415
##  [120,]             0.56238452              2.2075589
##  [121,]            -0.67891464              1.3667838
##  [122,]            -0.67891464              0.8062671
##  [123,]             0.56238452             -0.3147664
##  [124,]             3.97595721              3.0483340
##  [125,]             1.49335889              0.8062671
##  [126,]             0.56238452             -0.3147664
##  [127,]             3.97595721              0.5260087
##  [128,]            -0.67891464             -1.1555415
##  [129,]            -0.05826506             -0.8752831
##  [130,]             0.87270931              1.9273006
##  [131,]            -0.36858985             -0.5950247
##  [132,]            -0.05826506             -0.8752831
##  [133,]            -0.05826506             -0.5950247
##  [134,]            -0.67891464              0.8062671
##  [135,]             0.87270931              0.8062671
##  [136,]            -0.67891464             -0.8752831
##  [137,]            -0.67891464             -0.3147664
##  [138,]             0.87270931              1.3667838
##  [139,]            -0.05826506             -0.5950247
##  [140,]             0.56238452              0.8062671
##  [141,]            -0.67891464             -0.0345080
##  [142,]            -0.67891464             -0.3147664
##  [143,]            -0.05826506             -0.5950247
##  [144,]            -0.67891464             -0.0345080
##  [145,]            -0.67891464              0.8062671
##  [146,]            -0.05826506             -0.5950247
##  [147,]            -0.36858985             -0.5950247
##  [148,]             1.49335889              0.8062671
```

```
## [149,]              -0.36858985              -0.0345080
## [150,]              -0.67891464              -1.1555415
## [151,]              -0.05826506               2.4878173
## [152,]              -0.67891464               0.5260087
## [153,]               0.56238452               0.2457504
## [154,]              -0.67891464               3.0483340
## [155,]               0.25205973               0.8062671
## [156,]              -0.67891464               1.3667838
## [157,]              -0.67891464              -1.1555415
## [158,]              -0.67891464              -1.1555415
## [159,]              -0.05826506               1.9273006
## [160,]              -0.36858985              -0.5950247
## [161,]              -0.05826506              -0.5950247
## [162,]              -0.05826506              -0.5950247
## [163,]              -0.67891464              -0.5950247
## [164,]              -0.36858985              -0.0345080
## [165,]              -0.67891464              -0.8752831
## [166,]               0.56238452              -0.0345080
## [167,]              -0.36858985               1.0865255
## [168,]               1.49335889              -0.0345080
## [169,]              -0.67891464               0.8062671
## [170,]              -0.36858985              -0.0345080
## [171,]              -0.36858985              -0.8752831
## [172,]              -0.67891464              -1.1555415
## [173,]               1.49335889              -0.5950247
## [174,]               1.18303410               1.6470422
## [175,]              -0.67891464              -0.3147664
## [176,]              -0.05826506              -0.5950247
## [177,]              -0.67891464              -0.5950247
## [178,]              -0.36858985              -1.1555415
## [179,]               3.97595721               0.8062671
## [180,]              -0.05826506              -0.8752831
## [181,]              -0.67891464              -0.5950247
## [182,]              -0.36858985              -0.5950247
## [183,]              -0.67891464              -0.5950247
## [184,]              -0.67891464              -0.5950247
## [185,]              -0.36858985              -0.3147664
## [186,]              -0.36858985               0.5260087
## [187,]               2.11400847               1.3667838
## [188,]              -0.05826506               3.0483340
## [189,]              -0.36858985               1.3667838
## [190,]              -0.36858985              -1.1555415
## [191,]               2.73465805               1.3667838
## [192,]              -0.67891464              -0.3147664
## [193,]              -0.67891464              -0.8752831
## [194,]              -0.05826506              -0.5950247
## [195,]               2.73465805               1.0865255
## [196,]              -0.36858985               0.8062671
## [197,]              -0.36858985              -0.5950247
## [198,]              -0.67891464              -0.5950247
## [199,]              -0.67891464              -1.1555415
## [200,]              -0.36858985               0.8062671
## [201,]              -0.05826506              -1.1555415
## [202,]              -0.36858985               0.8062671
```

```
##   [203,]              -0.05826506              -1.1555415
##   [204,]               0.25205973               0.8062671
##   [205,]              -0.67891464              -1.1555415
##   [206,]              -0.36858985               1.3667838
##   [207,]              -0.05826506              -0.5950247
##   [208,]              -0.36858985               0.8062671
##   [209,]              -0.67891464              -0.5950247
##   [210,]              -0.67891464              -0.3147664
##   [211,]               2.11400847               1.0865255
##   [212,]               0.87270931               1.0865255
##   [213,]              -0.67891464               0.8062671
##   [214,]               0.56238452               0.8062671
##   [215,]              -0.67891464              -0.0345080
##   [216,]              -0.67891464              -1.1555415
##   [217,]              -0.67891464              -0.8752831
##   [218,]              -0.36858985               0.2457504
##   [219,]               3.04498284               1.0865255
##   [220,]              -0.67891464               0.2457504
##   [221,]               0.25205973               0.8062671
##   [222,]              -0.36858985              -0.8752831
##   [223,]              -0.67891464               0.8062671
##   [224,]               0.87270931               2.4878173
##   [225,]              -0.36858985              -0.0345080
##   [226,]              -0.67891464              -1.1555415
##   [227,]               0.87270931               1.0865255
##   [228,]               0.56238452              -0.8752831
##   [229,]              -0.67891464               1.0865255
##   [230,]              -0.67891464              -0.8752831
##   [231,]              -0.05826506              -0.5950247
##   [232,]               2.73465805               3.0483340
##   [233,]              -0.05826506              -0.5950247
##   [234,]              -0.67891464               0.5260087
##   [235,]              -0.67891464              -0.0345080
##   [236,]              -0.36858985               1.3667838
##   [237,]              -0.36858985               0.8062671
##   [238,]               3.97595721               2.2075589
##   [239,]              -0.36858985              -0.5950247
##   [240,]              -0.36858985              -0.5950247
##   [241,]              -0.36858985              -0.5950247
##   [242,]              -0.05826506              -0.5950247
##   [243,]              -0.67891464              -1.1555415
##   [244,]               0.56238452               0.8062671
##   [245,]              -0.36858985               0.8062671
##   [246,]              -0.05826506              -0.5950247
##   [247,]              -0.67891464              -0.5950247
##   [248,]               0.87270931               1.3667838
##   [249,]              -0.67891464              -0.5950247
##   [250,]              -0.67891464              -0.5950247
##   [251,]              -0.67891464              -1.1555415
##   [252,]               2.73465805               1.0865255
##   [253,]              -0.36858985               0.2457504
##   [254,]              -0.67891464              -0.5950247
##   [255,]              -0.67891464              -0.5950247
##   [256,]              -0.36858985              -0.5950247
```

```
## [257,]            1.49335889          1.0865255
## [258,]            0.25205973          1.3667838
## [259,]           -0.67891464         -1.1555415
## [260,]           -0.36858985         -0.0345080
## [261,]           -0.67891464         -0.3147664
## [262,]            1.49335889          0.2457504
## [263,]           -0.67891464         -0.0345080
## [264,]            1.49335889          0.8062671
## [265,]           -0.67891464         -1.1555415
## [266,]           -0.67891464         -1.1555415
## [267,]            1.49335889          1.0865255
## [268,]           -0.36858985          0.2457504
## [269,]            0.56238452          1.6470422
## [270,]            2.42433326          1.9273006
## [271,]            0.56238452          2.4878173
## [272,]            2.11400847          1.3667838
## [273,]           -0.67891464         -0.0345080
## [274,]           -0.67891464         -0.8752831
## [275,]           -0.36858985         -1.1555415
## [276,]           -0.67891464         -0.5950247
## [277,]            1.18303410         -0.5950247
## [278,]            1.49335889          0.8062671
## [279,]           -0.36858985         -0.0345080
## [280,]           -0.36858985          0.5260087
## [281,]           -0.36858985         -0.3147664
## [282,]            2.73465805          0.5260087
## [283,]           -0.67891464          1.3667838
## [284,]           -0.67891464          1.0865255
## [285,]            0.25205973         -0.3147664
## [286,]            0.87270931          0.8062671
## [287,]           -0.67891464         -1.1555415
## [288,]           -0.36858985         -0.5950247
## [289,]           -0.67891464         -0.5950247
## [290,]           -0.67891464         -0.5950247
## [291,]           -0.36858985         -0.5950247
## [292,]            1.49335889          0.8062671
## [293,]           -0.05826506         -0.5950247
## [294,]            1.49335889         -0.0345080
## [295,]           -0.36858985         -0.5950247
## [296,]            0.56238452          1.0865255
## [297,]           -0.67891464         -1.1555415
## [298,]            1.18303410          1.3667838
## [299,]           -0.67891464         -1.1555415
## [300,]           -0.36858985         -0.5950247
## [301,]           -0.67891464         -0.0345080
## [302,]           -0.67891464         -1.1555415
## [303,]           -0.67891464          0.8062671
## [304,]            1.49335889          0.8062671
## [305,]            0.25205973          0.8062671
## [306,]           -0.67891464          1.0865255
## [307,]            0.56238452          1.0865255
## [308,]           -0.67891464         -0.8752831
## [309,]           -0.36858985         -0.5950247
## [310,]           -0.67891464         -0.3147664
```

```
## [311,]          -0.36858985              -1.1555415
## [312,]           2.11400847               1.9273006
## [313,]          -0.05826506              -0.5950247
## [314,]           1.80368368               1.0865255
## [315,]           2.73465805               1.6470422
## [316,]          -0.36858985               0.8062671
## [317,]          -0.67891464               0.8062671
## [318,]           1.49335889               0.8062671
## [319,]          -0.36858985              -0.5950247
## [320,]           2.73465805               1.3667838
## [321,]          -0.67891464              -0.0345080
## [322,]          -0.36858985               0.8062671
## [323,]          -0.67891464               0.8062671
## [324,]          -0.05826506              -0.5950247
## [325,]          -0.36858985               1.3667838
## [326,]           1.80368368               1.3667838
## [327,]           3.35530763              -0.3147664
## [328,]          -0.67891464              -1.1555415
## [329,]          -0.67891464              -0.8752831
## [330,]          -0.36858985              -0.8752831
## [331,]          -0.67891464              -1.1555415
## [332,]          -0.36858985              -0.0345080
## [333,]          -0.67891464              -0.3147664
## [334,]          -0.67891464              -1.1555415
## [335,]           2.11400847               1.0865255
## [336,]          -0.67891464              -0.5950247
## [337,]          -0.67891464               0.8062671
## [338,]          -0.05826506              -0.5950247
## [339,]          -0.36858985              -0.5950247
## [340,]          -0.67891464               0.8062671
## [341,]          -0.67891464              -0.0345080
## [342,]          -0.05826506               1.3667838
## [343,]           0.56238452               1.6470422
## [344,]          -0.36858985               0.8062671
## [345,]          -0.67891464               2.4878173
## [346,]          -0.67891464              -0.5950247
## [347,]          -0.36858985              -0.5950247
## [348,]          -0.67891464              -1.1555415
## [349,]          -0.67891464              -1.1555415
## [350,]          -0.67891464              -0.5950247
## [351,]          -0.36858985              -1.1555415
## [352,]          -0.67891464               0.8062671
## [353,]          -0.67891464              -1.1555415
## [354,]           1.18303410               0.8062671
## [355,]          -0.05826506              -0.5950247
## [356,]           1.49335889               0.8062671
## [357,]          -0.67891464              -1.1555415
## [358,]          -0.36858985              -0.5950247
## [359,]          -0.67891464              -1.1555415
## [360,]          -0.36858985               2.2075589
## [361,]          -0.36858985              -0.5950247
## [362,]          -0.36858985               0.8062671
## [363,]          -0.05826506              -0.5950247
## [364,]          -0.67891464              -1.1555415
```

```
## [365,]              -0.67891464              -0.3147664
## [366,]              -0.67891464              -1.1555415
## [367,]               1.49335889               0.8062671
## [368,]              -0.36858985              -0.3147664
## [369,]              -0.36858985              -1.1555415
## [370,]              -0.05826506              -0.5950247
## [371,]              -0.67891464              -1.1555415
## [372,]              -0.36858985              -0.5950247
## [373,]              -0.67891464              -1.1555415
## [374,]              -0.67891464              -0.0345080
## [375,]              -0.67891464               0.8062671
## [376,]              -0.67891464              -1.1555415
## [377,]              -0.67891464               0.8062671
## [378,]              -0.05826506              -0.5950247
## [379,]              -0.67891464              -0.0345080
## [380,]              -0.36858985              -0.5950247
## [381,]              -0.67891464              -0.3147664
## [382,]              -0.67891464              -1.1555415
## [383,]              -0.67891464              -0.0345080
## [384,]              -0.36858985              -0.5950247
## [385,]               2.11400847              -1.1555415
## [386,]              -0.67891464              -1.1555415
## [387,]               3.04498284               3.6088508
## [388,]              -0.36858985              -0.3147664
## [389,]              -0.36858985              -0.5950247
## [390,]              -0.67891464              -0.8752831
## [391,]               0.25205973               1.3667838
## [392,]              -0.67891464              -1.1555415
## [393,]              -0.36858985              -0.5950247
## [394,]              -0.36858985              -0.5950247
## [395,]               0.25205973               2.2075589
## [396,]              -0.36858985              -0.5950247
## [397,]              -0.67891464              -0.5950247
## [398,]              -0.36858985              -0.3147664
## [399,]               2.42433326               0.8062671
## [400,]               0.25205973              -0.5950247
## [401,]              -0.36858985               0.5260087
## [402,]               1.49335889               0.8062671
## [403,]               0.56238452              -0.0345080
## [404,]              -0.67891464               0.8062671
## [405,]              -0.36858985               1.0865255
## [406,]              -0.67891464              -0.5950247
## [407,]              -0.67891464              -0.0345080
## [408,]              -0.67891464              -0.5950247
## [409,]              -0.36858985              -0.0345080
## [410,]              -0.67891464              -0.5950247
## [411,]              -0.67891464              -0.5950247
## [412,]               2.73465805               1.6470422
## [413,]              -0.67891464               1.0865255
## [414,]              -0.67891464              -0.0345080
## [415,]              -0.36858985              -0.0345080
## [416,]              -0.36858985              -1.1555415
## [417,]              -0.67891464              -1.1555415
## [418,]              -0.36858985               2.2075589
```

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## [419,]            -0.67891464            -0.5950247
## [420,]            -0.36858985            -0.0345080
## [421,]            -0.67891464             0.8062671
## [422,]            -0.36858985            -0.8752831
## [423,]            -0.67891464            -1.1555415
## [424,]             1.49335889             1.0865255
## [425,]            -0.67891464            -1.1555415
## [426,]             3.97595721             0.8062671
## [427,]             1.18303410             0.8062671
## [428,]             3.35530763             1.9273006
## [429,]            -0.67891464            -0.0345080
## [430,]            -0.67891464            -0.8752831
## [431,]             0.56238452            -0.3147664
## [432,]            -0.67891464            -1.1555415
## [433,]             0.87270931             0.8062671
## [434,]            -0.36858985            -0.5950247
## [435,]            -0.67891464             1.0865255
## [436,]             1.49335889             0.8062671
## [437,]            -0.36858985            -0.3147664
## [438,]            -0.36858985            -0.5950247
## [439,]            -0.67891464            -1.1555415
## [440,]            -0.67891464            -1.1555415
## [441,]            -0.67891464            -0.5950247
## [442,]            -0.05826506            -1.1555415
## [443,]             2.11400847             0.8062671
## [444,]            -0.36858985            -0.5950247
## [445,]             1.18303410             0.8062671
## [446,]             1.49335889             0.8062671
## [447,]            -0.36858985             1.6470422
## [448,]             1.18303410             1.3667838
## [449,]             0.87270931             2.4878173
## [450,]            -0.67891464             0.8062671
## [451,]            -0.67891464             0.2457504
## [452,]             0.87270931             1.0865255
## [453,]             0.25205973             0.8062671
## [454,]            -0.36858985            -1.1555415
## [455,]            -0.36858985            -0.5950247
## [456,]            -0.67891464             0.2457504
## [457,]            -0.67891464            -0.8752831
## [458,]            -0.67891464            -1.1555415
## [459,]            -0.67891464            -0.8752831
## [460,]            -0.67891464             0.8062671
## [461,]            -0.67891464            -1.1555415
## [462,]            -0.67891464            -0.3147664
## [463,]             0.87270931             0.8062671
## [464,]            -0.67891464            -1.1555415
## [465,]            -0.36858985            -0.5950247
## [466,]            -0.36858985            -0.5950247
## [467,]             2.73465805             1.0865255
## [468,]             1.49335889             0.8062671
## [469,]             1.18303410             1.3667838
## [470,]            -0.36858985            -0.5950247
## [471,]            -0.05826506            -0.8752831
## [472,]            -0.67891464            -1.1555415
```

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## [473,]         0.56238452         -0.3147664
## [474,]        -0.67891464          1.3667838
## [475,]        -0.36858985         -0.0345080
## [476,]        -0.36858985         -0.0345080
## [477,]        -0.67891464         -1.1555415
## [478,]         2.42433326          0.8062671
## [479,]        -0.67891464          0.5260087
## [480,]        -0.36858985         -0.5950247
## [481,]        -0.67891464         -1.1555415
## [482,]        -0.36858985         -0.3147664
## [483,]        -0.36858985         -0.5950247
## [484,]        -0.67891464         -0.5950247
## [485,]         0.87270931          0.8062671
## [486,]        -0.67891464         -0.3147664
## [487,]        -0.36858985         -1.1555415
## [488,]        -0.67891464         -1.1555415
## [489,]        -0.05826506         -0.5950247
## [490,]        -0.67891464         -1.1555415
## [491,]        -0.67891464         -1.1555415
## [492,]         0.56238452          0.8062671
## [493,]        -0.67891464         -0.5950247
## [494,]        -0.67891464         -0.5950247
## [495,]        -0.67891464          0.5260087
## [496,]        -0.67891464         -0.5950247
## [497,]        -0.36858985         -0.5950247
## [498,]        -0.67891464         -0.8752831
## [499,]        -0.05826506         -0.5950247
## [500,]        -0.36858985         -0.5950247
## [501,]        -0.67891464          0.2457504
## [502,]        -0.67891464         -1.1555415
## [503,]         1.80368368          1.6470422
## [504,]         1.80368368          1.0865255
## [505,]        -0.67891464         -1.1555415
## [506,]        -0.67891464         -0.5950247
## [507,]         1.49335889          1.0865255
## [508,]        -0.36858985         -0.5950247
## [509,]         2.73465805          1.0865255
## [510,]         0.56238452          0.8062671
## [511,]         1.49335889         -0.8752831
## [512,]        -0.67891464         -0.5950247
## [513,]        -0.36858985         -0.8752831
## [514,]        -0.36858985         -0.8752831
## [515,]         2.11400847          0.8062671
## [516,]        -0.67891464         -1.1555415
## [517,]        -0.67891464         -0.5950247
## [518,]        -0.36858985         -0.5950247
## [519,]        -0.67891464          0.2457504
## [520,]        -0.05826506          1.0865255
## [521,]        -0.05826506         -0.5950247
## [522,]        -0.67891464         -0.0345080
## [523,]        -0.67891464         -1.1555415
## [524,]         0.25205973          1.0865255
## [525,]         1.49335889          0.8062671
## [526,]        -0.05826506         -1.1555415
```

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## [527,]           2.73465805            1.6470422
## [528,]          -0.67891464            1.0865255
## [529,]          -0.36858985           -0.3147664
## [530,]          -0.36858985            1.0865255
## [531,]          -0.67891464            0.8062671
## [532,]           1.49335889            0.8062671
## [533,]          -0.36858985            0.8062671
## [534,]          -0.36858985            2.2075589
## [535,]          -0.36858985           -0.3147664
## [536,]           3.04498284            0.5260087
## [537,]          -0.05826506           -0.5950247
## [538,]          -0.36858985            0.8062671
## [539,]          -0.05826506            1.6470422
## [540,]          -0.05826506           -0.5950247
## [541,]           0.25205973            0.8062671
## [542,]          -0.67891464            0.2457504
## [543,]          -0.67891464           -1.1555415
## [544,]          -0.36858985           -0.0345080
## [545,]           2.73465805            2.4878173
## [546,]           1.49335889            0.8062671
## [547,]          -0.67891464           -1.1555415
## [548,]          -0.05826506           -0.5950247
## [549,]          -0.05826506           -0.5950247
## [550,]           0.56238452           -0.3147664
## [551,]          -0.67891464           -0.5950247
## [552,]           0.25205973            0.5260087
## [553,]          -0.36858985           -0.8752831
## [554,]          -0.05826506           -0.3147664
## [555,]          -0.67891464            0.8062671
## [556,]          -0.05826506           -0.5950247
## [557,]          -0.05826506           -0.5950247
## [558,]          -0.67891464           -1.1555415
## [559,]           0.56238452            0.8062671
## [560,]          -0.67891464           -0.8752831
## [561,]          -0.67891464           -1.1555415
## [562,]          -0.36858985            3.3285924
## [563,]           1.49335889            1.0865255
## [564,]          -0.36858985           -0.0345080
## [565,]           0.25205973           -0.8752831
## [566,]          -0.67891464           -0.5950247
## [567,]          -0.36858985           -0.3147664
## [568,]          -0.36858985           -0.0345080
## [569,]          -0.36858985           -0.0345080
## [570,]          -0.67891464            1.3667838
## [571,]          -0.36858985           -0.5950247
## [572,]          -0.05826506           -1.1555415
## [573,]          -0.36858985           -0.8752831
## [574,]          -0.36858985           -0.5950247
## [575,]          -0.36858985           -0.3147664
## [576,]          -0.36858985           -0.0345080
## [577,]          -0.36858985           -0.8752831
## [578,]           0.56238452           -0.3147664
## [579,]           0.56238452            2.2075589
## [580,]          -0.36858985           -0.3147664
```

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## [581,]                -0.67891464               -0.5950247
## [582,]                -0.67891464               -0.5950247
## [583,]                 0.25205973                0.8062671
## [584,]                -0.36858985               -0.5950247
## [585,]                 3.66563242                1.3667838
## [586,]                -0.67891464               -1.1555415
## [587,]                -0.67891464               -1.1555415
## [588,]                -0.36858985               -0.0345080
## [589,]                -0.67891464               -0.3147664
## [590,]                -0.67891464               -1.1555415
## [591,]                 0.25205973                0.8062671
## [592,]                -0.67891464               -0.5950247
## [593,]                 0.25205973               -1.1555415
## [594,]                -0.67891464                0.2457504
## [595,]                -0.67891464                0.8062671
## [596,]                 3.35530763                1.0865255
## [597,]                -0.05826506               -0.5950247
## [598,]                -0.67891464               -0.5950247
## [599,]                -0.05826506               -0.8752831
## [600,]                -0.67891464               -0.0345080
## [601,]                 1.18303410                1.0865255
## [602,]                -0.67891464               -1.1555415
## [603,]                -0.67891464               -1.1555415
## [604,]                -0.67891464               -1.1555415
## [605,]                 1.49335889                1.0865255
## [606,]                -0.36858985               -0.5950247
## [607,]                -0.36858985               -0.3147664
## [608,]                 1.49335889                0.8062671
## [609,]                 1.49335889               -0.3147664
## [610,]                -0.36858985               -1.1555415
## [611,]                -0.67891464                1.0865255
## [612,]                -0.36858985                0.5260087
## [613,]                 1.49335889                0.2457504
## [614,]                -0.67891464               -0.5950247
## [615,]                -0.36858985                0.8062671
## [616,]                -0.67891464               -1.1555415
## [617,]                 0.56238452                3.6088508
## [618,]                -0.05826506               -0.3147664
## [619,]                -0.67891464               -0.8752831
## [620,]                -0.67891464                1.0865255
## [621,]                -0.36858985               -0.8752831
## [622,]                 0.56238452                1.9273006
## [623,]                -0.67891464               -0.3147664
## [624,]                -0.67891464               -0.3147664
## [625,]                -0.67891464               -0.0345080
## [626,]                -0.67891464               -0.5950247
## [627,]                -0.36858985               -0.3147664
## [628,]                -0.67891464               -1.1555415
## [629,]                -0.67891464               -1.1555415
## [630,]                -0.67891464               -0.0345080
## [631,]                -0.05826506               -0.5950247
## [632,]                -0.67891464               -0.5950247
## [633,]                -0.05826506               -0.5950247
## [634,]                -0.67891464               -0.3147664
```

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## [635,]          -0.67891464          -0.3147664
## [636,]           0.87270931           3.0483340
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## [638,]          -0.67891464          -0.5950247
## [639,]          -0.67891464          -0.3147664
## [640,]          -0.67891464          -0.5950247
## [641,]           0.25205973          -0.0345080
## [642,]           0.87270931          -0.3147664
## [643,]          -0.36858985          -0.5950247
## [644,]          -0.36858985          -0.3147664
## [645,]          -0.67891464          -0.5950247
## [646,]          -0.67891464          -0.5950247
## [647,]          -0.05826506          -0.5950247
## [648,]           0.56238452           1.0865255
## [649,]          -0.67891464          -1.1555415
## [650,]           0.25205973           1.0865255
## [651,]          -0.05826506          -0.5950247
## [652,]           1.49335889           0.8062671
## [653,]          -0.67891464           1.3667838
## [654,]           3.66563242           0.8062671
## [655,]          -0.67891464          -0.0345080
## [656,]          -0.67891464          -0.3147664
## [657,]          -0.67891464          -0.8752831
## [658,]          -0.67891464          -0.3147664
## [659,]           1.49335889          -0.8752831
## [660,]          -0.67891464          -0.5950247
## [661,]          -0.67891464          -1.1555415
## [662,]          -0.67891464          -1.1555415
## [663,]          -0.67891464          -0.5950247
## [664,]          -0.67891464          -1.1555415
## [665,]           0.56238452           1.9273006
## [666,]          -0.36858985          -0.5950247
## [667,]          -0.67891464          -0.5950247
## [668,]          -0.36858985          -1.1555415
## [669,]          -0.05826506          -0.5950247
## [670,]          -0.05826506          -0.5950247
## [671,]          -0.67891464          -1.1555415
## [672,]          -0.36858985          -1.1555415
## [673,]          -0.67891464          -0.3147664
## [674,]          -0.67891464          -0.5950247
## [675,]          -0.67891464          -0.0345080
## [676,]           0.87270931          -0.5950247
## [677,]          -0.67891464           0.8062671
## [678,]          -0.36858985           0.8062671
## [679,]          -0.67891464          -1.1555415
## [680,]          -0.67891464          -1.1555415
## [681,]          -0.67891464          -0.8752831
## [682,]           0.87270931           1.9273006
## [683,]          -0.67891464          -0.5950247
## [684,]          -0.67891464          -1.1555415
## [685,]          -0.67891464          -1.1555415
## [686,]          -0.67891464           0.8062671
## [687,]          -0.05826506           3.6088508
## [688,]           0.25205973           1.3667838
```

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## [689,]           -0.67891464         -1.1555415
## [690,]           -0.67891464         -1.1555415
## [691,]            1.80368368          0.2457504
## [692,]           -0.67891464         -1.1555415
## [693,]            1.18303410         -0.3147664
## [694,]            0.25205973          0.8062671
## [695,]           -0.36858985         -0.0345080
## [696,]            2.73465805          0.8062671
## [697,]           -0.67891464          1.0865255
## [698,]           -0.67891464         -0.5950247
## [699,]           -0.36858985         -1.1555415
## [700,]            1.49335889          1.0865255
## [701,]           -0.67891464         -1.1555415
## [702,]            3.97595721         -0.5950247
## [703,]            1.49335889          0.8062671
## [704,]           -0.36858985         -0.3147664
## [705,]           -0.67891464          1.0865255
## [706,]           -0.67891464          0.8062671
## [707,]           -0.67891464         -1.1555415
## [708,]           -0.05826506          0.8062671
## [709,]           -0.67891464          0.8062671
## [710,]           -0.36858985         -0.5950247
## [711,]            1.18303410         -1.1555415
## [712,]           -0.67891464         -1.1555415
## [713,]           -0.67891464         -0.5950247
## [714,]           -0.67891464         -0.5950247
## [715,]           -0.36858985         -0.3147664
## [716,]           -0.36858985         -0.5950247
## [717,]           -0.67891464          1.9273006
## [718,]           -0.05826506         -0.5950247
## [719,]           -0.67891464          1.0865255
## [720,]           -0.67891464          0.8062671
## [721,]           -0.67891464         -0.8752831
## [722,]           -0.36858985          0.2457504
## [723,]           -0.67891464         -0.5950247
## [724,]           -0.67891464          0.8062671
## [725,]            0.25205973         -0.5950247
## [726,]           -0.67891464         -0.5950247
## [727,]           -0.67891464         -0.3147664
## [728,]           -0.67891464         -1.1555415
## [729,]           -0.67891464          1.0865255
## [730,]            2.42433326         -0.8752831
## [731,]           -0.36858985          0.8062671
## [732,]           -0.67891464         -1.1555415
## [733,]           -0.36858985         -0.5950247
## [734,]           -0.36858985         -0.3147664
## [735,]           -0.36858985         -0.8752831
## [736,]           -0.05826506         -0.5950247
## [737,]            0.56238452          1.0865255
## [738,]           -0.05826506         -0.8752831
## [739,]            2.73465805          1.0865255
## [740,]           -0.05826506         -0.5950247
## [741,]           -0.36858985         -0.5950247
## [742,]           -0.67891464         -1.1555415
```

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## [743,]          -0.67891464          -1.1555415
## [744,]           0.56238452          -0.3147664
## [745,]          -0.67891464          -1.1555415
## [746,]           1.18303410           0.8062671
## [747,]           0.87270931           1.6470422
## [748,]          -0.67891464          -1.1555415
## [749,]          -0.05826506          -0.5950247
## [750,]           1.18303410           1.3667838
## [751,]           2.73465805           1.9273006
## [752,]          -0.67891464           2.4878173
## [753,]           3.97595721           2.7680757
## [754,]          -0.05826506           1.0865255
## [755,]          -0.05826506          -0.5950247
## [756,]          -0.36858985          -0.8752831
## [757,]           1.49335889           0.8062671
## [758,]          -0.67891464           1.3667838
## [759,]          -0.67891464          -0.0345080
## [760,]          -0.67891464          -0.0345080
## [761,]           1.18303410           2.2075589
## [762,]          -0.67891464          -1.1555415
## [763,]          -0.36858985          -0.5950247
## [764,]          -0.67891464          -1.1555415
## [765,]          -0.67891464          -1.1555415
## [766,]          -0.05826506          -0.5950247
## [767,]           1.49335889           0.8062671
## [768,]          -0.67891464          -0.8752831
## [769,]           1.49335889           0.2457504
## [770,]          -0.36858985          -0.3147664
## [771,]          -0.05826506          -0.5950247
## [772,]           1.49335889          -1.1555415
## [773,]          -0.67891464          -0.3147664
## [774,]           1.49335889           1.0865255
## [775,]           1.18303410          -0.5950247
## [776,]          -0.67891464          -1.1555415
## [777,]          -0.67891464          -0.5950247
## [778,]          -0.36858985          -1.1555415
## [779,]          -0.36858985           0.8062671
## [780,]          -0.05826506           0.8062671
## [781,]          -0.36858985           1.3667838
## [782,]          -0.36858985          -0.3147664
## [783,]          -0.67891464          -0.5950247
## [784,]          -0.67891464           1.0865255
## [785,]          -0.36858985           1.3667838
## [786,]           2.73465805          -0.8752831
## [787,]          -0.36858985          -0.5950247
## [788,]          -0.36858985          -0.5950247
## [789,]          -0.36858985           0.8062671
## [790,]           0.25205973           0.5260087
## [791,]          -0.36858985          -0.5950247
## [792,]           0.56238452           0.8062671
## [793,]           0.25205973           1.0865255
## [794,]          -0.05826506          -0.5950247
## [795,]          -0.67891464          -0.0345080
## [796,]          -0.67891464          -1.1555415
```

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## [797,]              0.87270931              0.5260087
## [798,]             -0.67891464             -1.1555415
## [799,]             -0.05826506             -0.5950247
## [800,]              3.35530763              0.8062671
## [801,]             -0.67891464             -1.1555415
## [802,]             -0.67891464             -1.1555415
## [803,]             -0.67891464             -0.5950247
## [804,]             -0.67891464             -1.1555415
## [805,]             -0.05826506             -0.8752831
## [806,]              0.56238452              2.2075589
## [807,]              0.56238452             -1.1555415
## [808,]             -0.05826506              0.8062671
## [809,]             -0.36858985              0.8062671
## [810,]             -0.36858985              0.8062671
## [811,]              0.56238452              1.3667838
## [812,]             -0.67891464             -1.1555415
## [813,]             -0.67891464             -0.8752831
## [814,]              2.73465805              0.2457504
## [815,]              0.56238452              1.3667838
## [816,]             -0.05826506             -0.5950247
## [817,]             -0.67891464             -0.3147664
## [818,]             -0.67891464              1.3667838
## [819,]             -0.05826506             -0.5950247
## [820,]             -0.67891464             -0.0345080
## [821,]             -0.67891464             -0.5950247
## [822,]             -0.05826506             -0.3147664
## [823,]             -0.67891464             -0.5950247
## [824,]             -0.36858985             -0.8752831
## [825,]             -0.67891464             -1.1555415
## [826,]             -0.36858985             -0.5950247
## [827,]              0.87270931             -1.1555415
## [828,]             -0.67891464             -0.5950247
## [829,]             -0.67891464             -1.1555415
## [830,]             -0.67891464             -0.3147664
## [831,]             -0.67891464             -1.1555415
## [832,]             -0.05826506             -0.5950247
## [833,]             -0.36858985             -0.3147664
## [834,]             -0.05826506             -0.5950247
## [835,]             -0.36858985             -0.3147664
## [836,]             -0.36858985             -0.0345080
## [837,]              0.25205973              1.6470422
## [838,]             -0.05826506              2.4878173
## [839,]              3.35530763              2.7680757
## [840,]             -0.36858985              0.2457504
## [841,]             -0.36858985              0.8062671
## [842,]             -0.36858985             -0.5950247
## [843,]             -0.67891464             -1.1555415
## [844,]             -0.67891464              0.8062671
## [845,]             -0.36858985             -0.0345080
## [846,]             -0.67891464             -1.1555415
## [847,]              1.18303410             -0.0345080
## [848,]              0.56238452              1.3667838
## [849,]             -0.05826506             -0.5950247
## [850,]             -0.36858985             -0.3147664
```

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## [853,]         -0.67891464           1.0865255
## [854,]         -0.67891464          -1.1555415
## [855,]         -0.67891464          -0.5950247
## [856,]          0.25205973           1.9273006
## [857,]         -0.36858985          -0.5950247
## [858,]         -0.67891464          -0.5950247
## [859,]          0.56238452           0.8062671
## [860,]         -0.36858985          -0.3147664
## [861,]         -0.67891464          -1.1555415
## [862,]          3.97595721           1.3667838
## [863,]         -0.67891464          -1.1555415
## [864,]         -0.36858985          -0.0345080
## [865,]         -0.67891464          -1.1555415
## [866,]         -0.67891464          -0.3147664
## [867,]         -0.67891464          -1.1555415
## [868,]         -0.05826506          -0.5950247
## [869,]          0.25205973          -0.3147664
## [870,]         -0.67891464          -0.3147664
## [871,]         -0.36858985           0.8062671
## [872,]         -0.67891464          -1.1555415
## [873,]         -0.67891464          -0.8752831
## [874,]         -0.36858985           0.8062671
## [875,]          1.80368368           1.3667838
## [876,]          3.35530763           3.6088508
## [877,]         -0.05826506          -0.5950247
## [878,]         -0.36858985          -0.0345080
## [879,]         -0.67891464          -0.3147664
## [880,]         -0.36858985           1.3667838
## [881,]         -0.05826506          -0.5950247
## [882,]         -0.67891464           0.8062671
## [883,]          1.49335889           0.8062671
## [884,]          0.56238452           1.6470422
## [885,]         -0.36858985          -0.3147664
## [886,]         -0.36858985          -0.8752831
## [887,]          0.87270931           0.8062671
## [888,]         -0.67891464          -1.1555415
## [889,]          0.56238452           2.2075589
## [890,]          1.18303410           1.0865255
## [891,]         -0.36858985          -0.0345080
## [892,]          1.49335889           0.8062671
## [893,]         -0.67891464          -1.1555415
## [894,]         -0.36858985          -0.5950247
## [895,]         -0.67891464           1.3667838
## [896,]         -0.67891464          -0.8752831
## [897,]         -0.36858985           1.0865255
## [898,]         -0.67891464           0.2457504
## [899,]         -0.67891464           0.8062671
## [900,]         -0.67891464          -1.1555415
## [901,]         -0.67891464           0.8062671
## [902,]         -0.67891464          -1.1555415
## [903,]         -0.67891464          -0.3147664
## [904,]         -0.36858985          -1.1555415
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## [907,]            -0.67891464          -1.1555415
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## [909,]            -0.67891464           1.0865255
## [910,]            -0.67891464          -0.8752831
## [911,]            -0.67891464          -0.8752831
## [912,]            -0.36858985          -1.1555415
## [913,]            -0.05826506          -0.5950247
## [914,]            -0.36858985           1.9273006
## [915,]             3.97595721          -1.1555415
## [916,]            -0.05826506          -0.5950247
## [917,]            -0.67891464           1.0865255
## [918,]            -0.67891464          -0.5950247
## [919,]             2.73465805           1.6470422
## [920,]             0.87270931          -0.0345080
## [921,]             0.87270931           1.6470422
## [922,]            -0.67891464          -0.5950247
## [923,]             3.66563242           2.4878173
## [924,]            -0.36858985           1.0865255
## [925,]            -0.05826506          -0.5950247
## [926,]            -0.67891464          -1.1555415
## [927,]             3.97595721           3.6088508
## [928,]             0.87270931           2.2075589
## [929,]            -0.67891464           0.2457504
## [930,]            -0.05826506          -0.5950247
## [931,]             1.49335889           0.8062671
## [932,]            -0.36858985           0.8062671
## [933,]             1.49335889           0.8062671
## [934,]            -0.36858985          -0.5950247
## [935,]            -0.05826506          -0.8752831
## [936,]            -0.67891464           1.0865255
## [937,]            -0.67891464          -1.1555415
## [938,]             3.97595721          -0.5950247
## [939,]            -0.05826506          -0.5950247
## [940,]            -0.36858985          -0.8752831
## [941,]            -0.67891464          -0.3147664
## [942,]             1.18303410           0.8062671
## [943,]            -0.36858985           0.8062671
## [944,]             0.87270931           0.8062671
## [945,]             1.49335889           0.2457504
## [946,]            -0.36858985          -0.5950247
## [947,]            -0.36858985          -1.1555415
## [948,]             1.49335889           0.8062671
## [949,]            -0.67891464           1.0865255
## [950,]            -0.36858985           0.8062671
## [951,]             2.11400847           0.5260087
## [952,]             2.73465805           1.3667838
## [953,]            -0.05826506          -0.5950247
## [954,]            -0.36858985          -0.5950247
## [955,]            -0.05826506           1.6470422
## [956,]             2.11400847           1.9273006
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## [958,]            -0.67891464          -1.1555415
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## [960,]           1.80368368           1.0865255
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## [962,]          -0.36858985          -0.8752831
## [963,]          -0.67891464           1.6470422
## [964,]          -0.36858985           0.8062671
## [965,]           2.11400847           0.5260087
## [966,]          -0.36858985          -0.5950247
## [967,]           0.87270931           1.3667838
## [968,]          -0.67891464          -0.3147664
## [969,]           1.18303410           2.4878173
## [970,]          -0.67891464           1.0865255
## [971,]          -0.67891464          -1.1555415
## [972,]          -0.67891464          -0.3147664
## [973,]          -0.67891464          -1.1555415
## [974,]          -0.67891464          -1.1555415
## [975,]          -0.67891464          -1.1555415
## [976,]           0.25205973           1.0865255
## [977,]           3.97595721           1.3667838
## [978,]          -0.67891464          -1.1555415
## [979,]           2.73465805           1.0865255
## [980,]           1.49335889           0.8062671
## [981,]          -0.67891464          -1.1555415
## [982,]           0.25205973          -0.5950247
## [983,]          -0.67891464          -0.3147664
## [984,]           0.56238452           1.9273006
## [985,]          -0.67891464          -0.0345080
## [986,]           1.18303410           0.8062671
## [987,]          -0.36858985          -0.0345080
## [988,]           0.25205973          -0.5950247
## [989,]           0.25205973          -0.3147664
## [990,]          -0.36858985          -0.3147664
## [991,]          -0.36858985          -0.5950247
## [992,]          -0.36858985          -0.5950247
## [993,]          -0.67891464           0.2457504
## [994,]          -0.36858985          -0.5950247
## [995,]          -0.67891464          -0.5950247
## [996,]          -0.36858985           1.0865255
## [997,]           0.56238452          -0.0345080
## [998,]           1.49335889           0.8062671
## [999,]          -0.36858985          -0.8752831
## [1000,]         -0.67891464           1.3667838
## [1001,]         -0.67891464          -0.0345080
## [1002,]         -0.67891464          -0.5950247
## [1003,]         -0.05826506          -0.5950247
## [1004,]         -0.67891464          -0.5950247
## [1005,]         -0.67891464           0.8062671
## [1006,]         -0.67891464           1.3667838
## [1007,]         -0.36858985          -0.3147664
## [1008,]          1.49335889           0.8062671
## [1009,]          3.04498284           0.8062671
## [1010,]         -0.36858985           0.2457504
## [1011,]         -0.67891464          -1.1555415
## [1012,]         -0.67891464          -0.8752831
```

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## [1013,]            -0.67891464            -1.1555415
## [1014,]            -0.67891464            -0.5950247
## [1015,]            -0.36858985            -1.1555415
## [1016,]            -0.36858985            -0.3147664
## [1017,]            -0.67891464            -1.1555415
## [1018,]            -0.36858985            -0.0345080
## [1019,]            -0.36858985             1.0865255
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## [1021,]            -0.36858985            -0.5950247
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## [1023,]            -0.36858985            -0.3147664
## [1024,]            -0.36858985            -1.1555415
## [1025,]             0.87270931             0.5260087
## [1026,]            -0.67891464            -0.3147664
## [1027,]            -0.67891464            -0.3147664
## [1028,]            -0.67891464            -0.5950247
## [1029,]            -0.67891464            -0.3147664
## [1030,]            -0.67891464             0.8062671
## [1031,]             2.11400847             1.3667838
## [1032,]             0.56238452            -0.3147664
## [1033,]            -0.67891464            -1.1555415
## [1034,]             0.56238452             0.8062671
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## [1037,]            -0.05826506            -0.5950247
## [1038,]            -0.36858985            -0.5950247
## [1039,]            -0.05826506            -0.5950247
## [1040,]            -0.05826506            -0.5950247
## [1041,]             0.56238452             1.0865255
## [1042,]            -0.36858985            -0.3147664
## [1043,]            -0.67891464            -0.3147664
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## [1046,]            -0.36858985            -0.5950247
## [1047,]            -0.36858985            -0.3147664
## [1048,]            -0.67891464            -0.3147664
## [1049,]             0.25205973             2.2075589
## [1050,]            -0.05826506            -0.5950247
## [1051,]             0.87270931             1.0865255
## [1052,]            -0.67891464            -1.1555415
## [1053,]            -0.67891464            -1.1555415
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## [1055,]            -0.67891464             0.8062671
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## [1057,]            -0.36858985            -0.5950247
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## [1061,]            -0.67891464            -1.1555415
## [1062,]            -0.67891464            -1.1555415
## [1063,]            -0.05826506            -0.5950247
## [1064,]            -0.67891464            -0.0345080
## [1065,]            -0.36858985            -0.3147664
## [1066,]            -0.36858985            -0.5950247
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## [1067,]            -0.67891464         -0.5950247
## [1068,]            -0.36858985         -0.5950247
## [1069,]            -0.67891464         -1.1555415
## [1070,]            -0.67891464         -1.1555415
## [1071,]            -0.36858985         -0.3147664
## [1072,]            -0.36858985         -0.5950247
## [1073,]            -0.67891464         -0.5950247
## [1074,]            -0.36858985          0.8062671
## [1075,]            -0.67891464         -1.1555415
## [1076,]            -0.67891464         -1.1555415
## [1077,]            -0.36858985          2.2075589
## [1078,]            -0.67891464          0.8062671
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## [1080,]            -0.05826506         -0.5950247
## [1081,]             0.87270931         -0.8752831
## [1082,]             0.25205973         -0.3147664
## [1083,]            -0.36858985         -0.5950247
## [1084,]            -0.36858985         -1.1555415
## [1085,]             1.80368368          0.5260087
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## [1087,]             3.35530763          1.3667838
## [1088,]             0.87270931          0.8062671
## [1089,]            -0.67891464         -1.1555415
## [1090,]             0.25205973          0.8062671
## [1091,]            -0.67891464          0.8062671
## [1092,]            -0.67891464         -0.5950247
## [1093,]            -0.67891464         -0.3147664
## [1094,]             3.35530763          1.3667838
## [1095,]             1.49335889         -0.8752831
## [1096,]             0.87270931          0.8062671
## [1097,]             1.49335889          0.8062671
## [1098,]            -0.67891464         -1.1555415
## [1099,]            -0.05826506         -0.5950247
## [1100,]             1.49335889          0.8062671
## [1101,]             0.56238452         -0.5950247
## [1102,]            -0.05826506          0.2457504
## [1103,]            -0.36858985         -0.5950247
## [1104,]             1.49335889          0.8062671
## [1105,]            -0.67891464         -1.1555415
## [1106,]            -0.05826506         -0.5950247
## [1107,]             1.18303410          0.8062671
## [1108,]            -0.36858985         -0.5950247
## [1109,]            -0.36858985         -0.5950247
## [1110,]            -0.36858985         -0.3147664
## [1111,]            -0.67891464         -1.1555415
## [1112,]            -0.36858985          1.3667838
## [1113,]            -0.36858985         -0.0345080
## [1114,]            -0.36858985         -0.5950247
## [1115,]             1.49335889          0.5260087
## [1116,]            -0.67891464         -1.1555415
## [1117,]            -0.05826506          2.4878173
## [1118,]            -0.05826506         -0.8752831
## [1119,]            -0.67891464         -1.1555415
## [1120,]             1.49335889          0.8062671
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## [1121,]              -0.36858985              -0.5950247
## [1122,]              -0.67891464              -1.1555415
## [1123,]              -0.36858985               0.2457504
## [1124,]              -0.67891464              -0.0345080
## [1125,]               1.49335889               0.5260087
## [1126,]              -0.36858985              -0.3147664
## [1127,]              -0.67891464              -1.1555415
## [1128,]              -0.05826506              -0.5950247
## [1129,]              -0.67891464              -0.5950247
## [1130,]              -0.67891464              -0.8752831
## [1131,]               1.18303410               1.0865255
## [1132,]               1.49335889               0.8062671
## [1133,]              -0.36858985              -0.5950247
## [1134,]              -0.67891464              -0.5950247
## [1135,]              -0.67891464              -0.8752831
## [1136,]              -0.67891464               2.2075589
## [1137,]              -0.67891464              -1.1555415
## [1138,]              -0.36858985              -0.3147664
## [1139,]               3.04498284               2.4878173
## [1140,]              -0.67891464              -0.5950247
## [1141,]              -0.36858985               1.6470422
## [1142,]              -0.36858985              -0.8752831
## [1143,]              -0.36858985              -0.0345080
## [1144,]               0.56238452               0.2457504
## [1145,]              -0.67891464              -0.3147664
## [1146,]              -0.36858985              -0.8752831
## [1147,]               1.49335889              -0.5950247
## [1148,]              -0.36858985              -0.0345080
## [1149,]               1.49335889               0.8062671
## [1150,]              -0.67891464               0.8062671
## [1151,]              -0.36858985               1.6470422
## [1152,]              -0.67891464              -1.1555415
## [1153,]              -0.05826506              -0.5950247
## [1154,]              -0.67891464              -1.1555415
## [1155,]              -0.36858985              -1.1555415
## [1156,]              -0.67891464               0.8062671
## [1157,]               3.66563242               2.2075589
## [1158,]              -0.05826506               1.3667838
## [1159,]              -0.67891464              -0.5950247
## [1160,]               0.25205973               1.0865255
## [1161,]               0.25205973               1.3667838
## [1162,]              -0.67891464              -0.5950247
## [1163,]               1.18303410              -1.1555415
## [1164,]               1.49335889               0.8062671
## [1165,]               0.25205973              -0.3147664
## [1166,]              -0.67891464              -0.5950247
## [1167,]              -0.05826506              -0.5950247
## [1168,]              -0.05826506              -0.5950247
## [1169,]              -0.36858985              -0.3147664
## [1170,]              -0.67891464              -0.5950247
## [1171,]              -0.36858985              -0.5950247
## [1172,]              -0.67891464              -0.3147664
## [1173,]              -0.36858985              -0.0345080
## [1174,]              -0.67891464              -0.5950247
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## [1175,]            -0.67891464             0.8062671
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## [1180,]             1.49335889             1.3667838
## [1181,]            -0.36858985            -0.3147664
## [1182,]            -0.05826506             2.2075589
## [1183,]            -0.36858985            -0.5950247
## [1184,]            -0.67891464            -0.0345080
## [1185,]             0.56238452             0.8062671
## [1186,]             1.18303410             1.9273006
## [1187,]             1.18303410             0.8062671
## [1188,]            -0.05826506             1.3667838
## [1189,]            -0.67891464             1.3667838
## [1190,]            -0.67891464            -0.0345080
## [1191,]            -0.36858985             0.5260087
## [1192,]            -0.67891464            -0.5950247
## [1193,]            -0.05826506            -0.5950247
## [1194,]             0.25205973            -0.3147664
## [1195,]            -0.36858985            -0.5950247
## [1196,]            -0.67891464            -1.1555415
## [1197,]            -0.67891464            -0.5950247
## [1198,]            -0.67891464            -0.5950247
## [1199,]            -0.36858985            -0.5950247
## [1200,]            -0.67891464            -0.5950247
## [1201,]            -0.05826506            -0.5950247
## [1202,]            -0.36858985            -0.5950247
## [1203,]            -0.67891464            -1.1555415
## [1204,]            -0.36858985            -0.5950247
## [1205,]             1.49335889             0.8062671
## [1206,]            -0.67891464            -1.1555415
## [1207,]             0.87270931             0.8062671
## [1208,]            -0.36858985            -0.5950247
## [1209,]             0.56238452             2.4878173
## [1210,]            -0.67891464            -1.1555415
## [1211,]            -0.05826506             2.4878173
## [1212,]            -0.36858985            -0.3147664
## [1213,]             1.80368368             0.8062671
## [1214,]            -0.67891464            -0.5950247
## [1215,]             1.18303410             0.8062671
## [1216,]            -0.36858985            -0.0345080
## [1217,]             1.80368368             1.0865255
## [1218,]            -0.67891464            -0.0345080
## [1219,]             1.80368368             0.8062671
## [1220,]            -0.36858985            -0.5950247
## [1221,]             1.18303410             0.8062671
## [1222,]             3.66563242            -0.0345080
## [1223,]            -0.67891464            -1.1555415
## [1224,]             3.66563242             1.6470422
## [1225,]            -0.67891464            -0.5950247
## [1226,]             1.80368368             0.5260087
## [1227,]            -0.36858985            -0.3147664
## [1228,]            -0.67891464            -0.3147664
```

```
## [1229,]          -0.36858985          -0.5950247
## [1230,]          -0.67891464          -1.1555415
## [1231,]          -0.36858985          -0.5950247
## [1232,]          -0.67891464           1.3667838
## [1233,]          -0.67891464           0.8062671
## [1234,]          -0.67891464           1.0865255
## [1235,]          -0.67891464          -1.1555415
## [1236,]          -0.67891464          -0.3147664
## [1237,]          -0.05826506          -0.5950247
## [1238,]          -0.67891464          -1.1555415
## [1239,]          -0.36858985          -0.5950247
## [1240,]          -0.36858985          -0.0345080
## [1241,]           0.87270931           1.0865255
## [1242,]          -0.67891464          -0.5950247
## [1243,]           3.04498284           1.0865255
## [1244,]          -0.67891464          -0.3147664
## [1245,]          -0.67891464           0.8062671
## [1246,]          -0.05826506          -0.8752831
## [1247,]          -0.36858985          -0.5950247
## [1248,]          -0.67891464          -0.5950247
## [1249,]          -0.36858985          -0.0345080
## [1250,]          -0.05826506          -0.5950247
## [1251,]          -0.67891464          -0.5950247
## [1252,]          -0.36858985           0.8062671
## [1253,]          -0.36858985          -0.5950247
## [1254,]          -0.36858985           0.8062671
## [1255,]          -0.67891464          -0.0345080
## [1256,]          -0.67891464          -1.1555415
## [1257,]          -0.67891464           0.2457504
## [1258,]          -0.67891464          -1.1555415
## [1259,]          -0.67891464          -1.1555415
## [1260,]          -0.36858985           0.8062671
## [1261,]          -0.67891464           0.8062671
## [1262,]          -0.36858985          -1.1555415
## [1263,]          -0.67891464          -1.1555415
## [1264,]          -0.67891464          -0.0345080
## [1265,]          -0.67891464          -1.1555415
## [1266,]          -0.36858985           0.8062671
## [1267,]          -0.67891464          -0.0345080
## [1268,]          -0.67891464           0.8062671
## [1269,]          -0.67891464          -0.5950247
## [1270,]          -0.36858985           1.0865255
## [1271,]          -0.05826506          -0.5950247
## [1272,]          -0.36858985          -1.1555415
## [1273,]          -0.67891464          -0.0345080
## [1274,]          -0.67891464          -1.1555415
## [1275,]           0.87270931           0.8062671
## [1276,]          -0.05826506          -0.5950247
## [1277,]          -0.67891464          -0.3147664
## [1278,]          -0.05826506          -0.5950247
## [1279,]           0.87270931           0.8062671
## [1280,]          -0.05826506          -0.3147664
## [1281,]           0.56238452           0.8062671
## [1282,]           1.49335889           0.8062671
```

```
## [1283,]           1.49335889           0.5260087
## [1284,]          -0.67891464          -0.3147664
## [1285,]          -0.05826506          -0.5950247
## [1286,]          -0.05826506          -0.5950247
## [1287,]          -0.67891464          -0.5950247
## [1288,]          -0.67891464          -1.1555415
## [1289,]          -0.36858985           0.8062671
## [1290,]           0.25205973           1.0865255
## [1291,]          -0.67891464           0.8062671
## [1292,]          -0.67891464           1.0865255
## [1293,]          -0.05826506          -0.5950247
## [1294,]          -0.36858985          -0.5950247
## [1295,]          -0.36858985          -0.5950247
## [1296,]           3.35530763           0.2457504
## [1297,]          -0.67891464          -0.5950247
## [1298,]          -0.36858985          -0.0345080
## [1299,]           0.25205973           0.8062671
## [1300,]          -0.67891464          -0.3147664
## [1301,]           0.56238452           1.0865255
## [1302,]           3.66563242           2.7680757
## [1303,]          -0.67891464          -0.3147664
## [1304,]           3.66563242           1.6470422
## [1305,]           1.49335889           0.8062671
## [1306,]          -0.36858985           0.8062671
## [1307,]          -0.05826506          -0.5950247
## [1308,]          -0.36858985          -0.5950247
## [1309,]          -0.67891464          -0.3147664
## [1310,]          -0.36858985          -0.5950247
## [1311,]          -0.05826506          -0.5950247
## [1312,]          -0.67891464          -1.1555415
## [1313,]          -0.67891464          -1.1555415
## [1314,]          -0.05826506          -1.1555415
## [1315,]           0.87270931           0.8062671
## [1316,]          -0.67891464          -1.1555415
## [1317,]           1.49335889           0.8062671
## [1318,]          -0.67891464          -0.5950247
## [1319,]           0.25205973           1.6470422
## [1320,]          -0.67891464          -1.1555415
## [1321,]           0.25205973          -0.3147664
## [1322,]          -0.05826506          -1.1555415
## [1323,]           0.56238452           0.8062671
## [1324,]          -0.05826506          -0.5950247
## [1325,]          -0.36858985           0.5260087
## [1326,]          -0.67891464          -1.1555415
## [1327,]          -0.05826506          -0.5950247
## [1328,]          -0.05826506           1.0865255
## [1329,]           0.87270931           1.0865255
## [1330,]          -0.67891464          -1.1555415
## [1331,]           1.18303410           2.7680757
## [1332,]           3.04498284           1.3667838
## [1333,]          -0.36858985          -1.1555415
## [1334,]          -0.67891464           0.8062671
## [1335,]           1.49335889          -0.3147664
## [1336,]          -0.05826506          -0.5950247
```

```
## [1337,]           -0.67891464           -0.0345080
## [1338,]           -0.67891464           -1.1555415
## [1339,]           -0.67891464           -1.1555415
## [1340,]           -0.67891464           -1.1555415
## [1341,]           -0.36858985            0.8062671
## [1342,]           -0.67891464           -0.5950247
## [1343,]           -0.36858985           -1.1555415
## [1344,]           -0.36858985           -0.5950247
## [1345,]           -0.67891464           -0.0345080
## [1346,]           -0.67891464           -0.5950247
## [1347,]            0.25205973            1.0865255
## [1348,]           -0.67891464            1.0865255
## [1349,]            2.73465805            3.3285924
## [1350,]           -0.36858985           -1.1555415
## [1351,]           -0.67891464            0.8062671
## [1352,]            0.56238452            0.8062671
## [1353,]           -0.05826506           -0.5950247
## [1354,]            0.25205973           -1.1555415
## [1355,]           -0.36858985           -1.1555415
## [1356,]           -0.36858985           -0.3147664
## [1357,]           -0.36858985           -0.0345080
## [1358,]            0.87270931            0.8062671
## [1359,]           -0.36858985           -0.0345080
## [1360,]           -0.67891464           -0.8752831
## [1361,]           -0.05826506           -0.5950247
## [1362,]            1.49335889            0.8062671
## [1363,]           -0.67891464           -0.3147664
## [1364,]           -0.67891464            1.3667838
## [1365,]           -0.67891464            0.8062671
## [1366,]           -0.67891464           -1.1555415
## [1367,]           -0.36858985           -0.5950247
## [1368,]           -0.36858985           -0.5950247
## [1369,]            1.18303410            1.9273006
## [1370,]           -0.05826506           -0.5950247
## [1371,]           -0.36858985            0.8062671
## [1372,]           -0.67891464           -1.1555415
## [1373,]            1.49335889            1.3667838
## [1374,]           -0.67891464            0.8062671
## [1375,]           -0.67891464           -1.1555415
## [1376,]           -0.67891464           -0.3147664
## [1377,]           -0.67891464           -0.3147664
## [1378,]            0.56238452           -0.3147664
## [1379,]           -0.67891464           -1.1555415
## [1380,]           -0.67891464           -1.1555415
## [1381,]           -0.67891464           -0.0345080
## [1382,]           -0.36858985           -0.0345080
## [1383,]           -0.05826506           -0.3147664
## [1384,]           -0.67891464           -0.5950247
## [1385,]           -0.05826506           -0.8752831
## [1386,]           -0.36858985           -0.8752831
## [1387,]            1.49335889            0.5260087
## [1388,]           -0.67891464           -0.5950247
## [1389,]           -0.36858985           -0.5950247
## [1390,]            1.80368368            0.8062671
```

```
## [1391,]              -0.67891464              -0.3147664
## [1392,]              -0.67891464              -1.1555415
## [1393,]              -0.67891464               1.3667838
## [1394,]              -0.67891464               0.8062671
## [1395,]              -0.67891464              -1.1555415
## [1396,]              -0.67891464               1.0865255
## [1397,]              -0.05826506              -0.5950247
## [1398,]              -0.05826506              -0.3147664
## [1399,]              -0.05826506               1.0865255
## [1400,]              -0.67891464               1.3667838
## [1401,]              -0.36858985              -0.5950247
## [1402,]              -0.36858985              -0.0345080
## [1403,]              -0.67891464              -1.1555415
## [1404,]               2.73465805               1.6470422
## [1405,]               0.25205973               0.8062671
## [1406,]               0.56238452               1.0865255
## [1407,]              -0.36858985              -0.0345080
## [1408,]              -0.36858985              -0.5950247
## [1409,]              -0.36858985              -0.0345080
## [1410,]               2.11400847              -0.0345080
## [1411,]               0.87270931               1.6470422
## [1412,]              -0.36858985              -0.5950247
## [1413,]              -0.36858985               0.8062671
## [1414,]              -0.67891464              -0.5950247
## [1415,]               3.04498284               1.9273006
## [1416,]              -0.67891464              -1.1555415
## [1417,]               0.87270931               1.0865255
## [1418,]              -0.36858985              -0.5950247
## [1419,]               1.49335889               0.8062671
## [1420,]              -0.36858985              -0.5950247
## [1421,]              -0.36858985              -1.1555415
## [1422,]               0.87270931               2.2075589
## [1423,]              -0.05826506              -0.5950247
## [1424,]              -0.36858985              -0.5950247
## [1425,]              -0.67891464               1.0865255
## [1426,]               1.80368368              -0.8752831
## [1427,]               0.56238452              -0.8752831
## [1428,]              -0.67891464              -1.1555415
## [1429,]              -0.05826506              -0.5950247
## [1430,]              -0.36858985               0.8062671
## [1431,]              -0.36858985               1.9273006
## [1432,]               0.87270931               0.8062671
## [1433,]               1.18303410               1.0865255
## [1434,]              -0.67891464              -0.0345080
## [1435,]              -0.67891464              -1.1555415
## [1436,]              -0.36858985              -0.5950247
## [1437,]              -0.36858985              -0.5950247
## [1438,]              -0.36858985              -0.3147664
## [1439,]              -0.36858985              -1.1555415
## [1440,]               0.25205973              -0.0345080
## [1441,]              -0.67891464              -0.5950247
## [1442,]              -0.36858985               1.3667838
## [1443,]              -0.05826506              -0.5950247
## [1444,]               0.56238452               2.7680757
```

```
## [1445,]              2.11400847               1.0865255
## [1446,]             -0.67891464               1.6470422
## [1447,]             -0.36858985               0.8062671
## [1448,]              2.73465805               1.9273006
## [1449,]             -0.67891464              -0.0345080
## [1450,]             -0.36858985              -0.5950247
## [1451,]             -0.36858985               0.8062671
## [1452,]             -0.36858985               1.3667838
## [1453,]             -0.67891464              -0.8752831
## [1454,]             -0.67891464              -1.1555415
## [1455,]             -0.67891464              -0.8752831
## [1456,]             -0.05826506              -0.5950247
## [1457,]             -0.67891464              -0.5950247
## [1458,]             -0.67891464              -0.5950247
## [1459,]             -0.36858985              -0.8752831
## [1460,]             -0.67891464              -0.3147664
## [1461,]             -0.67891464              -0.0345080
## [1462,]             -0.05826506              -1.1555415
## [1463,]              2.11400847               0.5260087
## [1464,]             -0.36858985               0.8062671
## [1465,]             -0.67891464              -1.1555415
## [1466,]             -0.67891464              -0.3147664
## [1467,]             -0.36858985               0.8062671
## [1468,]             -0.67891464              -0.3147664
## [1469,]             -0.67891464               1.0865255
## [1470,]             -0.36858985              -0.5950247
## attr(,"scaled:center")
##               ï..Age                Attrition             BusinessTravel
##         3.692381e+01             1.161224e+00               2.607483e+00
##            DailyRate               Department            DistanceFromHome
##         8.024857e+02             2.260544e+00               9.192517e+00
##            Education           EducationField               EmployeeCount
##         2.912925e+00             3.247619e+00               1.000000e+00
##       EmployeeNumber  EnvironmentSatisfaction                      Gender
##         1.024865e+03             2.721769e+00               1.600000e+00
##           HourlyRate            JobInvolvement                    JobLevel
##         6.589116e+01             2.729932e+00               2.063946e+00
##              JobRole          JobSatisfaction               MaritalStatus
##         5.458503e+00             2.728571e+00               2.097279e+00
##        MonthlyIncome              MonthlyRate           NumCompaniesWorked
##         6.502931e+03             1.431310e+04               2.693197e+00
##               Over18                 OverTime            PercentSalaryHike
##         1.000000e+00             1.282993e+00               1.520952e+01
##    PerformanceRating RelationshipSatisfaction               StandardHours
##         3.153741e+00             2.712245e+00               8.000000e+01
##      StockOptionLevel         TotalWorkingYears        TrainingTimesLastYear
##         7.938776e-01             1.127959e+01               2.799320e+00
##       WorkLifeBalance            YearsAtCompany           YearsInCurrentRole
##         2.761224e+00             7.008163e+00               4.229252e+00
##  YearsSinceLastPromotion       YearsWithCurrManager
##         2.187755e+00             4.123129e+00
## attr(,"scaled:scale")
##               ï..Age                Attrition             BusinessTravel
##            9.1353735                0.3678630                  0.6654549
```

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```
##               DailyRate            Department       DistanceFromHome
##              403.5090999             0.5277923              8.1068644
##                Education         EducationField          EmployeeCount
##                1.0241649             1.3313691              0.0000000
##           EmployeeNumber  EnvironmentSatisfaction                 Gender
##              602.0243348             1.0930822              0.4900647
##               HourlyRate         JobInvolvement               JobLevel
##               20.3294276             0.7115611              1.1069399
##                  JobRole        JobSatisfaction          MaritalStatus
##                2.4618213             1.1028461              0.7301208
##            MonthlyIncome            MonthlyRate     NumCompaniesWorked
##             4707.9567831          7117.7860441              2.4980090
##                   Over18               OverTime        PercentSalaryHike
##                0.0000000             0.4506065              3.6599377
##        PerformanceRating RelationshipSatisfaction          StandardHours
##                0.3608235             1.0812089              0.0000000
##          StockOptionLevel       TotalWorkingYears    TrainingTimesLastYear
##                0.8520767             7.7807817              1.2892706
##          WorkLifeBalance          YearsAtCompany      YearsInCurrentRole
##                0.7064758             6.1265252              3.6231370
##   YearsSinceLastPromotion     YearsWithCurrManager
##                3.2224303             3.5681361
```

```r
as.matrix(scale.data)
```

```
##              ï..Age  Attrition BusinessTravel    DailyRate Department
##    [1,]  0.44619856  2.2801299      0.5898476  0.742273931  1.4010356
##    [2,]  1.32191535 -0.4382732     -0.9128837 -1.297333107 -0.4936491
##    [3,]  0.00834016  2.2801299      0.5898476  1.413882080 -0.4936491
##    [4,] -0.42951824 -0.4382732     -0.9128837  1.460968999 -0.4936491
##    [5,] -1.08630583 -0.4382732      0.5898476 -0.524116344 -0.4936491
##    [6,] -0.53898284 -0.4382732     -0.9128837  0.501882822 -0.4936491
##    [7,]  2.41656135 -0.4382732      0.5898476  1.292447397 -0.4936491
##    [8,] -0.75791204 -0.4382732      0.5898476  1.376708198 -0.4936491
##    [9,]  0.11780476 -0.4382732     -0.9128837 -1.453463415 -0.4936491
##   [10,] -0.10112444 -0.4382732      0.5898476  1.230490925 -0.4936491
##   [11,] -0.21058904 -0.4382732      0.5898476  0.016144086 -0.4936491
##   [12,] -0.86737664 -0.4382732      0.5898476 -1.609593723 -0.4936491
##   [13,] -0.64844744 -0.4382732      0.5898476 -0.328333895 -0.4936491
##   [14,] -0.32005364 -0.4382732      0.5898476  1.346969091 -0.4936491
##   [15,] -0.97684124  2.2801299      0.5898476 -1.733506665 -0.4936491
##   [16,] -0.86737664 -0.4382732      0.5898476  1.453534222 -0.4936491
##   [17,] -0.53898284 -0.4382732      0.5898476 -1.161028870 -0.4936491
##   [18,] -1.63362883 -0.4382732     -2.4156151  0.794317367 -0.4936491
##   [19,]  1.75977375 -0.4382732      0.5898476  1.032230217  1.4010356
##   [20,]  0.11780476 -0.4382732      0.5898476 -1.069333292 -0.4936491
##   [21,] -1.41469963 -0.4382732     -2.4156151 -0.320899118 -0.4936491
##   [22,] -0.10112444  2.2801299      0.5898476  1.029751958  1.4010356
##   [23,] -0.32005364 -0.4382732      0.5898476 -0.950376867 -0.4936491
##   [24,] -1.74309343 -0.4382732      0.5898476 -1.019768115 -0.4936491
##   [25,] -0.32005364  2.2801299      0.5898476 -0.256464388 -0.4936491
##   [26,]  1.75977375 -0.4382732      0.5898476  1.188360525 -0.4936491
##   [27,] -0.53898284  2.2801299     -0.9128837  0.799273884 -0.4936491
##   [28,]  0.55566316 -0.4382732      0.5898476 -0.276290459  1.4010356
```

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##  [29,]   0.77459236 -0.4382732       0.5898476 -0.806637854 -0.4936491
##  [30,]   0.99352156 -0.4382732       0.5898476 -0.241594835  1.4010356
##  [31,]  -0.42951824 -0.4382732       0.5898476  0.301143855 -0.4936491
##  [32,]   0.77459236 -0.4382732       0.5898476  1.627012342 -0.4936491
##  [33,]  -0.75791204 -0.4382732       0.5898476 -1.678984971 -0.4936491
##  [34,]   0.22726936  2.2801299       0.5898476  0.229274348  1.4010356
##  [35,]  -1.41469963  2.2801299       0.5898476  0.026057122 -0.4936491
##  [36,]   0.66512776 -0.4382732       0.5898476  1.166056195 -0.4936491
##  [37,]   1.43137995  2.2801299       0.5898476  0.164839618  1.4010356
##  [38,]  -0.21058904 -0.4382732       0.5898476  0.216883054  1.4010356
##  [39,]  -0.10112444 -0.4382732       0.5898476  0.122709217 -0.4936491
##  [40,]  -0.42951824 -0.4382732      -0.9128837  0.838926026  1.4010356
##  [41,]  -0.21058904 -0.4382732       0.5898476 -0.838855219 -0.4936491
##  [42,]  -1.08630583 -0.4382732       0.5898476  1.084273653 -0.4936491
##  [43,]  -1.19577043  2.2801299       0.5898476  1.374229939 -0.4936491
##  [44,]  -1.08630583 -0.4382732      -0.9128837  0.474621974  1.4010356
##  [45,]  -0.75791204 -0.4382732      -0.9128837 -0.201942693 -0.4936491
##  [46,]   0.44619856  2.2801299       0.5898476  1.381664715 -0.4936491
##  [47,]  -0.32005364 -0.4382732      -2.4156151  0.650578353  1.4010356
##  [48,]   0.00834016 -0.4382732       0.5898476 -0.977637715 -0.4936491
##  [49,]   0.99352156 -0.4382732      -0.9128837  1.012404146  1.4010356
##  [50,]  -0.21058904 -0.4382732       0.5898476  1.057012805 -0.4936491
##  [51,]   1.21245075  2.2801299       0.5898476 -0.437377284 -0.4936491
##  [52,]  -0.97684124  2.2801299       0.5898476  1.565055871 -0.4936491
##  [53,]   0.77459236 -0.4382732       0.5898476  1.698881849  1.4010356
##  [54,]  -0.21058904 -0.4382732      -2.4156151  0.729882636 -0.4936491
##  [55,]  -1.19577043 -0.4382732       0.5898476  1.587360200  1.4010356
##  [56,]  -0.42951824 -0.4382732      -0.9128837 -0.712464017 -0.4936491
##  [57,]  -0.21058904 -0.4382732      -0.9128837  0.125187476  1.4010356
##  [58,]  -0.21058904 -0.4382732       0.5898476  0.841404285 -0.4936491
##  [59,]  -0.64844744 -0.4382732       0.5898476 -0.365507777 -0.4936491
##  [60,]   0.00834016 -0.4382732       0.5898476  0.774491296 -0.4936491
##  [61,]  -0.53898284 -0.4382732       0.5898476 -0.930550796 -0.4936491
##  [62,]   0.11780476 -0.4382732      -0.9128837 -0.370464295 -0.4936491
##  [63,]   1.43137995 -0.4382732       0.5898476  0.462230680 -0.4936491
##  [64,]   2.41656135 -0.4382732       0.5898476  1.567534129  1.4010356
##  [65,]  -0.10112444 -0.4382732       0.5898476  1.042143252 -0.4936491
##  [66,]   1.97870295 -0.4382732       0.5898476  0.083057075 -0.4936491
##  [67,]  -0.10112444 -0.4382732      -0.9128837  0.972752004 -0.4936491
##  [68,]   0.88405696 -0.4382732       0.5898476  1.329621279 -0.4936491
##  [69,]  -0.21058904 -0.4382732      -0.9128837 -0.343203448 -0.4936491
##  [70,]  -0.10112444  2.2801299       0.5898476 -1.200681012 -0.4936491
##  [71,]   2.41656135 -0.4382732      -0.9128837  1.047099770  1.4010356
##  [72,]  -0.86737664 -0.4382732       0.5898476  1.302360432 -0.4936491
##  [73,]  -0.64844744 -0.4382732       0.5898476  0.692708754 -0.4936491
##  [74,]  -0.53898284 -0.4382732       0.5898476 -0.630681475 -0.4936491
##  [75,]  -0.10112444 -0.4382732       0.5898476 -1.661637159 -0.4936491
##  [76,]  -0.64844744 -0.4382732       0.5898476 -0.139986222 -0.4936491
##  [77,]  -0.21058904 -0.4382732       0.5898476 -0.065638456  1.4010356
##  [78,]   0.88405696 -0.4382732       0.5898476 -1.510463368 -0.4936491
##  [79,]   0.00834016 -0.4382732       0.5898476 -1.004898562 -0.4936491
##  [80,]   0.99352156 -0.4382732       0.5898476  0.353187291 -2.3883338
##  [81,]  -0.75791204 -0.4382732       0.5898476  0.122709217 -0.4936491
##  [82,]  -0.21058904 -0.4382732       0.5898476  1.019838923 -0.4936491
```

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##   [83,]   1.97870295 -0.4382732      0.5898476 -1.713680595  1.4010356
##   [84,]   0.11780476 -0.4382732     -2.4156151 -0.568725004 -0.4936491
##   [85,]  -0.32005364 -0.4382732      0.5898476  0.868665132 -0.4936491
##   [86,]   2.08816755 -0.4382732      0.5898476  1.480795070 -0.4936491
##   [87,]  -1.52416423 -0.4382732      0.5898476 -0.648029287  1.4010356
##   [88,]   1.54084455 -0.4382732      0.5898476 -0.918159502 -0.4936491
##   [89,]  -0.75791204 -0.4382732      0.5898476 -1.275028777 -0.4936491
##   [90,]   0.99352156  2.2801299      0.5898476 -0.330812153  1.4010356
##   [91,]   0.33673396 -0.4382732     -0.9128837 -0.675290134 -0.4936491
##   [92,]   1.54084455 -0.4382732      0.5898476 -0.422507731  1.4010356
##   [93,]  -0.75791204 -0.4382732      0.5898476  1.317229985  1.4010356
##   [94,]   0.99352156 -0.4382732     -0.9128837 -0.407638178 -0.4936491
##   [95,]  -0.53898284 -0.4382732      0.5898476  0.719969601  1.4010356
##   [96,]   1.86923835 -0.4382732      0.5898476  1.027273699 -0.4936491
##   [97,]  -1.41469963 -0.4382732      0.5898476  1.364316903  1.4010356
##   [98,]  -0.97684124 -0.4382732     -2.4156151 -1.691376265  1.4010356
##   [99,]   2.30709675 -0.4382732      0.5898476 -0.298594788  1.4010356
##  [100,]   0.77459236 -0.4382732     -2.4156151 -0.776898747 -0.4936491
##  [101,]   0.00834016  2.2801299      0.5898476  0.011187569 -2.3883338
##  [102,]  -0.53898284 -0.4382732      0.5898476  0.060752746 -0.4936491
##  [103,]  -1.85255803  2.2801299     -0.9128837  0.169796135 -0.4936491
##  [104,]  -0.32005364 -0.4382732      0.5898476 -0.340725189 -0.4936491
##  [105,]   0.00834016 -0.4382732     -2.4156151  0.588621882 -0.4936491
##  [106,]   2.41656135 -0.4382732     -2.4156151  1.530360247 -2.3883338
##  [107,]   1.43137995 -0.4382732     -0.9128837  0.774491296 -0.4936491
##  [108,]  -1.30523503  2.2801299      0.5898476 -1.393985202  1.4010356
##  [109,]  -1.30523503 -0.4382732      0.5898476  1.183404007 -0.4936491
##  [110,]  -1.63362883 -0.4382732      0.5898476 -0.665377099 -0.4936491
##  [111,]   1.54084455 -0.4382732     -0.9128837  1.619577565 -0.4936491
##  [112,]  -0.32005364  2.2801299     -0.9128837 -0.358073001 -0.4936491
##  [113,]   1.86923835 -0.4382732     -2.4156151 -1.636854570 -2.3883338
##  [114,]  -1.41469963 -0.4382732      0.5898476  0.804230402 -0.4936491
##  [115,]  -0.32005364 -0.4382732      0.5898476  0.566317552 -0.4936491
##  [116,]   0.00834016 -0.4382732      0.5898476  0.957882451  1.4010356
##  [117,]  -0.32005364 -0.4382732      0.5898476  1.366795162 -0.4936491
##  [118,]  -0.10112444 -0.4382732     -0.9128837  1.646838413  1.4010356
##  [119,]  -0.10112444 -0.4382732      0.5898476  0.296187337 -0.4936491
##  [120,]   0.66512776 -0.4382732     -0.9128837 -1.012333339  1.4010356
##  [121,]  -0.75791204 -0.4382732     -0.9128837  1.262708290 -0.4936491
##  [122,]  -0.42951824 -0.4382732     -2.4156151 -0.130073186  1.4010356
##  [123,]   2.08816755  2.2801299      0.5898476 -0.895855172 -0.4936491
##  [124,]   1.54084455 -0.4382732      0.5898476 -0.293638271 -0.4936491
##  [125,]  -0.64844744  2.2801299      0.5898476 -1.371680873  1.4010356
##  [126,]  -1.19577043 -0.4382732      0.5898476  0.095448370 -0.4936491
##  [127,]   2.30709675  2.2801299      0.5898476 -1.624463276 -0.4936491
##  [128,]  -1.96202263  2.2801299      0.5898476 -0.680246652  1.4010356
##  [129,]  -1.63362883 -0.4382732      0.5898476 -0.516681568 -0.4936491
##  [130,]   1.32191535 -0.4382732      0.5898476 -0.823985666 -0.4936491
##  [131,]   0.66512776 -0.4382732     -0.9128837  0.382926397 -0.4936491
##  [132,]   1.43137995 -0.4382732     -0.9128837  0.016144086  1.4010356
##  [133,]  -0.64844744  2.2801299      0.5898476 -0.645551028  1.4010356
##  [134,]   0.44619856 -0.4382732      0.5898476 -0.001203726  1.4010356
##  [135,]  -1.19577043 -0.4382732      0.5898476  1.369273421 -2.3883338
##  [136,]  -0.10112444 -0.4382732      0.5898476 -1.453463415 -0.4936491
```

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## [137,]  1.54084455  2.2801299   -0.9128837  0.861230356 -0.4936491
## [138,]  0.22726936 -0.4382732    0.5898476  1.304838691  1.4010356
## [139,] -1.30523503 -0.4382732    0.5898476  0.387882915  1.4010356
## [140,] -0.75791204 -0.4382732    0.5898476  1.084273653 -2.3883338
## [141,] -0.53898284  2.2801299    0.5898476  0.571274070 -0.4936491
## [142,]  0.88405696 -0.4382732    0.5898476  1.272621326 -0.4936491
## [143,]  0.11780476 -0.4382732    0.5898476 -1.086681104 -0.4936491
## [144,] -0.75791204 -0.4382732    0.5898476 -0.903289949 -0.4936491
## [145,] -0.53898284 -0.4382732   -0.9128837 -0.281246976  1.4010356
## [146,] -0.75791204 -0.4382732    0.5898476 -1.490637298 -0.4936491
## [147,] -0.75791204 -0.4382732    0.5898476  1.547708059 -0.4936491
## [148,]  0.44619856 -0.4382732   -0.9128837  0.135100511 -0.4936491
## [149,]  0.44619856 -0.4382732    0.5898476  0.323448184 -0.4936491
## [150,] -1.96202263 -0.4382732    0.5898476  0.938056380 -0.4936491
## [151,]  0.33673396 -0.4382732   -0.9128837  1.468403775 -0.4936491
## [152,] -0.21058904 -0.4382732    0.5898476 -0.348159965  1.4010356
## [153,]  1.75977375 -0.4382732    0.5898476  1.570012388  1.4010356
## [154,]  0.88405696 -0.4382732    0.5898476 -1.507985110 -0.4936491
## [155,] -0.53898284 -0.4382732   -0.9128837  0.407708985  1.4010356
## [156,] -0.86737664 -0.4382732   -2.4156151  1.718707920 -0.4936491
## [157,]  1.54084455 -0.4382732    0.5898476  0.908317274 -0.4936491
## [158,]  2.30709675 -0.4382732    0.5898476  0.848839062 -0.4936491
## [159,]  0.33673396 -0.4382732    0.5898476 -0.427464249  1.4010356
## [160,] -0.32005364 -0.4382732   -0.9128837 -1.237854894  1.4010356
## [161,] -1.63362883 -0.4382732    0.5898476  1.123925794 -0.4936491
## [162,] -1.08630583 -0.4382732   -2.4156151 -0.276290459 -0.4936491
## [163,] -0.97684124 -0.4382732    0.5898476 -0.898333431 -0.4936491
## [164,]  2.19763215 -0.4382732    0.5898476 -1.161028870 -0.4936491
## [165,] -1.08630583 -0.4382732   -2.4156151  1.604708012 -0.4936491
## [166,]  1.43137995 -0.4382732    0.5898476  1.609664530 -0.4936491
## [167,]  0.44619856 -0.4382732    0.5898476 -0.836376960 -0.4936491
## [168,] -0.75791204 -0.4382732    0.5898476  1.329621279  1.4010356
## [169,]  0.11780476 -0.4382732    0.5898476 -0.249029611  1.4010356
## [170,] -0.53898284 -0.4382732    0.5898476 -1.691376265 -0.4936491
## [171,] -1.08630583 -0.4382732    0.5898476  0.878578168 -0.4936491
## [172,] -1.96202263  2.2801299   -0.9128837 -0.496855497  1.4010356
## [173,] -0.10112444 -0.4382732   -0.9128837  1.679055778 -0.4936491
## [174,] -0.75791204 -0.4382732   -2.4156151 -1.713680595 -0.4936491
## [175,]  0.88405696 -0.4382732    0.5898476  1.153664901  1.4010356
## [176,]  2.08816755 -0.4382732    0.5898476 -0.221768764 -0.4936491
## [177,] -0.42951824 -0.4382732    0.5898476 -1.656680641 -0.4936491
## [178,] -1.96202263  2.2801299    0.5898476 -1.237854894 -0.4936491
## [179,]  0.99352156 -0.4382732    0.5898476 -0.685203170  1.4010356
## [180,]  0.11780476 -0.4382732    0.5898476  1.431229892 -0.4936491
## [181,] -0.64844744 -0.4382732    0.5898476 -1.641811088 -0.4936491
## [182,] -0.32005364 -0.4382732    0.5898476 -0.429942508 -0.4936491
## [183,]  0.44619856  2.2801299    0.5898476  1.371751680  1.4010356
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## [185,]  1.75977375 -0.4382732    0.5898476  0.697665271 -0.4936491
## [186,] -0.42951824 -0.4382732    0.5898476  0.318491667 -0.4936491
## [187,]  0.33673396 -0.4382732    0.5898476  0.462230680 -0.4936491
## [188,]  1.97870295 -0.4382732    0.5898476 -0.273812200 -0.4936491
## [189,] -0.32005364 -0.4382732   -0.9128837  0.660491389 -0.4936491
## [190,]  1.54084455 -0.4382732    0.5898476 -1.213072306 -0.4936491
```

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## [191,]  1.65030915 -0.4382732      0.5898476 -0.256464388 -0.4936491
## [192,] -1.08630583 -0.4382732      0.5898476  0.226796089 -0.4936491
## [193,] -0.21058904  2.2801299      0.5898476 -0.610855404 -0.4936491
## [194,]  0.66512776 -0.4382732     -2.4156151  1.342012574 -0.4936491
## [195,]  0.88405696 -0.4382732     -2.4156151  0.972752004 -0.4936491
## [196,]  0.00834016 -0.4382732      0.5898476 -1.270072259 -0.4936491
## [197,] -0.21058904 -0.4382732     -0.9128837 -1.646767605 -0.4936491
## [198,]  0.55566316 -0.4382732     -2.4156151  0.306100372 -0.4936491
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## [200,]  0.11780476 -0.4382732      0.5898476  0.697665271 -0.4936491
## [201,] -1.08630583 -0.4382732     -0.9128837 -0.819029148 -0.4936491
## [202,]  1.32191535 -0.4382732     -2.4156151  0.494448045 -0.4936491
## [203,] -0.32005364 -0.4382732     -0.9128837  0.187143947 -0.4936491
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## [205,]  0.11780476  2.2801299      0.5898476  0.935578121 -0.4936491
## [206,] -0.86737664  2.2801299      0.5898476 -1.688898006  1.4010356
## [207,] -1.63362883 -0.4382732      0.5898476  0.826534732 -0.4936491
## [208,] -0.10112444 -0.4382732     -0.9128837 -0.415072955 -0.4936491
## [209,]  0.33673396 -0.4382732     -2.4156151  0.863708615 -0.4936491
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## [214,]  1.54084455 -0.4382732      0.5898476  1.651794931 -0.4936491
## [215,] -0.75791204  2.2801299      0.5898476  0.501882822 -0.4936491
## [216,]  0.44619856 -0.4382732      0.5898476  0.231752607  1.4010356
## [217,] -0.75791204  2.2801299     -0.9128837 -1.161028870  1.4010356
## [218,] -0.86737664  2.2801299      0.5898476  0.469665457 -0.4936491
## [219,]  0.88405696 -0.4382732     -2.4156151  0.618360988  1.4010356
## [220,]  1.86923835 -0.4382732      0.5898476  0.853795579  1.4010356
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## [222,] -0.42951824 -0.4382732      0.5898476 -1.624463276 -0.4936491
## [223,]  0.00834016 -0.4382732     -0.9128837 -0.345681707 -0.4936491
## [224,]  0.11780476 -0.4382732      0.5898476 -1.693854524  1.4010356
## [225,] -0.64844744 -0.4382732     -2.4156151  0.437448092 -0.4936491
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## [234,]  1.43137995 -0.4382732      0.5898476  0.127665735  1.4010356
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## [244,]  0.33673396 -0.4382732      0.5898476  1.232969184 -0.4936491
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```

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## [439,] -0.21058904 -0.4382732     0.5898476  1.173490972 -0.4936491
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## [646,] -0.86737664  2.2801299      0.5898476 -1.143681058  1.4010356
## [647,]  1.75977375 -0.4382732      0.5898476  0.162361359  1.4010356
## [648,] -0.21058904 -0.4382732      0.5898476 -0.323377377 -0.4936491
## [649,]  0.00834016 -0.4382732     -0.9128837  1.061969323  1.4010356
## [650,]  1.75977375 -0.4382732      0.5898476 -1.735984924 -0.4936491
## [651,]  0.66512776 -0.4382732     -0.9128837 -0.942942091 -0.4936491
## [652,]  1.10298615 -0.4382732      0.5898476 -1.371680873  1.4010356
## [653,]  0.00834016 -0.4382732     -2.4156151  1.114012759  1.4010356
## [654,]  1.43137995 -0.4382732     -2.4156151  0.194578724 -0.4936491
## [655,]  0.22726936 -0.4382732      0.5898476  1.438664669 -2.3883338
## [656,] -0.42951824 -0.4382732      0.5898476  0.675360942 -2.3883338
## [657,] -0.53898284  2.2801299      0.5898476 -1.061898516 -0.4936491
## [658,] -0.86737664 -0.4382732      0.5898476  0.702621789 -0.4936491
## [659,]  0.77459236 -0.4382732      0.5898476 -0.350638224 -0.4936491
## [660,] -0.97684124 -0.4382732      0.5898476  0.045883193  1.4010356
## [661,]  2.30709675  2.2801299     -0.9128837 -0.053247162 -0.4936491
## [662,]  0.66512776 -0.4382732      0.5898476 -1.550115510 -0.4936491
## [663,] -1.85255803  2.2801299      0.5898476 -0.749637900  1.4010356
## [664,] -1.74309343  2.2801299      0.5898476  1.547708059 -0.4936491
## [665,] -0.10112444 -0.4382732      0.5898476  1.542751541 -0.4936491
## [666,]  1.10298615 -0.4382732      0.5898476  1.614621048  1.4010356
## [667,] -1.63362883  2.2801299      0.5898476 -0.459681614 -0.4936491
## [668,]  0.44619856  2.2801299      0.5898476  0.700143530 -0.4936491
## [669,] -0.97684124 -0.4382732      0.5898476  0.477100233 -0.4936491
## [670,]  0.22726936  2.2801299      0.5898476  0.791839108 -0.4936491
## [671,] -1.08630583 -0.4382732      0.5898476 -0.457203355 -0.4936491
## [672,] -0.32005364 -0.4382732      0.5898476 -0.635637993 -0.4936491
## [673,]  0.55566316 -0.4382732      0.5898476 -0.843811736  1.4010356
## [674,] -0.42951824 -0.4382732      0.5898476  0.980186781 -0.4936491
## [675,]  2.30709675 -0.4382732      0.5898476  1.163577936 -0.4936491
## [676,] -0.64844744 -0.4382732      0.5898476 -1.607115464  1.4010356
```

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## [677,] -0.21058904 -0.4382732     0.5898476  0.829012991 -0.4936491
## [678,]  1.32191535 -0.4382732     0.5898476 -0.682724911 -0.4936491
## [679,]  1.21245075 -0.4382732     0.5898476  1.651794931 -0.4936491
## [680,] -0.64844744 -0.4382732    -2.4156151  0.955404192  1.4010356
## [681,] -0.10112444 -0.4382732     0.5898476 -1.522854663 -0.4936491
## [682,]  0.11780476 -0.4382732     0.5898476  1.314751726 -0.4936491
## [683,] -0.53898284 -0.4382732    -2.4156151  0.945491157 -0.4936491
## [684,] -1.30523503  2.2801299     0.5898476  0.159883100  1.4010356
## [685,]  0.33673396 -0.4382732     0.5898476 -0.358073001  1.4010356
## [686,] -1.19577043 -0.4382732    -0.9128837  1.190838784  1.4010356
## [687,]  0.44619856 -0.4382732     0.5898476 -1.336985249 -0.4936491
## [688,] -0.10112444 -0.4382732     0.5898476  0.335839479 -0.4936491
## [689,] -1.96202263  2.2801299     0.5898476 -0.950376867  1.4010356
## [690,] -1.85255803  2.2801299     0.5898476 -1.669071935 -0.4936491
## [691,] -0.64844744 -0.4382732     0.5898476 -0.462159873 -0.4936491
## [692,]  0.33673396 -0.4382732    -0.9128837  1.651794931 -0.4936491
## [693,] -0.53898284 -0.4382732     0.5898476 -0.754594418 -0.4936491
## [694,] -0.10112444  2.2801299     0.5898476 -0.675290134  1.4010356
## [695,] -0.42951824 -0.4382732     0.5898476  0.660491389 -0.4936491
## [696,]  0.00834016  2.2801299     0.5898476 -0.439855543  1.4010356
## [697,]  0.88405696 -0.4382732    -2.4156151  0.006231051 -0.4936491
## [698,] -0.86737664 -0.4382732    -0.9128837  1.490708105  1.4010356
## [699,] -0.21058904 -0.4382732     0.5898476  1.032230217  1.4010356
## [700,]  1.65030915 -0.4382732     0.5898476  0.620839247 -0.4936491
## [701,]  2.30709675  2.2801299     0.5898476 -1.272550518 -0.4936491
## [702,]  1.75977375 -0.4382732     0.5898476  1.421316857  1.4010356
## [703,] -0.75791204 -0.4382732     0.5898476 -1.416289532  1.4010356
## [704,]  0.11780476 -0.4382732    -2.4156151 -1.612071981  1.4010356
## [705,] -0.21058904 -0.4382732     0.5898476  0.197056983  1.4010356
## [706,]  0.22726936 -0.4382732     0.5898476  0.249100419  1.4010356
## [707,]  0.33673396  2.2801299    -2.4156151  1.676577519  1.4010356
## [708,]  1.10298615 -0.4382732    -0.9128837  1.428751634 -0.4936491
## [709,] -0.10112444 -0.4382732    -2.4156151  1.057012805  1.4010356
## [710,] -0.64844744  2.2801299    -2.4156151 -1.158550611 -0.4936491
## [711,] -0.42951824 -0.4382732    -2.4156151 -0.199464434  1.4010356
## [712,] -0.86737664  2.2801299     0.5898476  0.256535195 -0.4936491
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## [715,]  1.43137995 -0.4382732     0.5898476  0.801752143 -0.4936491
## [716,] -0.42951824 -0.4382732    -0.9128837  0.060752746 -0.4936491
## [717,]  0.44619856 -0.4382732    -0.9128837  0.092970111 -0.4936491
## [718,] -1.08630583 -0.4382732     0.5898476  0.821578214 -0.4936491
## [719,]  0.88405696 -0.4382732    -2.4156151 -1.374159131 -0.4936491
## [720,]  1.10298615 -0.4382732     0.5898476  0.377969879  1.4010356
## [721,] -0.75791204  2.2801299     0.5898476 -1.646767605 -0.4936491
## [722,]  1.43137995 -0.4382732     0.5898476  0.338317737 -0.4936491
## [723,]  0.11780476 -0.4382732    -0.9128837  1.458490740 -0.4936491
## [724,]  0.99352156 -0.4382732     0.5898476 -0.586072816 -0.4936491
## [725,] -1.41469963 -0.4382732     0.5898476  1.000012852 -0.4936491
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## [727,] -0.64844744 -0.4382732    -0.9128837  0.125187476 -0.4936491
## [728,] -2.07148723 -0.4382732    -2.4156151 -1.277507036 -0.4936491
## [729,]  1.86923835 -0.4382732     0.5898476  1.582403683 -0.4936491
## [730,] -0.21058904 -0.4382732     0.5898476 -0.543942415 -0.4936491
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## [731,] -0.75791204 -0.4382732    0.5898476 -1.609593723 -0.4936491
## [732,] -1.85255803  2.2801299    0.5898476  0.729882636 -0.4936491
## [733,] -0.75791204  2.2801299   -0.9128837 -1.718637112 -0.4936491
## [734,] -1.19577043 -0.4382732    0.5898476  0.653056612 -0.4936491
## [735,] -1.63362883 -0.4382732    0.5898476 -1.450985156 -0.4936491
## [736,]  1.21245075 -0.4382732    0.5898476 -1.302289625 -0.4936491
## [737,]  1.21245075 -0.4382732    0.5898476  1.369273421 -0.4936491
## [738,]  0.44619856 -0.4382732    0.5898476 -0.628203216 -0.4936491
## [739,]  0.22726936 -0.4382732    0.5898476 -0.833898701 -0.4936491
## [740,] -1.08630583 -0.4382732    0.5898476  0.625795765 -0.4936491
## [741,] -0.21058904 -0.4382732    0.5898476 -0.001203726 -0.4936491
## [742,]  0.55566316 -0.4382732    0.5898476 -1.332028731  1.4010356
## [743,]  1.43137995 -0.4382732    0.5898476  0.003752792 -0.4936491
## [744,]  2.41656135 -0.4382732    0.5898476 -0.216812246 -0.4936491
## [745,]  0.00834016  2.2801299    0.5898476  0.838926026 -0.4936491
## [746,]  1.97870295 -0.4382732   -0.9128837 -1.654202382 -0.4936491
## [747,]  0.44619856 -0.4382732   -2.4156151 -1.376637390 -0.4936491
## [748,]  0.11780476 -0.4382732    0.5898476  0.576230587  1.4010356
## [749,] -1.19577043  2.2801299   -2.4156151 -1.332028731  1.4010356
## [750,]  1.65030915  2.2801299    0.5898476 -1.329550472  1.4010356
## [751,]  0.77459236 -0.4382732    0.5898476  1.599751495  1.4010356
## [752,]  1.43137995 -0.4382732   -2.4156151 -1.629419793  1.4010356
## [753,] -0.10112444  2.2801299    0.5898476  0.204491759 -0.4936491
## [754,]  0.22726936 -0.4382732   -0.9128837  0.353187291 -0.4936491
## [755,] -0.42951824 -0.4382732   -2.4156151  0.583665364  1.4010356
## [756,]  0.88405696 -0.4382732    0.5898476  1.069404100  1.4010356
## [757,] -0.53898284 -0.4382732   -2.4156151  0.759621743 -0.4936491
## [758,] -0.32005364 -0.4382732    0.5898476 -1.453463415  1.4010356
## [759,]  2.41656135 -0.4382732    0.5898476  0.710056566  1.4010356
## [760,]  0.88405696 -0.4382732    0.5898476 -0.035899350 -2.3883338
## [761,]  1.75977375 -0.4382732   -0.9128837 -1.681463229  1.4010356
## [762,] -0.10112444  2.2801299    0.5898476 -0.353116483 -0.4936491
## [763,] -1.19577043  2.2801299   -0.9128837 -1.141202799 -0.4936491
## [764,] -0.32005364 -0.4382732    0.5898476  1.314751726  1.4010356
## [765,] -0.97684124 -0.4382732    0.5898476  0.846360803  1.4010356
## [766,]  0.11780476 -0.4382732   -0.9128837  0.950447675 -0.4936491
## [767,]  1.43137995 -0.4382732    0.5898476  1.639403636 -0.4936491
## [768,]  0.00834016 -0.4382732    0.5898476 -1.681463229 -0.4936491
## [769,]  0.33673396 -0.4382732    0.5898476 -1.245289671  1.4010356
## [770,] -1.19577043 -0.4382732   -0.9128837  0.293709078 -0.4936491
## [771,]  0.99352156 -0.4382732    0.5898476 -0.923116020 -0.4936491
## [772,]  1.86923835 -0.4382732    0.5898476  0.692708754  1.4010356
## [773,]  2.08816755 -0.4382732   -0.9128837  1.084273653 -0.4936491
## [774,] -0.10112444 -0.4382732    0.5898476 -0.016073279 -0.4936491
## [775,]  1.97870295 -0.4382732   -2.4156151 -0.888420396 -0.4936491
## [776,]  0.66512776 -0.4382732    0.5898476 -0.960289903  1.4010356
## [777,] -1.85255803  2.2801299   -0.9128837 -0.082986268  1.4010356
## [778,] -1.74309343  2.2801299    0.5898476  1.317229985 -0.4936491
## [779,]  0.99352156 -0.4382732    0.5898476  0.496926304 -0.4936491
## [780,]  1.54084455  2.2801299    0.5898476  1.289969138 -0.4936491
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## [782,] -1.19577043 -0.4382732    0.5898476 -1.512941627 -0.4936491
## [783,] -0.75791204 -0.4382732    0.5898476  0.925665086 -0.4936491
## [784,]  0.44619856 -0.4382732    0.5898476 -0.727333570 -0.4936491
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## [785,]  0.11780476 -0.4382732    0.5898476 -1.170941905 -0.4936491
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## [789,] -0.97684124 -0.4382732    0.5898476  0.135100511 -0.4936491
## [790,]  0.77459236  2.2801299    0.5898476  1.421316857 -2.3883338
## [791,] -0.42951824 -0.4382732    0.5898476 -0.367986036 -0.4936491
## [792,] -0.21058904  2.2801299    0.5898476  0.995056334  1.4010356
## [793,] -0.42951824  2.2801299   -0.9128837  0.060752746 -0.4936491
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## [795,] -0.32005364 -0.4382732   -0.9128837 -0.457203355 -0.4936491
## [796,]  0.00834016 -0.4382732    0.5898476 -1.222985341  1.4010356
## [797,] -1.30523503  2.2801299    0.5898476  1.032230217 -0.4936491
## [798,] -1.19577043  2.2801299    0.5898476  1.307316950 -0.4936491
## [799,] -0.42951824  2.2801299    0.5898476  0.531621928 -0.4936491
## [800,]  0.55566316 -0.4382732    0.5898476 -0.826463924 -0.4936491
## [801,] -0.97684124  2.2801299   -0.9128837  0.511795857 -0.4936491
## [802,]  1.43137995  2.2801299   -0.9128837  0.387882915  1.4010356
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## [805,]  1.21245075 -0.4382732   -2.4156151  1.138795348 -0.4936491
## [806,]  0.88405696 -0.4382732   -2.4156151  0.613404470  1.4010356
## [807,]  1.65030915 -0.4382732    0.5898476  0.474621974 -0.4936491
## [808,]  0.11780476 -0.4382732    0.5898476 -0.080508009  1.4010356
## [809,] -0.86737664 -0.4382732    0.5898476  0.754665225 -0.4936491
## [810,] -0.97684124 -0.4382732    0.5898476  0.365578585 -0.4936491
## [811,]  0.99352156 -0.4382732    0.5898476 -0.982594232  1.4010356
## [812,]  0.11780476 -0.4382732    0.5898476 -1.666593676  1.4010356
## [813,]  0.66512776 -0.4382732   -0.9128837  0.692708754 -0.4936491
## [814,]  0.22726936  2.2801299   -0.9128837 -1.485680780 -0.4936491
## [815,]  0.33673396 -0.4382732    0.5898476  1.252795255 -0.4936491
## [816,] -1.74309343 -0.4382732    0.5898476  0.449839386 -0.4936491
## [817,]  0.22726936 -0.4382732   -2.4156151 -0.900811690 -0.4936491
## [818,] -0.10112444 -0.4382732   -2.4156151 -1.450985156 -0.4936491
## [819,] -0.64844744 -0.4382732   -0.9128837 -0.023508055  1.4010356
## [820,] -0.97684124 -0.4382732    0.5898476  1.607186271 -0.4936491
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## [822,]  1.32191535 -0.4382732    0.5898476 -1.557550287  1.4010356
## [823,] -0.32005364 -0.4382732   -0.9128837  0.496926304 -0.4936491
## [824,] -0.86737664 -0.4382732   -0.9128837 -0.774420488 -0.4936491
## [825,]  0.55566316 -0.4382732    0.5898476 -1.522854663 -0.4936491
## [826,] -0.86737664 -0.4382732    0.5898476 -0.209377470 -0.4936491
## [827,]  0.11780476 -0.4382732    0.5898476 -0.915681243 -2.3883338
## [828,] -0.97684124 -0.4382732   -0.9128837 -0.073073233 -0.4936491
## [829,] -2.07148723  2.2801299   -2.4156151 -1.376637390 -0.4936491
## [830,] -0.42951824  2.2801299    0.5898476 -0.494377238  1.4010356
## [831,]  0.44619856 -0.4382732    0.5898476 -1.574898099 -0.4936491
## [832,] -0.64844744  2.2801299   -0.9128837  0.177230912 -0.4936491
## [833,]  0.00834016 -0.4382732    0.5898476 -1.079246328 -0.4936491
## [834,] -1.08630583 -0.4382732    0.5898476 -1.495593815 -0.4936491
## [835,] -0.32005364 -0.4382732    0.5898476  1.480795070  1.4010356
## [836,] -0.21058904 -0.4382732    0.5898476 -0.680246652 -2.3883338
## [837,] -0.86737664  2.2801299    0.5898476 -0.977637715  1.4010356
## [838,]  0.33673396 -0.4382732   -0.9128837 -0.519159826 -0.4936491
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## [839,]  0.55566316  2.2801299   -0.9128837 -0.796724818  1.4010356
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## [843,] -0.97684124  2.2801299    0.5898476  1.691447072 -0.4936491
## [844,] -1.19577043 -0.4382732    0.5898476  1.441142928 -0.4936491
## [845,] -0.75791204 -0.4382732    0.5898476  0.122709217  1.4010356
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## [847,] -0.21058904 -0.4382732    0.5898476  0.040926675 -0.4936491
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## [852,]  2.08816755 -0.4382732    0.5898476 -0.209377470 -0.4936491
## [853,] -0.86737664 -0.4382732    0.5898476  1.483273328 -0.4936491
## [854,] -1.96202263 -0.4382732    0.5898476 -0.390290366 -0.4936491
## [855,]  0.88405696 -0.4382732    0.5898476  1.622055824 -0.4936491
## [856,]  0.00834016 -0.4382732    0.5898476  0.432491574 -0.4936491
## [857,] -1.85255803 -0.4382732    0.5898476  0.006231051 -0.4936491
## [858,]  0.77459236  2.2801299    0.5898476  0.729882636 -0.4936491
## [859,]  1.75977375 -0.4382732    0.5898476  1.042143252 -0.4936491
## [860,] -0.86737664 -0.4382732    0.5898476  0.345752514 -0.4936491
## [861,] -1.63362883  2.2801299   -0.9128837  1.123925794 -0.4936491
## [862,]  0.99352156 -0.4382732    0.5898476  1.485751587  1.4010356
## [863,]  0.77459236 -0.4382732   -2.4156151 -1.713680595 -0.4936491
## [864,] -0.42951824 -0.4382732    0.5898476 -1.624463276 -2.3883338
## [865,]  0.44619856  2.2801299   -2.4156151  0.256535195 -0.4936491
## [866,] -0.75791204 -0.4382732    0.5898476  1.304838691  1.4010356
## [867,]  0.33673396 -0.4382732   -0.9128837  0.945491157  1.4010356
## [868,]  1.43137995 -0.4382732   -0.9128837  1.532838506 -0.4936491
## [869,] -0.97684124 -0.4382732    0.5898476  0.933099863 -0.4936491
## [870,]  0.99352156 -0.4382732    0.5898476  1.604708012 -0.4936491
## [871,] -0.21058904 -0.4382732    0.5898476  1.384142974  1.4010356
## [872,] -1.41469963  2.2801299    0.5898476  0.449839386 -0.4936491
## [873,] -0.42951824 -0.4382732   -0.9128837  0.851317320  1.4010356
## [874,] -0.10112444 -0.4382732    0.5898476  0.283796043 -0.4936491
## [875,] -0.75791204 -0.4382732    0.5898476  0.125187476 -0.4936491
## [876,]  0.77459236 -0.4382732    0.5898476 -1.493115556 -0.4936491
## [877,] -1.85255803 -0.4382732    0.5898476 -0.367986036  1.4010356
## [878,]  0.99352156 -0.4382732    0.5898476 -1.617028499 -0.4936491
## [879,]  0.55566316 -0.4382732   -2.4156151 -1.545158992 -2.3883338
## [880,]  2.52602595 -0.4382732    0.5898476 -0.263899164  1.4010356
## [881,] -0.53898284 -0.4382732   -0.9128837 -1.701289300 -0.4936491
## [882,] -0.53898284 -0.4382732   -0.9128837  1.272621326 -0.4936491
## [883,] -0.10112444 -0.4382732    0.5898476 -1.089159363 -0.4936491
## [884,] -0.42951824 -0.4382732    0.5898476 -1.698811041 -0.4936491
## [885,]  0.33673396 -0.4382732    0.5898476 -1.723593630  1.4010356
## [886,] -1.30523503 -0.4382732    0.5898476  1.371751680  1.4010356
## [887,] -0.75791204 -0.4382732    0.5898476  1.641881895 -0.4936491
## [888,]  0.55566316 -0.4382732   -0.9128837 -0.853724772 -0.4936491
## [889,] -0.21058904 -0.4382732   -2.4156151  1.014882405  1.4010356
## [890,] -1.08630583 -0.4382732    0.5898476  0.744752190 -0.4936491
## [891,]  1.86923835 -0.4382732   -0.9128837  0.405230726 -0.4936491
## [892,]  0.77459236 -0.4382732    0.5898476  0.779447814 -0.4936491
```

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## [893,] -1.96202263  2.2801299      -2.4156151 -0.739724865 -0.4936491
## [894,] -0.86737664 -0.4382732       0.5898476  0.514274116 -0.4936491
## [895,]  1.86923835 -0.4382732       0.5898476 -0.291160012 -0.4936491
## [896,] -0.64844744 -0.4382732       0.5898476  1.312273467 -0.4936491
## [897,] -0.64844744 -0.4382732       0.5898476  0.643143577 -0.4936491
## [898,]  2.41656135 -0.4382732       0.5898476 -1.180854941  1.4010356
## [899,]  0.66512776 -0.4382732       0.5898476  0.291230819 -0.4936491
## [900,]  1.32191535 -0.4382732       0.5898476  0.732360895 -0.4936491
## [901,] -0.10112444 -0.4382732      -0.9128837 -0.826463924 -0.4936491
## [902,]  1.21245075 -0.4382732       0.5898476  0.412665503 -0.4936491
## [903,] -1.08630583 -0.4382732       0.5898476  0.903360756 -0.4936491
## [904,] -0.86737664 -0.4382732       0.5898476  1.304838691 -0.4936491
## [905,]  1.21245075 -0.4382732       0.5898476 -0.216812246 -0.4936491
## [906,] -0.86737664 -0.4382732       0.5898476 -0.268855682 -0.4936491
## [907,] -0.32005364 -0.4382732       0.5898476  1.282534361 -0.4936491
## [908,]  0.77459236 -0.4382732       0.5898476  0.734839154  1.4010356
## [909,] -0.42951824 -0.4382732       0.5898476 -0.660420581  1.4010356
## [910,] -1.96202263 -0.4382732       0.5898476 -1.332028731 -0.4936491
## [911,] -1.52416423 -0.4382732       0.5898476 -1.064376775 -0.4936491
## [912,] -1.30523503  2.2801299      -0.9128837 -0.504290273  1.4010356
## [913,] -1.19577043 -0.4382732       0.5898476 -0.543942415 -0.4936491
## [914,]  0.88405696  2.2801299       0.5898476  1.602229753  1.4010356
## [915,]  1.97870295 -0.4382732      -2.4156151 -1.550115510 -0.4936491
## [916,] -1.74309343  2.2801299      -0.9128837 -1.366724355 -0.4936491
## [917,]  0.99352156 -0.4382732       0.5898476 -1.572419840  1.4010356
## [918,] -0.32005364 -0.4382732       0.5898476 -1.664115417  1.4010356
## [919,]  1.54084455 -0.4382732      -0.9128837 -1.401419979  1.4010356
## [920,]  2.41656135 -0.4382732       0.5898476  1.552664576 -0.4936491
## [921,] -0.32005364 -0.4382732      -0.9128837 -1.654202382 -0.4936491
## [922,] -0.97684124 -0.4382732      -0.9128837 -0.028464573 -0.4936491
## [923,]  0.77459236 -0.4382732       0.5898476  0.982665040 -0.4936491
## [924,] -0.32005364 -0.4382732      -0.9128837 -0.382855589 -2.3883338
## [925,] -0.21058904 -0.4382732       0.5898476 -0.167247069 -0.4936491
## [926,]  0.55566316 -0.4382732       0.5898476 -0.494377238 -0.4936491
## [927,]  0.66512776 -0.4382732       0.5898476 -0.672811875  1.4010356
## [928,] -0.10112444 -0.4382732       0.5898476 -0.925594279 -0.4936491
## [929,]  0.77459236  2.2801299       0.5898476 -0.449768578 -0.4936491
## [930,] -0.97684124 -0.4382732      -0.9128837 -1.510463368 -0.4936491
## [931,]  1.54084455 -0.4382732      -0.9128837  0.410187244 -0.4936491
## [932,] -0.75791204 -0.4382732      -2.4156151  0.189622206 -0.4936491
## [933,] -0.86737664  2.2801299       0.5898476  0.008709310 -0.4936491
## [934,] -0.97684124 -0.4382732       0.5898476 -0.402681660 -0.4936491
## [935,] -1.30523503 -0.4382732       0.5898476 -1.329550472 -0.4936491
## [936,] -0.53898284 -0.4382732       0.5898476 -0.491898979  1.4010356
## [937,]  0.88405696 -0.4382732      -0.9128837 -1.086681104 -0.4936491
## [938,]  0.22726936 -0.4382732       0.5898476 -0.967724679 -0.4936491
## [939,]  2.30709675 -0.4382732       0.5898476  0.112796182 -0.4936491
## [940,] -0.53898284  2.2801299       0.5898476  0.710056566 -0.4936491
## [941,]  0.22726936  2.2801299       0.5898476 -1.096594140 -0.4936491
## [942,] -0.75791204 -0.4382732       0.5898476  0.831491250 -0.4936491
## [943,] -0.10112444 -0.4382732       0.5898476 -1.183333200 -0.4936491
## [944,]  0.99352156 -0.4382732       0.5898476  0.467187198 -2.3883338
## [945,] -0.97684124 -0.4382732      -2.4156151  1.669142743 -0.4936491
## [946,]  1.43137995 -0.4382732       0.5898476  1.287490879 -0.4936491
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## [947,]   0.33673396  2.2801299   0.5898476 -1.247767930  1.4010356
## [948,]   1.65030915  2.2801299   0.5898476  0.563839293  1.4010356
## [949,]  -0.75791204 -0.4382732   0.5898476 -0.417551213 -0.4936491
## [950,]   0.22726936 -0.4382732   0.5898476 -0.690159687 -0.4936491
## [951,]  -0.64844744 -0.4382732  -2.4156151 -0.534029380  1.4010356
## [952,]   0.44619856 -0.4382732  -2.4156151 -1.354333061  1.4010356
## [953,]  -0.64844744  2.2801299  -0.9128837  0.638187059  1.4010356
## [954,]   0.77459236  2.2801299   0.5898476  0.328404702 -0.4936491
## [955,]   0.55566316 -0.4382732  -2.4156151 -0.762029194 -0.4936491
## [956,]   1.97870295 -0.4382732   0.5898476 -1.289898330 -0.4936491
## [957,]   2.08816755 -0.4382732   0.5898476 -1.478246003 -2.3883338
## [958,]   0.33673396 -0.4382732  -2.4156151 -0.853724772 -0.4936491
## [959,]  -0.32005364 -0.4382732   0.5898476  0.348230773 -0.4936491
## [960,]   0.33673396 -0.4382732   0.5898476 -0.692637946 -0.4936491
## [961,]   0.44619856 -0.4382732  -0.9128837  0.534100187  1.4010356
## [962,]  -0.21058904 -0.4382732  -0.9128837 -0.794246559 -0.4936491
## [963,]   1.54084455 -0.4382732   0.5898476 -0.080508009 -2.3883338
## [964,]   0.11780476 -0.4382732   0.5898476  0.511795857  1.4010356
## [965,]  -0.32005364 -0.4382732   0.5898476 -0.732290088  1.4010356
## [966,]  -1.30523503 -0.4382732   0.5898476  0.197056983 -0.4936491
## [967,]   2.30709675  2.2801299   0.5898476 -0.499333756 -0.4936491
## [968,]   0.33673396 -0.4382732   0.5898476 -1.173420164 -0.4936491
## [969,]  -0.10112444 -0.4382732  -0.9128837 -0.484464202  1.4010356
## [970,]   1.21245075 -0.4382732   0.5898476  0.130143994 -0.4936491
## [971,]  -1.08630583 -0.4382732   0.5898476  1.210664854  1.4010356
## [972,]   1.54084455 -0.4382732   0.5898476  1.493186364 -0.4936491
## [973,]  -2.07148723 -0.4382732  -2.4156151  0.796795626 -0.4936491
## [974,]  -0.21058904 -0.4382732   0.5898476  0.035970157 -0.4936491
## [975,]  -1.08630583 -0.4382732  -0.9128837 -0.023508055  1.4010356
## [976,]   1.97870295  2.2801299   0.5898476 -1.327072213  1.4010356
## [977,]   2.08816755 -0.4382732   0.5898476  1.403969045 -0.4936491
## [978,]  -0.32005364 -0.4382732  -2.4156151  0.487013269 -0.4936491
## [979,]   0.33673396 -0.4382732   0.5898476  0.990099816 -0.4936491
## [980,]  -0.32005364 -0.4382732   0.5898476 -1.282463554 -0.4936491
## [981,]  -0.64844744  2.2801299  -0.9128837 -0.246551352  1.4010356
## [982,]  -0.21058904  2.2801299  -0.9128837 -0.348159965  1.4010356
## [983,]   0.11780476 -0.4382732  -0.9128837 -0.271333941 -0.4936491
## [984,]  -0.32005364 -0.4382732   0.5898476 -0.987550750 -0.4936491
## [985,]  -0.97684124 -0.4382732   0.5898476 -0.164768810  1.4010356
## [986,]  -0.64844744  2.2801299   0.5898476 -1.170941905 -0.4936491
## [987,]   0.22726936 -0.4382732   0.5898476  1.723664437  1.4010356
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## [989,]   0.44619856 -0.4382732  -0.9128837  0.985143299 -0.4936491
## [990,]   0.00834016 -0.4382732   0.5898476  1.577447165 -0.4936491
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## [992,]  -0.53898284 -0.4382732   0.5898476 -0.752116159  1.4010356
## [993,]   0.22726936 -0.4382732  -2.4156151  1.691447072 -0.4936491
## [994,]  -1.30523503 -0.4382732   0.5898476  1.411403822  1.4010356
## [995,]   1.65030915 -0.4382732  -0.9128837 -1.190767976 -0.4936491
## [996,]   0.66512776 -0.4382732   0.5898476  0.316013408 -0.4936491
## [997,]  -1.08630583 -0.4382732   0.5898476 -1.480724262  1.4010356
## [998,]  -1.08630583  2.2801299   0.5898476 -1.654202382 -0.4936491
## [999,]  -1.19577043 -0.4382732   0.5898476 -0.296116529 -0.4936491
## [1000,]  0.55566316 -0.4382732   0.5898476  0.853795579 -2.3883338
```

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## [1001,]  1.65030915 -0.4382732      0.5898476 -1.349376543 -0.4936491
## [1002,]  0.00834016 -0.4382732      0.5898476  1.634447119 -0.4936491
## [1003,] -0.21058904 -0.4382732     -0.9128837 -1.493115556 -0.4936491
## [1004,] -1.30523503 -0.4382732      0.5898476  0.363100326 -0.4936491
## [1005,] -1.19577043 -0.4382732      0.5898476 -0.372942554 -0.4936491
## [1006,] -0.86737664 -0.4382732      0.5898476 -1.165985388 -2.3883338
## [1007,]  1.32191535  2.2801299     -0.9128837  1.666664484 -0.4936491
## [1008,] -0.86737664  2.2801299     -0.9128837 -1.153594093 -0.4936491
## [1009,]  1.86923835 -0.4382732      0.5898476  0.417622021 -0.4936491
## [1010,]  2.30709675 -0.4382732      0.5898476  0.625795765 -0.4936491
## [1011,]  1.97870295 -0.4382732      0.5898476  0.826534732 -0.4936491
## [1012,] -0.10112444 -0.4382732      0.5898476  0.920708568  1.4010356
## [1013,] -0.64844744  2.2801299     -0.9128837 -0.335768671  1.4010356
## [1014,] -0.75791204 -0.4382732      0.5898476  0.130143994  1.4010356
## [1015,] -0.64844744 -0.4382732      0.5898476 -1.537724216 -0.4936491
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## [1017,] -0.64844744  2.2801299      0.5898476 -1.488159039 -0.4936491
## [1018,] -1.08630583 -0.4382732      0.5898476  1.423795116 -0.4936491
## [1019,] -0.10112444 -0.4382732      0.5898476 -1.562506804 -0.4936491
## [1020,] -0.10112444 -0.4382732      0.5898476 -1.173420164  1.4010356
## [1021,]  1.10298615 -0.4382732      0.5898476 -0.836376960 -0.4936491
## [1022,] -1.30523503  2.2801299      0.5898476 -1.039594186  1.4010356
## [1023,]  0.00834016 -0.4382732     -2.4156151  1.513012435 -0.4936491
## [1024,]  2.08816755 -0.4382732      0.5898476  1.121447536 -0.4936491
## [1025,]  1.10298615 -0.4382732      0.5898476 -1.099072398 -0.4936491
## [1026,] -1.41469963 -0.4382732      0.5898476  1.669142743  1.4010356
## [1027,] -0.53898284 -0.4382732      0.5898476 -0.499333756  1.4010356
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## [1029,]  0.44619856 -0.4382732      0.5898476  1.190838784 -0.4936491
## [1030,]  0.33673396 -0.4382732     -2.4156151 -0.345681707 -0.4936491
## [1031,] -0.64844744 -0.4382732      0.5898476 -1.180854941  1.4010356
## [1032,]  0.99352156  2.2801299      0.5898476 -1.054463739  1.4010356
## [1033,]  0.22726936  2.2801299     -2.4156151 -0.521638085 -0.4936491
## [1034,] -0.64844744  2.2801299     -0.9128837  1.592316718 -0.4936491
## [1035,]  0.88405696 -0.4382732      0.5898476  0.583665364 -0.4936491
## [1036,] -0.64844744 -0.4382732      0.5898476  1.475838552 -2.3883338
## [1037,] -0.64844744  2.2801299     -0.9128837 -0.692637946 -0.4936491
## [1038,]  0.88405696 -0.4382732      0.5898476  1.599751495 -0.4936491
## [1039,]  1.21245075 -0.4382732      0.5898476  1.037186735  1.4010356
## [1040,] -0.32005364  2.2801299      0.5898476  0.754665225 -2.3883338
## [1041,]  0.33673396 -0.4382732     -2.4156151 -1.448506897 -0.4936491
## [1042,] -0.97684124 -0.4382732      0.5898476  0.157404841  1.4010356
## [1043,]  0.77459236 -0.4382732     -2.4156151  0.442404609 -0.4936491
## [1044,]  1.75977375 -0.4382732      0.5898476 -0.880985619 -0.4936491
## [1045,]  1.32191535 -0.4382732      0.5898476  1.716229661 -0.4936491
## [1046,]  0.33673396 -0.4382732      0.5898476  0.231752607 -0.4936491
## [1047,]  0.77459236 -0.4382732      0.5898476  1.646838413 -0.4936491
## [1048,] -0.42951824 -0.4382732     -0.9128837 -0.923116020  1.4010356
## [1049,] -0.32005364 -0.4382732      0.5898476  1.297403914  1.4010356
## [1050,] -0.75791204 -0.4382732      0.5898476  1.376708198  1.4010356
## [1051,]  0.55566316 -0.4382732     -0.9128837 -0.135029704 -0.4936491
## [1052,]  0.77459236 -0.4382732     -0.9128837 -1.039594186  1.4010356
## [1053,] -0.75791204 -0.4382732     -2.4156151  0.464708939 -0.4936491
## [1054,]  2.19763215 -0.4382732      0.5898476 -0.985072491 -0.4936491
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## [1058,] -0.86737664  2.2801299   -0.9128837 -1.703767559  1.4010356
## [1059,] -0.32005364  2.2801299    0.5898476 -0.030942832  1.4010356
## [1060,] -0.21058904 -0.4382732    0.5898476 -0.353116483  1.4010356
## [1061,] -1.41469963  2.2801299   -0.9128837 -1.044550704 -0.4936491
## [1062,] -1.41469963 -0.4382732   -2.4156151  0.068187522  1.4010356
## [1063,]  0.77459236 -0.4382732   -0.9128837  0.967795487 -0.4936491
## [1064,] -0.86737664 -0.4382732    0.5898476  1.099143206  1.4010356
## [1065,] -0.75791204 -0.4382732    0.5898476 -1.170941905 -2.3883338
## [1066,]  1.97870295 -0.4382732    0.5898476  1.057012805 -0.4936491
## [1067,] -0.42951824 -0.4382732    0.5898476  0.734839154 -0.4936491
## [1068,]  1.10298615 -0.4382732    0.5898476 -0.573681521  1.4010356
## [1069,] -0.97684124  2.2801299   -0.9128837 -1.272550518 -0.4936491
## [1070,] -0.97684124 -0.4382732    0.5898476  1.537795023 -0.4936491
## [1071,] -0.97684124 -0.4382732   -0.9128837 -0.831420442  1.4010356
## [1072,]  1.32191535 -0.4382732    0.5898476 -1.317159178 -0.4936491
## [1073,] -0.86737664 -0.4382732   -0.9128837 -0.972681197 -0.4936491
## [1074,] -0.97684124 -0.4382732    0.5898476  0.695187013 -0.4936491
## [1075,] -0.42951824 -0.4382732    0.5898476 -0.709985758 -0.4936491
## [1076,] -0.53898284 -0.4382732    0.5898476 -0.762029194 -0.4936491
## [1077,]  1.86923835 -0.4382732   -0.9128837  0.613404470 -0.4936491
## [1078,] -0.86737664  2.2801299    0.5898476 -1.433637344 -0.4936491
## [1079,]  0.77459236 -0.4382732    0.5898476 -1.651724123 -0.4936491
## [1080,]  0.22726936 -0.4382732    0.5898476  0.710056566 -0.4936491
## [1081,]  0.99352156 -0.4382732    0.5898476 -1.423724308  1.4010356
## [1082,] -0.21058904 -0.4382732    0.5898476  0.561361034 -0.4936491
## [1083,] -1.52416423 -0.4382732    0.5898476 -0.732290088 -0.4936491
## [1084,]  0.33673396  2.2801299    0.5898476 -0.313464341 -0.4936491
## [1085,] -0.32005364 -0.4382732    0.5898476  0.417622021  1.4010356
## [1086,] -0.64844744  2.2801299   -0.9128837 -0.598464110 -0.4936491
## [1087,]  1.43137995 -0.4382732   -0.9128837 -1.163507129 -0.4936491
## [1088,] -0.32005364 -0.4382732    0.5898476  1.579925424  1.4010356
## [1089,]  0.55566316 -0.4382732    0.5898476  1.009925887 -0.4936491
## [1090,]  0.00834016 -0.4382732    0.5898476 -0.318420859 -0.4936491
## [1091,] -0.86737664 -0.4382732    0.5898476 -0.895855172 -0.4936491
## [1092,] -0.42951824 -0.4382732    0.5898476 -0.563768486 -0.4936491
## [1093,]  0.88405696 -0.4382732    0.5898476  0.365578585 -0.4936491
## [1094,]  0.55566316 -0.4382732   -0.9128837 -1.275028777 -0.4936491
## [1095,]  0.33673396 -0.4382732    0.5898476  1.337056056  1.4010356
## [1096,] -0.42951824 -0.4382732    0.5898476 -0.529072862 -0.4936491
## [1097,]  0.33673396 -0.4382732    0.5898476  0.236709124 -2.3883338
## [1098,] -1.41469963 -0.4382732    0.5898476 -1.121376728 -0.4936491
## [1099,]  0.33673396 -0.4382732   -2.4156151  0.841404285 -0.4936491
## [1100,]  0.88405696 -0.4382732    0.5898476 -0.655464063 -0.4936491
## [1101,] -0.21058904 -0.4382732    0.5898476  1.485751587  1.4010356
## [1102,] -0.53898284 -0.4382732    0.5898476  0.053317969 -0.4936491
## [1103,] -0.10112444 -0.4382732    0.5898476  0.878578168  1.4010356
## [1104,]  1.21245075 -0.4382732    0.5898476 -0.769463971  1.4010356
## [1105,] -0.86737664 -0.4382732    0.5898476 -0.506768532 -0.4936491
## [1106,] -0.42951824 -0.4382732    0.5898476  1.089230170  1.4010356
## [1107,] -0.75791204  2.2801299    0.5898476 -0.154855775  1.4010356
## [1108,]  0.11780476 -0.4382732   -0.9128837  0.211926536 -2.3883338
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## [1109,] -0.21058904 -0.4382732      0.5898476  0.469665457 -0.4936491
## [1110,] -0.75791204 -0.4382732      0.5898476  1.203230078  1.4010356
## [1111,] -0.21058904  2.2801299      0.5898476 -1.731028407 -0.4936491
## [1112,]  1.75977375  2.2801299      0.5898476 -0.484464202 -0.4936491
## [1113,]  0.11780476  2.2801299      0.5898476  0.249100419 -0.4936491
## [1114,] -0.53898284 -0.4382732     -2.4156151  0.985143299 -0.4936491
## [1115,]  1.21245075 -0.4382732      0.5898476  0.757143484 -0.4936491
## [1116,] -0.32005364 -0.4382732      0.5898476 -0.801681336 -0.4936491
## [1117,]  1.97870295 -0.4382732      0.5898476 -0.291160012  1.4010356
## [1118,] -0.32005364 -0.4382732      0.5898476  1.359360386 -0.4936491
## [1119,] -1.19577043 -0.4382732      0.5898476 -0.814072630 -0.4936491
## [1120,]  0.11780476 -0.4382732      0.5898476  1.096664947  1.4010356
## [1121,]  0.11780476 -0.4382732      0.5898476 -0.905768208  1.4010356
## [1122,] -0.10112444 -0.4382732      0.5898476  0.202013500  1.4010356
## [1123,] -0.86737664 -0.4382732      0.5898476  1.406447304 -0.4936491
## [1124,] -0.21058904 -0.4382732      0.5898476 -0.328333895 -0.4936491
## [1125,]  0.22726936 -0.4382732      0.5898476  1.634447119  1.4010356
## [1126,] -0.86737664 -0.4382732     -0.9128837  0.477100233 -0.4936491
## [1127,]  1.43137995 -0.4382732      0.5898476 -1.334506990  1.4010356
## [1128,] -1.52416423 -0.4382732      0.5898476  0.432491574 -0.4936491
## [1129,] -0.10112444 -0.4382732     -0.9128837  1.237925702 -0.4936491
## [1130,]  0.55566316 -0.4382732      0.5898476  0.635708800 -0.4936491
## [1131,] -0.21058904 -0.4382732      0.5898476 -0.130073186 -0.4936491
## [1132,] -0.32005364 -0.4382732     -0.9128837 -0.370464295 -0.4936491
## [1133,]  0.33673396 -0.4382732      0.5898476 -1.696332783  1.4010356
## [1134,]  0.66512776 -0.4382732      0.5898476  0.464708939 -0.4936491
## [1135,] -0.21058904 -0.4382732      0.5898476  1.354403868 -0.4936491
## [1136,]  0.99352156 -0.4382732      0.5898476 -0.593507592  1.4010356
## [1137,] -0.97684124  2.2801299      0.5898476 -1.173420164 -0.4936491
## [1138,] -1.63362883 -0.4382732     -2.4156151 -0.856203031 -0.4936491
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## [1142,] -0.75791204 -0.4382732      0.5898476 -1.391506943 -0.4936491
## [1143,]  0.88405696 -0.4382732      0.5898476  0.526665410 -0.4936491
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## [1149,]  0.22726936 -0.4382732      0.5898476  1.448577704 -0.4936491
## [1150,] -1.08630583 -0.4382732      0.5898476  1.237925702 -0.4936491
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## [1152,] -0.97684124 -0.4382732      0.5898476 -0.551377192 -0.4936491
## [1153,] -1.74309343 -0.4382732      0.5898476 -0.635637993 -0.4936491
## [1154,] -2.07148723  2.2801299     -0.9128837 -0.640594510  1.4010356
## [1155,]  1.10298615 -0.4382732      0.5898476  0.925665086 -2.3883338
## [1156,]  0.22726936 -0.4382732      0.5898476 -1.567463322 -0.4936491
## [1157,]  0.33673396 -0.4382732      0.5898476  0.202013500 -0.4936491
## [1158,] -0.21058904 -0.4382732     -2.4156151 -1.473289486 -0.4936491
## [1159,]  0.00834016 -0.4382732      0.5898476 -0.325855636 -0.4936491
## [1160,]  0.22726936 -0.4382732     -0.9128837 -0.226725282 -0.4936491
## [1161,]  0.88405696 -0.4382732      0.5898476  1.304838691 -0.4936491
## [1162,]  0.11780476 -0.4382732      0.5898476 -1.004898562 -0.4936491
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## [1163,] -0.21058904  2.2801299     0.5898476 -0.162290551  1.4010356
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## [1166,]  0.77459236 -0.4382732    -0.9128837 -0.496855497 -2.3883338
## [1167,]  1.21245075 -0.4382732    -0.9128837 -1.084202845 -0.4936491
## [1168,] -0.21058904  2.2801299     0.5898476 -0.097855821  1.4010356
## [1169,] -1.41469963 -0.4382732    -0.9128837 -0.583594557 -0.4936491
## [1170,] -1.08630583 -0.4382732     0.5898476 -0.784333524 -0.4936491
## [1171,] -1.08630583 -0.4382732    -0.9128837 -0.524116344 -0.4936491
## [1172,]  0.33673396  2.2801299     0.5898476  1.304838691 -0.4936491
## [1173,] -0.86737664 -0.4382732     0.5898476 -0.826463924  1.4010356
## [1174,] -0.10112444 -0.4382732     0.5898476 -0.226725282 -0.4936491
## [1175,] -1.30523503 -0.4382732    -0.9128837 -0.075551491 -0.4936491
## [1176,]  0.22726936 -0.4382732     0.5898476 -0.769463971 -0.4936491
## [1177,]  1.32191535 -0.4382732     0.5898476 -1.242811412 -0.4936491
## [1178,]  1.43137995 -0.4382732     0.5898476  0.026057122 -0.4936491
## [1179,] -1.85255803 -0.4382732     0.5898476  0.838926026  1.4010356
## [1180,] -0.32005364 -0.4382732     0.5898476  0.811665179 -0.4936491
## [1181,] -0.10112444 -0.4382732     0.5898476 -1.218028824 -0.4936491
## [1182,]  1.32191535 -0.4382732     0.5898476 -0.836376960 -0.4936491
## [1183,] -0.10112444 -0.4382732    -2.4156151  0.226796089 -0.4936491
## [1184,] -0.10112444 -0.4382732     0.5898476  0.588621882 -0.4936491
## [1185,]  1.86923835 -0.4382732     0.5898476 -0.541464156 -0.4936491
## [1186,]  0.66512776 -0.4382732     0.5898476  1.210664854 -0.4936491
## [1187,] -0.21058904  2.2801299    -0.9128837  0.192100465  1.4010356
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## [1189,] -0.86737664 -0.4382732     0.5898476  0.467187198  1.4010356
## [1190,] -0.42951824 -0.4382732     0.5898476 -1.017289856  1.4010356
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## [1192,] -0.64844744 -0.4382732     0.5898476  0.767056519  1.4010356
## [1193,]  1.32191535 -0.4382732     0.5898476 -0.838855219 -0.4936491
## [1194,]  0.11780476 -0.4382732    -0.9128837 -1.621985017 -0.4936491
## [1195,]  1.10298615 -0.4382732     0.5898476  1.047099770  1.4010356
## [1196,]  1.32191535 -0.4382732     0.5898476  0.016144086 -0.4936491
## [1197,]  0.44619856 -0.4382732     0.5898476  1.000012852  1.4010356
## [1198,] -1.85255803 -0.4382732     0.5898476 -0.187073140  1.4010356
## [1199,] -0.42951824 -0.4382732    -2.4156151 -0.675290134  1.4010356
## [1200,] -0.10112444 -0.4382732     0.5898476  1.359360386 -0.4936491
## [1201,]  0.77459236 -0.4382732     0.5898476 -0.680246652 -2.3883338
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## [1204,]  1.75977375 -0.4382732     0.5898476  1.468403775 -0.4936491
## [1205,]  1.21245075  2.2801299    -0.9128837 -0.234160058  1.4010356
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## [1207,] -1.19577043 -0.4382732    -2.4156151 -0.040855867 -0.4936491
## [1208,]  1.97870295 -0.4382732     0.5898476  1.582403683 -0.4936491
## [1209,] -0.32005364 -0.4382732     0.5898476  0.878578168 -0.4936491
## [1210,]  2.52602595 -0.4382732     0.5898476 -1.071811551 -0.4936491
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## [1214,] -1.52416423  2.2801299     0.5898476 -0.930550796  1.4010356
## [1215,]  0.77459236 -0.4382732     0.5898476  0.293709078 -0.4936491
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## [1217,]  0.66512776 -0.4382732      0.5898476  0.933099863  1.4010356
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## [1224,]  1.10298615  2.2801299     -0.9128837  0.719969601  1.4010356
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## [1227,] -0.53898284 -0.4382732     -0.9128837 -0.538985897 -0.4936491
## [1228,] -0.64844744 -0.4382732      0.5898476 -0.152377516 -0.4936491
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## [1233,] -0.21058904 -0.4382732      0.5898476  1.406447304 -0.4936491
## [1234,] -0.75791204 -0.4382732      0.5898476 -0.023508055 -0.4936491
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## [1236,]  0.99352156 -0.4382732      0.5898476  1.175969230  1.4010356
## [1237,] -0.10112444  2.2801299      0.5898476  1.619577565  1.4010356
## [1238,] -0.53898284  2.2801299      0.5898476  0.400274209  1.4010356
## [1239,] -1.52416423 -0.4382732      0.5898476 -1.592245911 -0.4936491
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## [1247,] -0.75791204  2.2801299     -0.9128837 -0.501812014 -2.3883338
## [1248,] -0.64844744 -0.4382732      0.5898476  0.496926304  1.4010356
## [1249,] -1.08630583 -0.4382732      0.5898476  0.623317506 -0.4936491
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## [1251,] -0.86737664 -0.4382732     -0.9128837 -0.846289995 -0.4936491
## [1252,] -0.75791204 -0.4382732      0.5898476  0.437448092  1.4010356
## [1253,] -0.32005364 -0.4382732      0.5898476 -1.540202475 -0.4936491
## [1254,] -0.42951824 -0.4382732     -2.4156151  1.190838784  1.4010356
## [1255,]  1.32191535 -0.4382732      0.5898476  1.265186549  1.4010356
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## [1263,]  0.66512776  2.2801299     -0.9128837  0.011187569 -0.4936491
## [1264,]  0.55566316 -0.4382732      0.5898476  0.130143994 -0.4936491
## [1265,]  1.97870295 -0.4382732      0.5898476 -0.804159595 -0.4936491
## [1266,] -0.42951824 -0.4382732     -2.4156151 -0.068116715 -0.4936491
## [1267,]  0.44619856 -0.4382732      0.5898476 -0.630681475 -0.4936491
## [1268,] -0.32005364 -0.4382732     -2.4156151  1.418838598  1.4010356
## [1269,]  1.75977375 -0.4382732     -2.4156151 -0.350638224 -0.4936491
## [1270,]  0.66512776 -0.4382732      0.5898476 -1.384072167 -2.3883338
```

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## [1271,] -0.32005364 -0.4382732        0.5898476 -0.722377053  1.4010356
## [1272,] -1.74309343  2.2801299        0.5898476 -1.153594093  1.4010356
## [1273,]  0.11780476 -0.4382732        0.5898476  0.868665132 -0.4936491
## [1274,] -1.63362883  2.2801299        0.5898476  1.218099631 -0.4936491
## [1275,] -0.64844744 -0.4382732        0.5898476 -1.503028592  1.4010356
## [1276,]  1.54084455 -0.4382732        0.5898476  0.345752514 -0.4936491
## [1277,]  0.00834016 -0.4382732        0.5898476 -0.529072862  1.4010356
## [1278,]  0.99352156 -0.4382732        0.5898476 -0.169725328 -0.4936491
## [1279,] -0.10112444 -0.4382732        0.5898476  1.438664669 -0.4936491
## [1280,]  0.77459236  2.2801299       -0.9128837 -0.925594279 -0.4936491
## [1281,]  0.00834016 -0.4382732        0.5898476  1.081795394 -2.3883338
## [1282,] -0.21058904  2.2801299        0.5898476 -1.237854894  1.4010356
## [1283,] -0.42951824 -0.4382732        0.5898476  0.159883100 -0.4936491
## [1284,] -0.97684124 -0.4382732        0.5898476  0.938056380 -0.4936491
## [1285,]  0.22726936 -0.4382732        0.5898476  1.116491018 -0.4936491
## [1286,]  0.99352156 -0.4382732       -2.4156151  0.115274440  1.4010356
## [1287,]  0.33673396 -0.4382732        0.5898476 -0.462159873 -0.4936491
## [1288,]  0.55566316 -0.4382732        0.5898476  0.806708661 -0.4936491
## [1289,] -0.21058904 -0.4382732       -2.4156151  0.935578121 -0.4936491
## [1290,]  0.11780476 -0.4382732       -2.4156151  1.322186503 -2.3883338
## [1291,] -0.32005364  2.2801299       -0.9128837 -1.408854755 -0.4936491
## [1292,]  0.00834016  2.2801299        0.5898476 -1.071811551 -0.4936491
## [1293,]  0.22726936 -0.4382732       -0.9128837 -0.090421045  1.4010356
## [1294,]  0.66512776 -0.4382732       -2.4156151 -1.138724540 -0.4936491
## [1295,]  0.44619856 -0.4382732        0.5898476 -0.880985619 -0.4936491
## [1296,]  0.44619856 -0.4382732        0.5898476 -0.016073279  1.4010356
## [1297,] -0.75791204 -0.4382732        0.5898476  0.717491342 -0.4936491
## [1298,] -1.19577043  2.2801299        0.5898476  0.291230819 -2.3883338
## [1299,]  0.99352156  2.2801299        0.5898476 -1.341941766 -0.4936491
## [1300,]  0.33673396 -0.4382732        0.5898476  0.970273745 -0.4936491
## [1301,] -0.32005364 -0.4382732        0.5898476  0.018622345  1.4010356
## [1302,]  2.30709675 -0.4382732       -2.4156151 -1.121376728  1.4010356
## [1303,] -0.21058904 -0.4382732        0.5898476 -1.530289439 -0.4936491
## [1304,]  1.10298615 -0.4382732        0.5898476  0.491969786 -0.4936491
## [1305,]  0.33673396 -0.4382732        0.5898476 -0.130073186 -0.4936491
## [1306,]  1.86923835 -0.4382732        0.5898476 -0.920637761 -0.4936491
## [1307,] -0.64844744 -0.4382732       -0.9128837  0.799273884  1.4010356
## [1308,] -0.97684124 -0.4382732        0.5898476  1.027273699 -0.4936491
## [1309,]  0.11780476 -0.4382732        0.5898476 -0.196986175  1.4010356
## [1310,] -1.19577043 -0.4382732        0.5898476 -0.571203262  1.4010356
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## [1312,] -2.07148723 -0.4382732       -2.4156151  1.557621094 -0.4936491
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## [1314,] -0.86737664  2.2801299        0.5898476 -1.121376728 -2.3883338
## [1315,]  0.88405696 -0.4382732       -2.4156151 -0.529072862  1.4010356
## [1316,] -0.10112444 -0.4382732        0.5898476 -0.923116020 -0.4936491
## [1317,]  0.66512776 -0.4382732       -0.9128837  1.535316764  1.4010356
## [1318,] -1.08630583 -0.4382732       -0.9128837  1.225534407 -0.4936491
## [1319,] -0.86737664 -0.4382732       -0.9128837 -0.566246745 -0.4936491
## [1320,] -0.53898284 -0.4382732       -0.9128837  1.277577843  1.4010356
## [1321,]  0.55566316 -0.4382732       -2.4156151 -1.108985434 -0.4936491
## [1322,]  1.10298615 -0.4382732        0.5898476 -1.475767744 -0.4936491
## [1323,]  0.99352156 -0.4382732        0.5898476 -0.239116576 -0.4936491
## [1324,] -0.97684124 -0.4382732       -2.4156151 -1.294854848 -2.3883338
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## [1325,] -0.86737664 -0.4382732      0.5898476 -0.189551399 -0.4936491
## [1326,]  0.55566316 -0.4382732      0.5898476  0.841404285 -0.4936491
## [1327,] -0.53898284  2.2801299      0.5898476 -0.962768161  1.4010356
## [1328,]  0.99352156 -0.4382732      0.5898476  1.280056102  1.4010356
## [1329,] -1.08630583 -0.4382732      0.5898476 -0.184594881  1.4010356
## [1330,] -0.86737664 -0.4382732      0.5898476 -1.116420210 -2.3883338
## [1331,]  0.66512776 -0.4382732      0.5898476  0.050839710 -0.4936491
## [1332,]  1.21245075 -0.4382732      0.5898476  1.044621511 -0.4936491
## [1333,] -0.86737664  2.2801299     -0.9128837 -0.851246513 -0.4936491
## [1334,]  0.99352156  2.2801299      0.5898476  1.118969277  1.4010356
## [1335,] -1.08630583 -0.4382732     -0.9128837  0.814143438 -0.4936491
## [1336,]  0.22726936 -0.4382732      0.5898476  0.080578816 -0.4936491
## [1337,]  1.97870295 -0.4382732      0.5898476  0.083057075 -0.4936491
## [1338,] -0.97684124 -0.4382732      0.5898476  0.915752051  1.4010356
## [1339,] -0.75791204  2.2801299      0.5898476  0.353187291  1.4010356
## [1340,] -1.63362883  2.2801299      0.5898476 -1.019768115 -0.4936491
## [1341,] -0.10112444 -0.4382732      0.5898476  1.148708383  1.4010356
## [1342,] -0.64844744 -0.4382732      0.5898476 -1.218028824 -0.4936491
## [1343,] -0.32005364 -0.4382732      0.5898476  1.679055778  1.4010356
## [1344,] -0.86737664 -0.4382732      0.5898476 -0.521638085 -0.4936491
## [1345,]  0.00834016 -0.4382732      0.5898476 -0.048290644 -0.4936491
## [1346,] -0.21058904 -0.4382732      0.5898476 -1.446028638 -0.4936491
## [1347,]  0.88405696 -0.4382732      0.5898476 -0.610855404 -0.4936491
## [1348,] -0.10112444 -0.4382732     -0.9128837  1.017360664 -2.3883338
## [1349,]  0.33673396 -0.4382732      0.5898476  0.829012991 -0.4936491
## [1350,] -1.19577043 -0.4382732      0.5898476 -0.794246559 -0.4936491
## [1351,] -1.08630583 -0.4382732      0.5898476 -0.722377053  1.4010356
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## [1353,]  0.77459236 -0.4382732      0.5898476 -1.567463322 -0.4936491
## [1354,] -0.32005364  2.2801299     -2.4156151  0.407708985 -0.4936491
## [1355,]  2.08816755  2.2801299      0.5898476  0.890969462 -0.4936491
## [1356,] -0.10112444 -0.4382732      0.5898476 -1.158550611  1.4010356
## [1357,]  0.44619856 -0.4382732      0.5898476 -1.153594093  1.4010356
## [1358,]  0.55566316 -0.4382732      0.5898476  1.470882034 -0.4936491
## [1359,] -0.64844744 -0.4382732      0.5898476  0.685273977  1.4010356
## [1360,] -0.32005364 -0.4382732      0.5898476 -0.167247069  1.4010356
## [1361,] -0.64844744 -0.4382732      0.5898476 -0.821507407 -0.4936491
## [1362,] -1.19577043 -0.4382732     -0.9128837  0.727404378 -0.4936491
## [1363,]  0.88405696 -0.4382732     -0.9128837  1.225534407 -0.4936491
## [1364,] -0.42951824 -0.4382732      0.5898476 -1.450985156  1.4010356
## [1365,] -0.97684124 -0.4382732     -0.9128837 -0.048290644  1.4010356
## [1366,] -0.86737664  2.2801299     -0.9128837 -0.139986222  1.4010356
## [1367,]  0.22726936 -0.4382732     -2.4156151  1.111534500  1.4010356
## [1368,] -1.08630583 -0.4382732      0.5898476  1.366795162 -0.4936491
## [1369,] -0.32005364 -0.4382732     -0.9128837 -0.167247069 -0.4936491
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## [1371,]  1.10298615 -0.4382732     -2.4156151  0.908317274 -0.4936491
## [1372,]  2.08816755 -0.4382732      0.5898476  1.587360200  1.4010356
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## [1374,]  0.11780476 -0.4382732     -0.9128837  1.465925516 -0.4936491
## [1375,]  2.30709675 -0.4382732      0.5898476 -0.489420720  1.4010356
## [1376,] -0.53898284  2.2801299     -0.9128837 -1.398941720 -0.4936491
## [1377,]  0.11780476 -0.4382732      0.5898476  1.000012852 -0.4936491
## [1378,]  1.32191535 -0.4382732     -0.9128837  0.648100094 -0.4936491
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## [1379,]  0.55566316 -0.4382732    0.5898476 -0.950376867  1.4010356
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## [1384,] -0.10112444 -0.4382732   -2.4156151  1.359360386 -0.4936491
## [1385,] -0.32005364 -0.4382732    0.5898476  0.333361220  1.4010356
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## [1387,] -1.19577043 -0.4382732    0.5898476 -1.599680687 -0.4936491
## [1388,] -0.86737664 -0.4382732    0.5898476 -1.651724123 -0.4936491
## [1389,] -0.53898284 -0.4382732   -2.4156151  0.851317320 -0.4936491
## [1390,] -0.64844744 -0.4382732   -0.9128837  0.799273884 -0.4936491
## [1391,] -0.97684124  2.2801299    0.5898476  1.490708105 -0.4936491
## [1392,]  0.11780476 -0.4382732    0.5898476  1.490708105  1.4010356
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## [1394,] -1.08630583 -0.4382732    0.5898476  0.375491620  1.4010356
## [1395,] -0.53898284 -0.4382732    0.5898476  1.413882080 -0.4936491
## [1396,] -0.64844744  2.2801299   -0.9128837 -0.120160151  1.4010356
## [1397,]  1.75977375  2.2801299    0.5898476  0.905839015  1.4010356
## [1398,]  1.86923835 -0.4382732    0.5898476 -1.604637205 -0.4936491
## [1399,] -0.42951824 -0.4382732   -0.9128837  1.240403961 -0.4936491
## [1400,]  0.66512776 -0.4382732    0.5898476 -0.566246745 -0.4936491
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## [1402,]  1.97870295 -0.4382732    0.5898476 -1.520376404 -2.3883338
## [1403,] -0.64844744 -0.4382732    0.5898476  1.173490972 -0.4936491
## [1404,]  0.22726936 -0.4382732    0.5898476 -1.693854524  1.4010356
## [1405,]  0.55566316 -0.4382732   -2.4156151 -1.158550611 -0.4936491
## [1406,] -0.64844744 -0.4382732   -2.4156151 -0.261420906 -0.4936491
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## [1408,] -1.41469963 -0.4382732    0.5898476 -0.078029750 -0.4936491
## [1409,] -1.52416423 -0.4382732    0.5898476 -0.573681521 -0.4936491
## [1410,]  0.33673396 -0.4382732   -0.9128837 -0.273812200 -0.4936491
## [1411,]  0.33673396 -0.4382732    0.5898476 -0.888420396  1.4010356
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## [1413,] -0.75791204 -0.4382732    0.5898476  0.268926489 -0.4936491
## [1414,] -1.30523503 -0.4382732    0.5898476  0.432491574 -0.4936491
## [1415,]  1.10298615 -0.4382732    0.5898476  0.935578121 -0.4936491
## [1416,] -0.42951824 -0.4382732   -2.4156151  1.265186549 -0.4936491
## [1417,]  0.11780476 -0.4382732    0.5898476  1.285012620  1.4010356
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## [1421,]  0.44619856 -0.4382732    0.5898476 -0.397725143 -0.4936491
## [1422,]  1.10298615 -0.4382732   -2.4156151  0.890969462 -0.4936491
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## [1425,] -0.21058904 -0.4382732    0.5898476  1.468403775 -0.4936491
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## [1427,] -0.53898284 -0.4382732    0.5898476 -1.327072213 -0.4936491
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## [1432,] -0.53898284 -0.4382732    0.5898476 -0.003681985  1.4010356
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## [1455,]  0.88405696 -0.4382732      0.5898476 -1.061898516  1.4010356
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## [1461,] -0.86737664 -0.4382732      0.5898476 -0.828942183 -0.4936491
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## [1466,] -0.10112444 -0.4382732     -0.9128837  0.202013500 -0.4936491
## [1467,]  0.22726936 -0.4382732      0.5898476 -0.469594649 -0.4936491
## [1468,] -1.08630583 -0.4382732      0.5898476 -1.604637205 -0.4936491
## [1469,]  1.32191535 -0.4382732     -0.9128837  0.546491481  1.4010356
## [1470,] -0.32005364 -0.4382732      0.5898476 -0.432420766 -0.4936491
##         DistanceFromHome   Education EducationField EmployeeCount
##    [1,]      -1.01056544 -0.89138490     -0.9370948           NaN
##    [2,]      -0.14709966 -1.86779013     -0.9370948           NaN
##    [3,]      -0.88721318 -0.89138490      1.3162247           NaN
##    [4,]      -0.76386093  1.06142554     -0.9370948           NaN
##    [5,]      -0.88721318 -1.86779013      0.5651182           NaN
##    [6,]      -0.88721318 -0.89138490     -0.9370948           NaN
##    [7,]      -0.76386093  0.08502032      0.5651182           NaN
##    [8,]       1.82653640 -1.86779013     -0.9370948           NaN
##    [9,]       1.70318415  0.08502032     -0.9370948           NaN
##   [10,]       2.19659316  0.08502032      0.5651182           NaN
##   [11,]       0.83971837  0.08502032      0.5651182           NaN
##   [12,]       0.71636612 -0.89138490     -0.9370948           NaN
##   [13,]       2.07324091 -1.86779013     -0.9370948           NaN
##   [14,]       1.20977513 -0.89138490      0.5651182           NaN
##   [15,]       1.82653640  0.08502032     -0.9370948           NaN
```

```
##   [16,]      1.45647964  1.06142554   -0.9370948      NaN
##   [17,]     -0.51715642 -0.89138490   -0.9370948      NaN
##   [18,]      0.83971837 -0.89138490    0.5651182      NaN
##   [19,]     -0.88721318  1.06142554   -0.9370948      NaN
##   [20,]     -0.88721318  0.08502032   -0.9370948      NaN
##   [21,]      0.22295710 -0.89138490    1.3162247      NaN
##   [22,]     -0.02374741  1.06142554   -0.9370948      NaN
##   [23,]     -0.27045191  1.06142554   -0.9370948      NaN
##   [24,]      0.71636612 -0.89138490   -0.9370948      NaN
##   [25,]     -0.39380417 -1.86779013    0.5651182      NaN
##   [26,]     -0.51715642  0.08502032    1.3162247      NaN
##   [27,]      0.83971837 -1.86779013   -0.9370948      NaN
##   [28,]     -0.14709966  1.06142554   -0.1859883      NaN
##   [29,]     -0.27045191  1.06142554    0.5651182      NaN
##   [30,]     -0.88721318  1.06142554   -0.1859883      NaN
##   [31,]     -0.88721318  0.08502032    0.5651182      NaN
##   [32,]      0.09960485  1.06142554    1.3162247      NaN
##   [33,]     -0.02374741 -0.89138490    0.5651182      NaN
##   [34,]     -0.51715642  0.08502032    2.0673313      NaN
##   [35,]     -1.01056544  0.08502032    0.5651182      NaN
##   [36,]     -0.88721318 -0.89138490    0.5651182      NaN
##   [37,]     -0.76386093 -0.89138490   -0.1859883      NaN
##   [38,]     -0.88721318  0.08502032   -0.1859883      NaN
##   [39,]     -0.51715642  1.06142554   -0.9370948      NaN
##   [40,]     -1.01056544  0.08502032   -0.9370948      NaN
##   [41,]     -0.64050868 -0.89138490    1.3162247      NaN
##   [42,]     -0.88721318  1.06142554   -0.9370948      NaN
##   [43,]      1.94988866  0.08502032   -0.9370948      NaN
##   [44,]     -0.14709966  0.08502032   -0.9370948      NaN
##   [45,]     -1.01056544 -0.89138490    0.5651182      NaN
##   [46,]      0.34630935  0.08502032    2.0673313      NaN
##   [47,]      1.70318415  1.06142554   -0.1859883      NaN
##   [48,]      1.20977513 -0.89138490   -0.9370948      NaN
##   [49,]     -0.51715642  1.06142554   -0.1859883      NaN
##   [50,]     -0.14709966 -1.86779013   -0.9370948      NaN
##   [51,]     -1.01056544 -0.89138490   -0.9370948      NaN
##   [52,]     -0.51715642  1.06142554    2.0673313      NaN
##   [53,]     -1.01056544  2.03783076   -0.1859883      NaN
##   [54,]      0.22295710 -0.89138490    0.5651182      NaN
##   [55,]      1.70318415  0.08502032   -0.1859883      NaN
##   [56,]     -1.01056544 -0.89138490   -0.9370948      NaN
##   [57,]      1.08642288  2.03783076   -0.9370948      NaN
##   [58,]      1.70318415  1.06142554    0.5651182      NaN
##   [59,]     -0.27045191  1.06142554   -0.9370948      NaN
##   [60,]     -1.01056544  1.06142554   -0.9370948      NaN
##   [61,]     -1.01056544  0.08502032    0.5651182      NaN
##   [62,]      2.44329767  2.03783076   -0.9370948      NaN
##   [63,]     -0.27045191 -0.89138490    0.5651182      NaN
##   [64,]      1.94988866  0.08502032   -0.9370948      NaN
##   [65,]     -0.14709966  0.08502032    2.0673313      NaN
##   [66,]     -0.14709966  0.08502032    0.5651182      NaN
##   [67,]      0.22295710  0.08502032   -0.9370948      NaN
##   [68,]     -0.27045191  0.08502032   -0.9370948      NaN
##   [69,]     -1.01056544  0.08502032    0.5651182      NaN
```

```
##   [70,]     -0.02374741  0.08502032    0.5651182      NaN
##   [71,]     -1.01056544 -1.86779013   -0.9370948      NaN
##   [72,]     -0.88721318  0.08502032   -0.9370948      NaN
##   [73,]     -1.01056544  1.06142554    0.5651182      NaN
##   [74,]     -1.01056544  0.08502032   -0.9370948      NaN
##   [75,]     -0.39380417  0.08502032   -0.9370948      NaN
##   [76,]     -0.14709966  1.06142554   -0.9370948      NaN
##   [77,]     -1.01056544  1.06142554   -0.1859883      NaN
##   [78,]     -0.39380417  1.06142554    1.3162247      NaN
##   [79,]     -0.27045191  1.06142554    0.5651182      NaN
##   [80,]     -0.51715642 -0.89138490    0.5651182      NaN
##   [81,]     -1.01056544 -1.86779013   -0.9370948      NaN
##   [82,]     -1.01056544  0.08502032    0.5651182      NaN
##   [83,]     -1.01056544 -0.89138490   -0.9370948      NaN
##   [84,]     -0.39380417  0.08502032    0.5651182      NaN
##   [85,]     -1.01056544 -0.89138490    0.5651182      NaN
##   [86,]     -0.27045191  0.08502032   -0.9370948      NaN
##   [87,]     -0.88721318 -1.86779013    2.0673313      NaN
##   [88,]     -0.02374741  1.06142554   -0.9370948      NaN
##   [89,]     -0.88721318  0.08502032   -0.9370948      NaN
##   [90,]     -0.02374741 -0.89138490    0.5651182      NaN
##   [91,]     -1.01056544  1.06142554   -0.9370948      NaN
##   [92,]      1.45647964  1.06142554   -0.1859883      NaN
##   [93,]     -0.64050868 -0.89138490    0.5651182      NaN
##   [94,]     -1.01056544  0.08502032    0.5651182      NaN
##   [95,]     -0.39380417  1.06142554    0.5651182      NaN
##   [96,]     -0.88721318  1.06142554    2.0673313      NaN
##   [97,]     -0.76386093 -0.89138490    1.3162247      NaN
##   [98,]     -0.64050868  0.08502032    0.5651182      NaN
##   [99,]      0.09960485  1.06142554    0.5651182      NaN
##  [100,]      1.70318415  0.08502032    0.5651182      NaN
##  [101,]     -0.39380417  1.06142554   -1.6882013      NaN
##  [102,]     -1.01056544 -1.86779013   -0.9370948      NaN
##  [103,]     -0.39380417  0.08502032   -0.9370948      NaN
##  [104,]     -0.39380417  1.06142554    1.3162247      NaN
##  [105,]     -0.88721318 -0.89138490   -0.9370948      NaN
##  [106,]     -0.88721318  1.06142554   -1.6882013      NaN
##  [107,]     -1.01056544  0.08502032   -0.9370948      NaN
##  [108,]     -0.51715642  0.08502032   -0.1859883      NaN
##  [109,]     -0.27045191 -1.86779013    0.5651182      NaN
##  [110,]      0.71636612  0.08502032    0.5651182      NaN
##  [111,]     -1.01056544  1.06142554    0.5651182      NaN
##  [112,]     -0.27045191  0.08502032   -0.9370948      NaN
##  [113,]      2.07324091  0.08502032   -1.6882013      NaN
##  [114,]      1.08642288 -1.86779013   -0.9370948      NaN
##  [115,]     -0.39380417  1.06142554   -0.9370948      NaN
##  [116,]     -0.76386093  0.08502032   -0.9370948      NaN
##  [117,]     -0.51715642  0.08502032    0.5651182      NaN
##  [118,]      0.22295710 -0.89138490    2.0673313      NaN
##  [119,]     -0.76386093 -0.89138490   -0.9370948      NaN
##  [120,]      2.07324091 -0.89138490   -0.9370948      NaN
##  [121,]      1.70318415  0.08502032   -0.9370948      NaN
##  [122,]      1.57983189 -0.89138490   -0.1859883      NaN
##  [123,]      0.59301386  1.06142554   -0.9370948      NaN
```

```
##  [124,]      -0.39380417  0.08502032    -0.9370948      NaN
##  [125,]      -0.39380417  1.06142554    -0.9370948      NaN
##  [126,]      -0.39380417  0.08502032     1.3162247      NaN
##  [127,]       1.70318415  1.06142554     0.5651182      NaN
##  [128,]       1.57983189 -1.86779013    -0.1859883      NaN
##  [129,]      -0.88721318 -1.86779013     2.0673313      NaN
##  [130,]       1.33312739  1.06142554     0.5651182      NaN
##  [131,]       2.31994542  0.08502032     0.5651182      NaN
##  [132,]       0.34630935  0.08502032    -0.1859883      NaN
##  [133,]       1.33312739  0.08502032    -0.9370948      NaN
##  [134,]      -0.02374741 -1.86779013    -0.9370948      NaN
##  [135,]       1.94988866 -1.86779013    -0.9370948      NaN
##  [136,]      -0.39380417 -0.89138490     0.5651182      NaN
##  [137,]      -0.14709966  1.06142554    -0.9370948      NaN
##  [138,]      -0.64050868  1.06142554    -0.9370948      NaN
##  [139,]       2.31994542  0.08502032    -0.9370948      NaN
##  [140,]      -0.02374741  0.08502032    -1.6882013      NaN
##  [141,]      -0.02374741  0.08502032     0.5651182      NaN
##  [142,]       2.44329767  0.08502032     0.5651182      NaN
##  [143,]      -0.76386093  2.03783076     2.0673313      NaN
##  [144,]       1.08642288  0.08502032    -0.9370948      NaN
##  [145,]      -0.02374741 -0.89138490     0.5651182      NaN
##  [146,]      -0.51715642  0.08502032     2.0673313      NaN
##  [147,]      -0.88721318 -1.86779013     0.5651182      NaN
##  [148,]       0.09960485  0.08502032    -0.9370948      NaN
##  [149,]      -0.02374741  1.06142554    -0.9370948      NaN
##  [150,]      -0.76386093 -1.86779013     0.5651182      NaN
##  [151,]       2.07324091  0.08502032     0.5651182      NaN
##  [152,]      -1.01056544  2.03783076    -0.1859883      NaN
##  [153,]      -0.39380417 -0.89138490    -0.1859883      NaN
##  [154,]      -0.02374741  0.08502032    -0.9370948      NaN
##  [155,]      -0.14709966  0.08502032    -0.1859883      NaN
##  [156,]      -1.01056544 -1.86779013     2.0673313      NaN
##  [157,]      -0.27045191  1.06142554     0.5651182      NaN
##  [158,]      -0.02374741  0.08502032     0.5651182      NaN
##  [159,]      -0.64050868  1.06142554    -0.1859883      NaN
##  [160,]      -0.88721318  1.06142554    -0.1859883      NaN
##  [161,]       1.20977513 -1.86779013     0.5651182      NaN
##  [162,]      -0.02374741  0.08502032     0.5651182      NaN
##  [163,]       1.45647964  0.08502032     0.5651182      NaN
##  [164,]       1.82653640 -0.89138490    -0.9370948      NaN
##  [165,]      -0.76386093  0.08502032     0.5651182      NaN
##  [166,]       0.22295710  0.08502032    -0.9370948      NaN
##  [167,]       0.59301386  0.08502032    -0.9370948      NaN
##  [168,]      -0.51715642  0.08502032    -0.9370948      NaN
##  [169,]      -1.01056544  1.06142554    -0.9370948      NaN
##  [170,]      -0.39380417  2.03783076    -0.9370948      NaN
##  [171,]       0.96307062  0.08502032     2.0673313      NaN
##  [172,]      -1.01056544 -1.86779013     2.0673313      NaN
##  [173,]      -0.76386093 -0.89138490     0.5651182      NaN
##  [174,]      -0.02374741  0.08502032     0.5651182      NaN
##  [175,]      -0.64050868 -0.89138490    -0.9370948      NaN
##  [176,]      -0.14709966  0.08502032    -0.9370948      NaN
##  [177,]      -0.88721318  0.08502032    -0.9370948      NaN
```

```
## [178,]    -0.88721318  0.08502032   -0.9370948        NaN
## [179,]    -1.01056544 -0.89138490   -0.1859883        NaN
## [180,]    -0.02374741 -0.89138490   -0.9370948        NaN
## [181,]     0.34630935 -1.86779013    0.5651182        NaN
## [182,]     2.19659316 -0.89138490    0.5651182        NaN
## [183,]     1.33312739 -0.89138490   -0.1859883        NaN
## [184,]    -1.01056544  0.08502032    0.5651182        NaN
## [185,]     0.46966161 -0.89138490    0.5651182        NaN
## [186,]     0.59301386  0.08502032    0.5651182        NaN
## [187,]    -0.64050868 -1.86779013    0.5651182        NaN
## [188,]     0.59301386  1.06142554    0.5651182        NaN
## [189,]    -0.88721318 -1.86779013   -0.9370948        NaN
## [190,]    -0.76386093  0.08502032    0.5651182        NaN
## [191,]    -1.01056544  1.06142554   -0.9370948        NaN
## [192,]    -0.02374741  0.08502032    0.5651182        NaN
## [193,]     1.70318415 -0.89138490   -0.9370948        NaN
## [194,]    -0.27045191  0.08502032    0.5651182        NaN
## [195,]    -0.88721318 -0.89138490    0.5651182        NaN
## [196,]     1.45647964  0.08502032   -0.9370948        NaN
## [197,]    -0.88721318  0.08502032    0.5651182        NaN
## [198,]     1.45647964 -0.89138490    0.5651182        NaN
## [199,]    -0.88721318  1.06142554   -0.9370948        NaN
## [200,]     2.44329767  0.08502032    2.0673313        NaN
## [201,]    -1.01056544 -1.86779013    2.0673313        NaN
## [202,]     1.08642288  1.06142554   -0.9370948        NaN
## [203,]     0.09960485  1.06142554    0.5651182        NaN
## [204,]     1.20977513 -0.89138490    0.5651182        NaN
## [205,]     2.44329767 -1.86779013    0.5651182        NaN
## [206,]     2.19659316  0.08502032   -0.1859883        NaN
## [207,]    -0.51715642  0.08502032   -0.9370948        NaN
## [208,]     1.08642288 -1.86779013    0.5651182        NaN
## [209,]    -0.02374741  2.03783076   -0.9370948        NaN
## [210,]    -1.01056544  1.06142554    0.5651182        NaN
## [211,]    -0.64050868  1.06142554    0.5651182        NaN
## [212,]    -1.01056544 -1.86779013   -0.9370948        NaN
## [213,]     1.33312739  0.08502032   -0.9370948        NaN
## [214,]    -0.14709966  1.06142554   -0.9370948        NaN
## [215,]    -0.76386093  0.08502032    2.0673313        NaN
## [216,]    -0.39380417  0.08502032   -0.9370948        NaN
## [217,]     2.07324091  1.06142554   -0.1859883        NaN
## [218,]    -1.01056544  0.08502032    2.0673313        NaN
## [219,]    -0.39380417  0.08502032    0.5651182        NaN
## [220,]    -0.76386093  0.08502032   -0.1859883        NaN
## [221,]    -0.51715642 -0.89138490   -0.9370948        NaN
## [222,]    -0.64050868  1.06142554    0.5651182        NaN
## [223,]     0.22295710  0.08502032    1.3162247        NaN
## [224,]    -0.76386093  0.08502032   -0.9370948        NaN
## [225,]    -1.01056544  1.06142554    0.5651182        NaN
## [226,]    -0.76386093  0.08502032   -0.9370948        NaN
## [227,]    -0.64050868  1.06142554   -0.1859883        NaN
## [228,]    -1.01056544 -1.86779013    0.5651182        NaN
## [229,]    -1.01056544  0.08502032   -0.1859883        NaN
## [230,]     1.08642288 -1.86779013    0.5651182        NaN
## [231,]    -0.88721318  0.08502032   -0.9370948        NaN
```

```
##   [232,]      -0.64050868 -0.89138490    2.0673313       NaN
##   [233,]      -0.39380417 -0.89138490    0.5651182       NaN
##   [234,]      -1.01056544  1.06142554    0.5651182       NaN
##   [235,]       0.59301386  0.08502032    0.5651182       NaN
##   [236,]       0.83971837  0.08502032   -0.1859883       NaN
##   [237,]      -0.88721318 -0.89138490   -0.9370948       NaN
##   [238,]      -0.88721318  1.06142554   -0.9370948       NaN
##   [239,]      -0.64050868 -0.89138490   -0.9370948       NaN
##   [240,]      -1.01056544  0.08502032   -0.9370948       NaN
##   [241,]      -1.01056544  1.06142554    0.5651182       NaN
##   [242,]       2.07324091  1.06142554   -0.1859883       NaN
##   [243,]       1.20977513 -0.89138490   -0.9370948       NaN
##   [244,]       1.82653640 -0.89138490    2.0673313       NaN
##   [245,]      -1.01056544  0.08502032    1.3162247       NaN
##   [246,]      -0.76386093  1.06142554    0.5651182       NaN
##   [247,]      -0.51715642  1.06142554   -0.9370948       NaN
##   [248,]      -0.88721318  1.06142554   -0.9370948       NaN
##   [249,]      -1.01056544 -0.89138490    0.5651182       NaN
##   [250,]      -0.27045191  1.06142554   -0.9370948       NaN
##   [251,]       0.09960485  0.08502032    0.5651182       NaN
##   [252,]      -0.88721318  1.06142554    2.0673313       NaN
##   [253,]       0.71636612  0.08502032   -0.9370948       NaN
##   [254,]       0.96307062 -0.89138490   -0.9370948       NaN
##   [255,]       1.33312739 -0.89138490   -0.1859883       NaN
##   [256,]      -1.01056544  0.08502032   -0.9370948       NaN
##   [257,]      -0.88721318  0.08502032    0.5651182       NaN
##   [258,]      -0.88721318 -0.89138490    0.5651182       NaN
##   [259,]      -1.01056544  0.08502032   -0.9370948       NaN
##   [260,]       2.44329767 -0.89138490    0.5651182       NaN
##   [261,]      -0.27045191  0.08502032   -0.9370948       NaN
##   [262,]      -0.88721318 -0.89138490   -0.9370948       NaN
##   [263,]      -0.88721318 -1.86779013    2.0673313       NaN
##   [264,]      -0.88721318  0.08502032    2.0673313       NaN
##   [265,]      -0.88721318  1.06142554   -0.9370948       NaN
##   [266,]      -0.88721318  0.08502032    0.5651182       NaN
##   [267,]       1.70318415  0.08502032    0.5651182       NaN
##   [268,]      -0.51715642 -0.89138490   -0.9370948       NaN
##   [269,]       1.33312739 -0.89138490    0.5651182       NaN
##   [270,]      -0.39380417  0.08502032   -0.9370948       NaN
##   [271,]      -1.01056544  0.08502032    0.5651182       NaN
##   [272,]       2.44329767  1.06142554   -0.9370948       NaN
##   [273,]      -0.02374741  0.08502032    0.5651182       NaN
##   [274,]      -0.39380417  1.06142554    0.5651182       NaN
##   [275,]      -0.76386093 -0.89138490    0.5651182       NaN
##   [276,]      -1.01056544  1.06142554    0.5651182       NaN
##   [277,]       1.57983189  0.08502032   -0.9370948       NaN
##   [278,]      -0.27045191 -0.89138490    0.5651182       NaN
##   [279,]      -1.01056544  0.08502032   -0.9370948       NaN
##   [280,]      -0.64050868 -1.86779013   -0.9370948       NaN
##   [281,]      -0.76386093  1.06142554    0.5651182       NaN
##   [282,]      -1.01056544 -1.86779013   -0.9370948       NaN
##   [283,]      -0.88721318 -0.89138490   -0.9370948       NaN
##   [284,]       1.33312739 -0.89138490    2.0673313       NaN
##   [285,]       0.22295710 -0.89138490    0.5651182       NaN
```

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```
## [286,]    -1.01056544  0.08502032   -0.9370948        NaN
## [287,]     1.82653640  0.08502032   -0.9370948        NaN
## [288,]     1.70318415  1.06142554   -0.9370948        NaN
## [289,]     0.83971837  1.06142554    0.5651182        NaN
## [290,]    -0.14709966 -0.89138490   -0.9370948        NaN
## [291,]     0.09960485  1.06142554   -0.9370948        NaN
## [292,]    -0.76386093  0.08502032    2.0673313        NaN
## [293,]    -0.51715642  0.08502032   -0.1859883        NaN
## [294,]    -0.64050868  1.06142554   -0.1859883        NaN
## [295,]    -0.02374741  0.08502032    0.5651182        NaN
## [296,]     2.07324091  0.08502032   -0.1859883        NaN
## [297,]    -0.76386093  0.08502032   -0.9370948        NaN
## [298,]     0.83971837  0.08502032   -0.1859883        NaN
## [299,]     1.08642288  1.06142554   -0.9370948        NaN
## [300,]    -0.88721318  0.08502032    0.5651182        NaN
## [301,]    -0.88721318  1.06142554   -0.9370948        NaN
## [302,]     0.09960485  0.08502032    0.5651182        NaN
## [303,]     0.83971837 -0.89138490    0.5651182        NaN
## [304,]    -0.27045191  0.08502032    2.0673313        NaN
## [305,]    -1.01056544  0.08502032    0.5651182        NaN
## [306,]     1.82653640  1.06142554   -0.9370948        NaN
## [307,]    -0.27045191  0.08502032   -0.9370948        NaN
## [308,]     1.94988866 -0.89138490   -0.9370948        NaN
## [309,]    -1.01056544  1.06142554   -0.9370948        NaN
## [310,]    -0.51715642  1.06142554    2.0673313        NaN
## [311,]    -0.88721318  0.08502032   -1.6882013        NaN
## [312,]    -0.27045191  0.08502032   -0.9370948        NaN
## [313,]    -0.88721318  1.06142554   -0.9370948        NaN
## [314,]    -0.51715642  1.06142554   -0.9370948        NaN
## [315,]     0.09960485 -1.86779013    0.5651182        NaN
## [316,]     0.09960485  1.06142554   -0.9370948        NaN
## [317,]    -1.01056544 -0.89138490    2.0673313        NaN
## [318,]    -0.14709966  1.06142554    0.5651182        NaN
## [319,]    -0.51715642  0.08502032   -0.9370948        NaN
## [320,]    -0.14709966 -0.89138490    2.0673313        NaN
## [321,]    -0.88721318  0.08502032   -0.9370948        NaN
## [322,]    -0.27045191  0.08502032   -0.1859883        NaN
## [323,]    -0.88721318  1.06142554    0.5651182        NaN
## [324,]    -0.88721318  1.06142554    0.5651182        NaN
## [325,]     2.31994542 -0.89138490    0.5651182        NaN
## [326,]    -0.27045191 -0.89138490   -0.9370948        NaN
## [327,]    -0.27045191 -0.89138490    0.5651182        NaN
## [328,]    -0.76386093 -0.89138490    0.5651182        NaN
## [329,]     0.09960485  0.08502032   -0.1859883        NaN
## [330,]    -0.51715642  2.03783076   -0.9370948        NaN
## [331,]     0.09960485  1.06142554   -0.9370948        NaN
## [332,]    -1.01056544 -1.86779013   -0.1859883        NaN
## [333,]     1.33312739  1.06142554   -0.9370948        NaN
## [334,]    -0.27045191  0.08502032   -0.9370948        NaN
## [335,]    -0.14709966  1.06142554    1.3162247        NaN
## [336,]    -1.01056544 -0.89138490    0.5651182        NaN
## [337,]    -0.14709966  1.06142554    1.3162247        NaN
## [338,]    -0.02374741  2.03783076    1.3162247        NaN
## [339,]    -0.51715642  0.08502032   -0.1859883        NaN
```

```
## [340,]     -0.14709966  1.06142554    -0.1859883    NaN
## [341,]     -0.51715642 -0.89138490     0.5651182    NaN
## [342,]      0.71636612 -0.89138490    -0.9370948    NaN
## [343,]     -0.27045191  1.06142554     0.5651182    NaN
## [344,]      0.09960485 -1.86779013    -0.1859883    NaN
## [345,]     -0.51715642  1.06142554     2.0673313    NaN
## [346,]      2.07324091 -1.86779013    -0.9370948    NaN
## [347,]     -0.39380417  0.08502032     0.5651182    NaN
## [348,]     -0.64050868 -1.86779013     0.5651182    NaN
## [349,]      1.70318415  2.03783076    -0.9370948    NaN
## [350,]     -0.88721318  0.08502032    -0.9370948    NaN
## [351,]     -0.88721318 -1.86779013     2.0673313    NaN
## [352,]     -0.88721318  0.08502032     0.5651182    NaN
## [353,]      2.44329767 -1.86779013     0.5651182    NaN
## [354,]     -0.39380417  0.08502032     0.5651182    NaN
## [355,]      1.94988866 -0.89138490     2.0673313    NaN
## [356,]     -1.01056544  0.08502032    -0.9370948    NaN
## [357,]     -0.88721318  1.06142554     1.3162247    NaN
## [358,]     -1.01056544 -1.86779013     2.0673313    NaN
## [359,]     -1.01056544  2.03783076     0.5651182    NaN
## [360,]     -0.76386093  1.06142554     0.5651182    NaN
## [361,]     -1.01056544  1.06142554     0.5651182    NaN
## [362,]      0.09960485  1.06142554    -0.9370948    NaN
## [363,]     -0.02374741 -0.89138490     0.5651182    NaN
## [364,]     -0.51715642  0.08502032    -0.1859883    NaN
## [365,]      0.09960485  0.08502032     0.5651182    NaN
## [366,]     -0.27045191  1.06142554     0.5651182    NaN
## [367,]     -0.64050868  0.08502032    -0.1859883    NaN
## [368,]      0.09960485  0.08502032     2.0673313    NaN
## [369,]      1.57983189 -0.89138490    -0.1859883    NaN
## [370,]     -0.02374741  1.06142554    -0.9370948    NaN
## [371,]      0.34630935  0.08502032    -0.9370948    NaN
## [372,]      1.70318415  0.08502032    -0.9370948    NaN
## [373,]     -0.02374741  1.06142554    -0.9370948    NaN
## [374,]     -1.01056544 -0.89138490     0.5651182    NaN
## [375,]     -0.02374741  1.06142554    -0.9370948    NaN
## [376,]     -0.27045191  0.08502032     1.3162247    NaN
## [377,]      0.59301386 -0.89138490    -0.9370948    NaN
## [378,]     -0.88721318  0.08502032    -0.9370948    NaN
## [379,]      1.20977513  0.08502032    -0.1859883    NaN
## [380,]     -0.88721318  0.08502032    -0.9370948    NaN
## [381,]      0.09960485  1.06142554    -0.1859883    NaN
## [382,]     -0.88721318 -1.86779013     2.0673313    NaN
## [383,]     -0.76386093 -1.86779013     2.0673313    NaN
## [384,]      0.22295710  0.08502032     0.5651182    NaN
## [385,]     -0.88721318 -0.89138490     0.5651182    NaN
## [386,]     -0.64050868  0.08502032     2.0673313    NaN
## [387,]      0.59301386  0.08502032    -0.9370948    NaN
## [388,]     -0.88721318 -0.89138490    -0.1859883    NaN
## [389,]     -1.01056544  1.06142554    -0.9370948    NaN
## [390,]      0.09960485  1.06142554    -0.9370948    NaN
## [391,]      0.34630935  0.08502032    -0.9370948    NaN
## [392,]     -0.88721318  0.08502032     0.5651182    NaN
## [393,]     -0.51715642 -0.89138490     0.5651182    NaN
```

```
## [394,]   -0.64050868  1.06142554   -0.1859883      NaN
## [395,]   -0.27045191 -0.89138490    0.5651182      NaN
## [396,]    1.45647964  0.08502032    0.5651182      NaN
## [397,]   -0.14709966  1.06142554    1.3162247      NaN
## [398,]   -0.64050868 -0.89138490   -0.9370948      NaN
## [399,]    1.94988866  2.03783076    0.5651182      NaN
## [400,]   -1.01056544 -0.89138490   -0.9370948      NaN
## [401,]   -1.01056544 -1.86779013   -0.9370948      NaN
## [402,]   -0.39380417  0.08502032   -0.9370948      NaN
## [403,]    0.34630935  0.08502032    2.0673313      NaN
## [404,]   -1.01056544  0.08502032   -0.1859883      NaN
## [405,]    0.96307062 -0.89138490    0.5651182      NaN
## [406,]   -0.76386093  0.08502032    0.5651182      NaN
## [407,]   -0.76386093  0.08502032    0.5651182      NaN
## [408,]    0.09960485 -0.89138490   -0.9370948      NaN
## [409,]   -0.64050868 -0.89138490   -0.9370948      NaN
## [410,]    2.44329767 -0.89138490   -0.9370948      NaN
## [411,]   -0.88721318  0.08502032   -0.9370948      NaN
## [412,]   -0.27045191  0.08502032   -0.9370948      NaN
## [413,]    1.08642288  0.08502032    0.5651182      NaN
## [414,]    2.31994542  1.06142554    2.0673313      NaN
## [415,]   -1.01056544 -1.86779013    2.0673313      NaN
## [416,]   -0.39380417 -0.89138490   -0.1859883      NaN
## [417,]   -0.88721318 -0.89138490   -0.9370948      NaN
## [418,]   -0.88721318  1.06142554   -0.9370948      NaN
## [419,]    1.70318415  0.08502032   -0.9370948      NaN
## [420,]   -0.76386093  0.08502032   -0.9370948      NaN
## [421,]   -0.76386093  1.06142554    0.5651182      NaN
## [422,]    1.94988866  2.03783076    2.0673313      NaN
## [423,]   -0.88721318 -0.89138490    2.0673313      NaN
## [424,]    1.57983189  1.06142554    1.3162247      NaN
## [425,]    2.44329767  0.08502032   -0.1859883      NaN
## [426,]    2.44329767  1.06142554   -0.9370948      NaN
## [427,]   -0.88721318  0.08502032    0.5651182      NaN
## [428,]    2.31994542  0.08502032   -0.1859883      NaN
## [429,]   -0.88721318 -0.89138490    0.5651182      NaN
## [430,]   -0.88721318  0.08502032   -0.9370948      NaN
## [431,]    1.57983189  0.08502032   -0.9370948      NaN
## [432,]   -0.14709966  1.06142554   -0.9370948      NaN
## [433,]   -0.88721318  1.06142554   -0.9370948      NaN
## [434,]    0.09960485  0.08502032   -0.1859883      NaN
## [435,]   -0.02374741 -1.86779013   -0.9370948      NaN
## [436,]    0.71636612 -1.86779013    0.5651182      NaN
## [437,]    0.09960485 -1.86779013    0.5651182      NaN
## [438,]   -0.27045191 -1.86779013   -0.1859883      NaN
## [439,]    0.83971837  0.08502032   -0.9370948      NaN
## [440,]    1.33312739  0.08502032   -0.9370948      NaN
## [441,]    1.70318415  0.08502032   -1.6882013      NaN
## [442,]   -0.51715642 -0.89138490    1.3162247      NaN
## [443,]    0.09960485  1.06142554    0.5651182      NaN
## [444,]   -0.64050868 -1.86779013    2.0673313      NaN
## [445,]   -0.88721318  2.03783076   -0.1859883      NaN
## [446,]    1.08642288  2.03783076   -0.9370948      NaN
## [447,]    0.09960485 -0.89138490   -0.9370948      NaN
```

```
## [448,]     -1.01056544  0.08502032   -0.1859883       NaN
## [449,]     -0.39380417  0.08502032   -0.9370948       NaN
## [450,]     -0.14709966 -1.86779013   -0.9370948       NaN
## [451,]     -0.88721318 -1.86779013   -0.9370948       NaN
## [452,]      1.82653640  0.08502032    0.5651182       NaN
## [453,]     -0.88721318  0.08502032    1.3162247       NaN
## [454,]      0.96307062  1.06142554   -0.9370948       NaN
## [455,]      1.20977513  0.08502032    2.0673313       NaN
## [456,]     -1.01056544  2.03783076    0.5651182       NaN
## [457,]     -0.27045191  0.08502032   -0.9370948       NaN
## [458,]     -0.51715642  0.08502032   -0.1859883       NaN
## [459,]      2.31994542  0.08502032    1.3162247       NaN
## [460,]     -0.88721318  1.06142554    1.3162247       NaN
## [461,]      2.44329767 -0.89138490    0.5651182       NaN
## [462,]     -1.01056544  0.08502032    0.5651182       NaN
## [463,]      1.45647964  1.06142554   -0.9370948       NaN
## [464,]      1.82653640  0.08502032    2.0673313       NaN
## [465,]     -1.01056544  0.08502032    2.0673313       NaN
## [466,]      1.08642288 -1.86779013    0.5651182       NaN
## [467,]     -0.88721318  2.03783076   -0.9370948       NaN
## [468,]     -0.02374741  1.06142554    0.5651182       NaN
## [469,]     -0.39380417 -0.89138490    2.0673313       NaN
## [470,]      0.22295710  1.06142554    1.3162247       NaN
## [471,]      1.82653640  0.08502032    0.5651182       NaN
## [472,]      0.09960485  0.08502032    0.5651182       NaN
## [473,]     -1.01056544  1.06142554   -0.9370948       NaN
## [474,]      1.08642288  1.06142554   -0.9370948       NaN
## [475,]      1.70318415  0.08502032    0.5651182       NaN
## [476,]      2.31994542 -0.89138490   -0.1859883       NaN
## [477,]      0.96307062 -0.89138490    1.3162247       NaN
## [478,]     -0.76386093  0.08502032    0.5651182       NaN
## [479,]      0.46966161 -1.86779013    0.5651182       NaN
## [480,]     -0.27045191  0.08502032   -0.9370948       NaN
## [481,]      0.34630935  1.06142554   -0.9370948       NaN
## [482,]     -1.01056544 -0.89138490   -0.9370948       NaN
## [483,]      0.46966161  1.06142554    0.5651182       NaN
## [484,]      1.94988866 -0.89138490    1.3162247       NaN
## [485,]     -0.39380417  1.06142554    0.5651182       NaN
## [486,]     -0.39380417  1.06142554    0.5651182       NaN
## [487,]     -0.88721318  0.08502032   -0.1859883       NaN
## [488,]     -1.01056544  0.08502032   -0.9370948       NaN
## [489,]     -0.88721318  1.06142554   -0.9370948       NaN
## [490,]     -0.39380417  1.06142554    1.3162247       NaN
## [491,]     -1.01056544 -1.86779013   -0.9370948       NaN
## [492,]     -0.02374741  2.03783076    0.5651182       NaN
## [493,]     -1.01056544  1.06142554   -0.9370948       NaN
## [494,]     -1.01056544  1.06142554   -0.9370948       NaN
## [495,]      0.59301386  0.08502032    2.0673313       NaN
## [496,]     -0.88721318 -1.86779013   -0.1859883       NaN
## [497,]      1.57983189 -1.86779013    2.0673313       NaN
## [498,]     -0.76386093  1.06142554    1.3162247       NaN
## [499,]     -0.39380417 -1.86779013    0.5651182       NaN
## [500,]     -0.14709966  1.06142554   -0.1859883       NaN
## [501,]     -0.02374741  1.06142554   -0.9370948       NaN
```

```
## [502,]     -0.76386093  0.08502032      0.5651182          NaN
## [503,]     -1.01056544 -1.86779013      0.5651182          NaN
## [504,]     -1.01056544  2.03783076     -0.9370948          NaN
## [505,]      2.07324091  1.06142554     -0.9370948          NaN
## [506,]     -0.39380417  0.08502032     -0.9370948          NaN
## [507,]     -0.76386093  0.08502032      1.3162247          NaN
## [508,]     -0.76386093 -0.89138490      0.5651182          NaN
## [509,]     -0.39380417  1.06142554     -0.9370948          NaN
## [510,]     -0.39380417  0.08502032     -0.9370948          NaN
## [511,]      1.20977513  1.06142554      0.5651182          NaN
## [512,]     -0.02374741 -0.89138490      0.5651182          NaN
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## [514,]      0.09960485 -1.86779013      0.5651182          NaN
## [515,]     -0.76386093  0.08502032     -0.9370948          NaN
## [516,]     -0.76386093  0.08502032     -0.9370948          NaN
## [517,]     -0.64050868  0.08502032      0.5651182          NaN
## [518,]     -0.14709966  0.08502032     -0.9370948          NaN
## [519,]     -0.27045191  1.06142554     -0.1859883          NaN
## [520,]     -1.01056544  1.06142554     -0.9370948          NaN
## [521,]     -0.88721318 -1.86779013     -0.1859883          NaN
## [522,]     -0.76386093 -1.86779013      0.5651182          NaN
## [523,]      0.09960485 -0.89138490     -0.9370948          NaN
## [524,]      2.31994542 -1.86779013      0.5651182          NaN
## [525,]     -0.02374741  0.08502032      0.5651182          NaN
## [526,]     -0.76386093 -0.89138490     -0.9370948          NaN
## [527,]     -0.88721318  1.06142554      2.0673313          NaN
## [528,]      0.09960485  0.08502032     -0.1859883          NaN
## [529,]     -0.14709966 -0.89138490      2.0673313          NaN
## [530,]     -1.01056544  1.06142554     -0.9370948          NaN
## [531,]     -1.01056544 -0.89138490     -0.9370948          NaN
## [532,]     -0.76386093 -0.89138490     -0.9370948          NaN
## [533,]      0.59301386  1.06142554     -0.1859883          NaN
## [534,]     -0.51715642  1.06142554     -0.9370948          NaN
## [535,]     -0.27045191  0.08502032     -0.9370948          NaN
## [536,]      0.09960485  1.06142554     -1.6882013          NaN
## [537,]      0.83971837  1.06142554     -0.1859883          NaN
## [538,]      0.09960485 -0.89138490     -0.9370948          NaN
## [539,]     -1.01056544  0.08502032     -1.6882013          NaN
## [540,]     -0.14709966  1.06142554     -0.1859883          NaN
## [541,]     -1.01056544 -0.89138490     -0.9370948          NaN
## [542,]     -0.14709966  0.08502032     -0.9370948          NaN
## [543,]     -1.01056544  0.08502032     -0.9370948          NaN
## [544,]      1.82653640  0.08502032      0.5651182          NaN
## [545,]     -0.76386093  0.08502032      0.5651182          NaN
## [546,]      2.19659316  2.03783076     -0.1859883          NaN
## [547,]      0.09960485  0.08502032     -0.9370948          NaN
## [548,]      1.20977513  0.08502032      0.5651182          NaN
## [549,]      0.71636612  0.08502032     -0.9370948          NaN
## [550,]     -0.14709966 -0.89138490      0.5651182          NaN
## [551,]     -0.02374741 -1.86779013      0.5651182          NaN
## [552,]     -0.76386093  0.08502032     -1.6882013          NaN
## [553,]     -0.02374741  0.08502032      0.5651182          NaN
## [554,]     -0.88721318 -1.86779013      0.5651182          NaN
## [555,]     -0.27045191  0.08502032      0.5651182          NaN
```

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## [556,]      0.09960485  0.08502032  -0.1859883      NaN
## [557,]     -0.39380417  0.08502032  -0.9370948      NaN
## [558,]     -0.88721318  1.06142554  -0.9370948      NaN
## [559,]      1.82653640  1.06142554  -0.9370948      NaN
## [560,]     -0.88721318  2.03783076   0.5651182      NaN
## [561,]     -0.14709966  2.03783076  -0.9370948      NaN
## [562,]     -0.76386093  1.06142554  -0.1859883      NaN
## [563,]     -1.01056544  1.06142554   1.3162247      NaN
## [564,]      2.07324091 -1.86779013   0.5651182      NaN
## [565,]     -0.88721318 -0.89138490   2.0673313      NaN
## [566,]      0.09960485 -1.86779013   0.5651182      NaN
## [567,]      2.19659316 -0.89138490  -0.9370948      NaN
## [568,]     -0.88721318  0.08502032   1.3162247      NaN
## [569,]     -0.88721318  0.08502032   0.5651182      NaN
## [570,]     -0.14709966  1.06142554  -0.9370948      NaN
## [571,]      1.20977513  1.06142554   0.5651182      NaN
## [572,]     -1.01056544 -0.89138490  -0.9370948      NaN
## [573,]      2.19659316  0.08502032   0.5651182      NaN
## [574,]     -0.14709966  0.08502032   2.0673313      NaN
## [575,]     -1.01056544  1.06142554  -0.9370948      NaN
## [576,]      1.20977513  1.06142554   0.5651182      NaN
## [577,]     -0.14709966 -1.86779013  -0.1859883      NaN
## [578,]      0.09960485 -1.86779013  -0.9370948      NaN
## [579,]     -0.88721318  1.06142554  -0.9370948      NaN
## [580,]     -0.88721318  1.06142554   0.5651182      NaN
## [581,]     -0.14709966  1.06142554  -0.9370948      NaN
## [582,]     -1.01056544  0.08502032  -0.9370948      NaN
## [583,]     -0.88721318 -0.89138490   0.5651182      NaN
## [584,]     -0.14709966 -0.89138490  -0.9370948      NaN
## [585,]     -0.14709966  0.08502032  -0.9370948      NaN
## [586,]     -0.39380417  0.08502032  -0.9370948      NaN
## [587,]     -0.02374741  0.08502032  -0.9370948      NaN
## [588,]      0.22295710  1.06142554  -0.9370948      NaN
## [589,]     -0.88721318  0.08502032   0.5651182      NaN
## [590,]     -1.01056544 -0.89138490  -0.9370948      NaN
## [591,]     -0.27045191  0.08502032   0.5651182      NaN
## [592,]      0.83971837  0.08502032  -0.1859883      NaN
## [593,]     -0.88721318 -0.89138490   1.3162247      NaN
## [594,]     -1.01056544  0.08502032   1.3162247      NaN
## [595,]      1.70318415 -0.89138490  -0.9370948      NaN
## [596,]     -0.88721318  1.06142554  -0.9370948      NaN
## [597,]     -1.01056544  1.06142554  -0.9370948      NaN
## [598,]     -1.01056544 -0.89138490  -0.9370948      NaN
## [599,]     -0.88721318  1.06142554   0.5651182      NaN
## [600,]      0.46966161  0.08502032  -1.6882013      NaN
## [601,]     -0.64050868  0.08502032  -0.9370948      NaN
## [602,]      0.83971837  1.06142554   0.5651182      NaN
## [603,]     -0.88721318  0.08502032   0.5651182      NaN
## [604,]     -0.88721318  0.08502032  -0.9370948      NaN
## [605,]      2.44329767  0.08502032  -0.9370948      NaN
## [606,]      0.34630935  0.08502032  -0.9370948      NaN
## [607,]      0.83971837  1.06142554  -0.9370948      NaN
## [608,]      0.22295710  0.08502032  -0.1859883      NaN
## [609,]     -0.88721318 -1.86779013   0.5651182      NaN
```

```
## [610,]     0.59301386 -0.89138490    -0.9370948    NaN
## [611,]    -0.51715642 -1.86779013     2.0673313    NaN
## [612,]    -0.27045191  0.08502032     1.3162247    NaN
## [613,]    -0.88721318  1.06142554    -0.1859883    NaN
## [614,]    -0.76386093 -0.89138490    -1.6882013    NaN
## [615,]    -0.51715642 -0.89138490     0.5651182    NaN
## [616,]    -0.76386093  0.08502032     0.5651182    NaN
## [617,]     2.07324091  1.06142554    -0.1859883    NaN
## [618,]    -0.64050868  0.08502032     0.5651182    NaN
## [619,]    -0.88721318 -1.86779013     0.5651182    NaN
## [620,]    -1.01056544  0.08502032     0.5651182    NaN
## [621,]     2.19659316 -1.86779013     0.5651182    NaN
## [622,]    -1.01056544 -0.89138490    -0.9370948    NaN
## [623,]     0.46966161  1.06142554    -0.9370948    NaN
## [624,]    -0.51715642  1.06142554    -0.9370948    NaN
## [625,]    -0.27045191 -0.89138490    -0.1859883    NaN
## [626,]    -0.02374741  0.08502032    -0.1859883    NaN
## [627,]    -0.14709966 -0.89138490     0.5651182    NaN
## [628,]     1.94988866  1.06142554     0.5651182    NaN
## [629,]     0.83971837  1.06142554    -0.1859883    NaN
## [630,]    -0.14709966 -0.89138490     0.5651182    NaN
## [631,]    -1.01056544 -0.89138490    -0.9370948    NaN
## [632,]    -0.14709966  1.06142554    -0.9370948    NaN
## [633,]    -0.88721318 -1.86779013     0.5651182    NaN
## [634,]    -0.14709966  0.08502032    -0.9370948    NaN
## [635,]    -0.76386093 -1.86779013     1.3162247    NaN
## [636,]    -0.02374741  0.08502032    -0.9370948    NaN
## [637,]     1.94988866  1.06142554    -0.9370948    NaN
## [638,]    -1.01056544  0.08502032    -0.9370948    NaN
## [639,]    -0.64050868 -1.86779013    -0.1859883    NaN
## [640,]    -1.01056544  0.08502032     2.0673313    NaN
## [641,]    -0.64050868 -1.86779013    -0.9370948    NaN
## [642,]    -0.51715642 -0.89138490    -0.9370948    NaN
## [643,]    -0.02374741  0.08502032    -0.1859883    NaN
## [644,]    -0.76386093  0.08502032    -0.9370948    NaN
## [645,]     0.22295710  1.06142554    -0.9370948    NaN
## [646,]    -1.01056544  0.08502032     0.5651182    NaN
## [647,]    -0.14709966  0.08502032    -0.1859883    NaN
## [648,]     1.94988866  0.08502032     2.0673313    NaN
## [649,]     1.45647964 -0.89138490     0.5651182    NaN
## [650,]     1.70318415  1.06142554    -0.9370948    NaN
## [651,]    -1.01056544  0.08502032    -0.9370948    NaN
## [652,]    -0.88721318 -0.89138490    -0.1859883    NaN
## [653,]     1.20977513 -0.89138490     0.5651182    NaN
## [654,]    -0.88721318  1.06142554    -0.9370948    NaN
## [655,]    -0.88721318  0.08502032    -0.9370948    NaN
## [656,]    -0.76386093 -0.89138490    -1.6882013    NaN
## [657,]     1.94988866  1.06142554    -0.9370948    NaN
## [658,]    -0.27045191 -1.86779013     0.5651182    NaN
## [659,]    -0.02374741 -0.89138490    -0.9370948    NaN
## [660,]    -0.51715642  1.06142554     0.5651182    NaN
## [661,]    -0.88721318 -1.86779013    -0.9370948    NaN
## [662,]    -0.14709966  0.08502032    -0.9370948    NaN
## [663,]    -0.88721318  0.08502032     0.5651182    NaN
```

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## [664,]      1.08642288 -1.86779013     1.3162247          NaN
## [665,]      0.59301386 -1.86779013    -0.9370948          NaN
## [666,]     -0.88721318  1.06142554    -0.9370948          NaN
## [667,]     -0.76386093 -1.86779013    -0.9370948          NaN
## [668,]     -0.88721318  1.06142554    -0.9370948          NaN
## [669,]     -0.02374741  0.08502032     0.5651182          NaN
## [670,]     -0.39380417  0.08502032     0.5651182          NaN
## [671,]     -0.64050868  0.08502032    -0.9370948          NaN
## [672,]      0.09960485  0.08502032    -0.9370948          NaN
## [673,]      0.59301386 -0.89138490     0.5651182          NaN
## [674,]     -1.01056544  1.06142554     1.3162247          NaN
## [675,]     -0.51715642  0.08502032     2.0673313          NaN
## [676,]     -0.27045191  1.06142554    -0.9370948          NaN
## [677,]      1.45647964 -1.86779013    -0.9370948          NaN
## [678,]     -0.14709966 -0.89138490     1.3162247          NaN
## [679,]      1.33312739  1.06142554     0.5651182          NaN
## [680,]      1.33312739 -0.89138490    -0.1859883          NaN
## [681,]     -0.27045191  1.06142554     1.3162247          NaN
## [682,]     -1.01056544  0.08502032     2.0673313          NaN
## [683,]     -1.01056544  0.08502032    -0.9370948          NaN
## [684,]      1.20977513 -0.89138490    -0.1859883          NaN
## [685,]      0.09960485  1.06142554    -0.1859883          NaN
## [686,]     -1.01056544  0.08502032     0.5651182          NaN
## [687,]     -0.39380417  0.08502032     0.5651182          NaN
## [688,]     -0.88721318  1.06142554     0.5651182          NaN
## [689,]      1.45647964  0.08502032     1.3162247          NaN
## [690,]     -0.64050868  0.08502032     2.0673313          NaN
## [691,]      0.34630935  0.08502032     0.5651182          NaN
## [692,]     -0.02374741  1.06142554     0.5651182          NaN
## [693,]     -0.76386093  1.06142554     0.5651182          NaN
## [694,]     -0.76386093 -1.86779013    -0.9370948          NaN
## [695,]     -1.01056544  0.08502032    -0.9370948          NaN
## [696,]     -1.01056544  1.06142554    -0.9370948          NaN
## [697,]     -0.64050868 -0.89138490    -0.9370948          NaN
## [698,]      1.33312739  0.08502032     2.0673313          NaN
## [699,]      1.08642288  0.08502032     0.5651182          NaN
## [700,]     -1.01056544 -0.89138490    -0.9370948          NaN
## [701,]     -0.88721318  0.08502032     2.0673313          NaN
## [702,]     -0.88721318 -0.89138490     0.5651182          NaN
## [703,]     -0.14709966 -0.89138490     1.3162247          NaN
## [704,]      0.09960485  0.08502032     2.0673313          NaN
## [705,]     -0.76386093  1.06142554    -0.9370948          NaN
## [706,]     -0.88721318  2.03783076    -0.9370948          NaN
## [707,]      1.82653640  0.08502032    -0.9370948          NaN
## [708,]      0.83971837  1.06142554     0.5651182          NaN
## [709,]     -0.14709966  1.06142554     2.0673313          NaN
## [710,]     -0.02374741 -0.89138490     0.5651182          NaN
## [711,]      0.96307062  0.08502032    -0.9370948          NaN
## [712,]      0.09960485  0.08502032    -0.9370948          NaN
## [713,]      0.46966161 -1.86779013    -0.9370948          NaN
## [714,]     -1.01056544  1.06142554     0.5651182          NaN
## [715,]     -1.01056544 -0.89138490     0.5651182          NaN
## [716,]     -1.01056544  1.06142554     1.3162247          NaN
## [717,]     -0.02374741  0.08502032     0.5651182          NaN
```

```
## [718,]      0.83971837  1.06142554     2.0673313          NaN
## [719,]      1.70318415 -0.89138490    -0.9370948          NaN
## [720,]     -0.64050868 -0.89138490    -0.9370948          NaN
## [721,]      1.57983189  0.08502032    -0.9370948          NaN
## [722,]      1.82653640  0.08502032    -0.9370948          NaN
## [723,]      0.09960485 -1.86779013     0.5651182          NaN
## [724,]     -0.27045191 -0.89138490     0.5651182          NaN
## [725,]      0.96307062 -1.86779013     0.5651182          NaN
## [726,]      0.59301386  1.06142554     1.3162247          NaN
## [727,]     -1.01056544 -1.86779013    -0.9370948          NaN
## [728,]     -0.51715642 -0.89138490    -0.9370948          NaN
## [729,]      0.96307062  0.08502032     2.0673313          NaN
## [730,]      1.94988866  1.06142554     0.5651182          NaN
## [731,]     -0.14709966 -0.89138490    -0.9370948          NaN
## [732,]      0.22295710  0.08502032     0.5651182          NaN
## [733,]     -0.51715642  0.08502032     0.5651182          NaN
## [734,]     -0.88721318 -0.89138490     0.5651182          NaN
## [735,]     -0.14709966 -1.86779013    -0.9370948          NaN
## [736,]     -0.39380417  0.08502032    -0.9370948          NaN
## [737,]     -0.64050868  1.06142554    -0.9370948          NaN
## [738,]     -0.27045191 -0.89138490     0.5651182          NaN
## [739,]     -1.01056544 -1.86779013    -0.9370948          NaN
## [740,]     -0.88721318  1.06142554    -0.9370948          NaN
## [741,]      0.09960485  0.08502032     1.3162247          NaN
## [742,]     -0.51715642 -0.89138490    -0.1859883          NaN
## [743,]     -0.02374741  0.08502032    -0.9370948          NaN
## [744,]     -0.88721318  0.08502032    -0.9370948          NaN
## [745,]      0.22295710 -0.89138490     0.5651182          NaN
## [746,]      1.08642288  1.06142554     0.5651182          NaN
## [747,]     -0.27045191 -1.86779013    -0.9370948          NaN
## [748,]     -0.76386093  1.06142554    -0.9370948          NaN
## [749,]      2.44329767 -0.89138490     0.5651182          NaN
## [750,]     -0.88721318 -1.86779013    -0.1859883          NaN
## [751,]      2.31994542  0.08502032     0.5651182          NaN
## [752,]     -1.01056544  0.08502032    -0.9370948          NaN
## [753,]      0.83971837  1.06142554    -0.9370948          NaN
## [754,]      1.57983189  0.08502032     0.5651182          NaN
## [755,]     -0.14709966 -1.86779013    -0.9370948          NaN
## [756,]      0.22295710 -0.89138490    -0.9370948          NaN
## [757,]      2.44329767  1.06142554     0.5651182          NaN
## [758,]     -1.01056544  1.06142554    -0.1859883          NaN
## [759,]     -1.01056544 -0.89138490     2.0673313          NaN
## [760,]      1.82653640  1.06142554     0.5651182          NaN
## [761,]     -0.88721318  0.08502032    -0.1859883          NaN
## [762,]      0.71636612  0.08502032     1.3162247          NaN
## [763,]     -0.88721318  0.08502032    -0.9370948          NaN
## [764,]      0.09960485  1.06142554    -0.9370948          NaN
## [765,]      0.09960485 -1.86779013     0.5651182          NaN
## [766,]     -0.76386093  1.06142554     1.3162247          NaN
## [767,]     -0.88721318  1.06142554     0.5651182          NaN
## [768,]     -0.76386093  0.08502032     1.3162247          NaN
## [769,]      2.07324091  0.08502032    -0.1859883          NaN
## [770,]     -1.01056544 -1.86779013     0.5651182          NaN
## [771,]     -1.01056544  1.06142554     0.5651182          NaN
```

```
## [772,]   -0.88721318  1.06142554  -0.9370948   NaN
## [773,]   -0.02374741  0.08502032   0.5651182   NaN
## [774,]    0.34630935  2.03783076   0.5651182   NaN
## [775,]   -0.88721318 -1.86779013   0.5651182   NaN
## [776,]    1.94988866  0.08502032   0.5651182   NaN
## [777,]   -0.02374741  0.08502032  -0.1859883   NaN
## [778,]    0.09960485  0.08502032  -0.9370948   NaN
## [779,]   -0.14709966  1.06142554  -0.9370948   NaN
## [780,]   -0.64050868  1.06142554  -0.9370948   NaN
## [781,]    1.82653640 -0.89138490   2.0673313   NaN
## [782,]   -1.01056544 -0.89138490   0.5651182   NaN
## [783,]    1.33312739  0.08502032   1.3162247   NaN
## [784,]   -0.27045191 -0.89138490   2.0673313   NaN
## [785,]    0.96307062 -1.86779013  -0.9370948   NaN
## [786,]    1.33312739  1.06142554   2.0673313   NaN
## [787,]   -0.14709966  2.03783076  -0.9370948   NaN
## [788,]   -0.88721318 -1.86779013  -0.9370948   NaN
## [789,]    0.09960485  0.08502032   1.3162247   NaN
## [790,]   -1.01056544 -0.89138490   0.5651182   NaN
## [791,]   -0.51715642  0.08502032  -0.9370948   NaN
## [792,]   -0.64050868  0.08502032   2.0673313   NaN
## [793,]    2.44329767  1.06142554   0.5651182   NaN
## [794,]    0.71636612 -0.89138490  -0.9370948   NaN
## [795,]   -0.76386093 -1.86779013  -0.9370948   NaN
## [796,]    0.09960485  1.06142554  -0.9370948   NaN
## [797,]   -0.64050868 -1.86779013   2.0673313   NaN
## [798,]    1.45647964  0.08502032   0.5651182   NaN
## [799,]    1.94988866  0.08502032   0.5651182   NaN
## [800,]   -0.88721318 -0.89138490   0.5651182   NaN
## [801,]   -1.01056544  0.08502032   0.5651182   NaN
## [802,]   -1.01056544  1.06142554   1.3162247   NaN
## [803,]   -0.27045191  0.08502032  -0.9370948   NaN
## [804,]   -0.76386093  1.06142554  -0.9370948   NaN
## [805,]   -1.01056544  1.06142554   0.5651182   NaN
## [806,]   -0.02374741  1.06142554  -0.9370948   NaN
## [807,]   -0.27045191  1.06142554  -0.9370948   NaN
## [808,]    0.09960485  1.06142554  -0.1859883   NaN
## [809,]    2.31994542  1.06142554  -0.9370948   NaN
## [810,]   -0.76386093  0.08502032   0.5651182   NaN
## [811,]   -0.76386093 -1.86779013  -0.1859883   NaN
## [812,]   -0.88721318 -0.89138490  -0.1859883   NaN
## [813,]    2.19659316  0.08502032  -0.9370948   NaN
## [814,]   -0.88721318  0.08502032  -0.9370948   NaN
## [815,]    0.59301386  0.08502032   0.5651182   NaN
## [816,]   -1.01056544 -1.86779013   2.0673313   NaN
## [817,]   -0.02374741  0.08502032  -0.9370948   NaN
## [818,]    1.08642288  1.06142554  -0.9370948   NaN
## [819,]    1.33312739  0.08502032  -0.9370948   NaN
## [820,]   -0.88721318 -1.86779013  -0.9370948   NaN
## [821,]    0.22295710 -0.89138490  -0.1859883   NaN
## [822,]   -0.14709966  1.06142554   2.0673313   NaN
## [823,]   -0.88721318 -0.89138490  -0.9370948   NaN
## [824,]    0.09960485  0.08502032  -0.9370948   NaN
## [825,]    2.44329767  0.08502032   0.5651182   NaN
```

```
## [826,]    -0.14709966 -1.86779013    0.5651182    NaN
## [827,]    -1.01056544  0.08502032   -1.6882013    NaN
## [828,]    -0.39380417  0.08502032   -0.9370948    NaN
## [829,]    -0.14709966 -1.86779013    0.5651182    NaN
## [830,]    -0.02374741  1.06142554   -0.1859883    NaN
## [831,]     0.34630935  1.06142554   -0.9370948    NaN
## [832,]     0.71636612  0.08502032    0.5651182    NaN
## [833,]     1.94988866 -0.89138490    0.5651182    NaN
## [834,]    -0.39380417  0.08502032   -0.9370948    NaN
## [835,]    -0.02374741 -1.86779013   -0.9370948    NaN
## [836,]    -0.14709966  1.06142554    2.0673313    NaN
## [837,]     1.70318415 -1.86779013   -0.9370948    NaN
## [838,]    -0.02374741  1.06142554    0.5651182    NaN
## [839,]     0.34630935  0.08502032   -0.9370948    NaN
## [840,]    -0.64050868  1.06142554   -0.1859883    NaN
## [841,]    -1.01056544  1.06142554    0.5651182    NaN
## [842,]     1.82653640  0.08502032    0.5651182    NaN
## [843,]     0.34630935 -1.86779013   -0.9370948    NaN
## [844,]    -0.76386093  1.06142554    0.5651182    NaN
## [845,]     0.09960485  0.08502032   -0.1859883    NaN
## [846,]     2.07324091 -0.89138490    0.5651182    NaN
## [847,]    -0.88721318  0.08502032   -0.9370948    NaN
## [848,]    -1.01056544  0.08502032    0.5651182    NaN
## [849,]    -0.64050868  1.06142554    1.3162247    NaN
## [850,]    -0.02374741  0.08502032   -0.1859883    NaN
## [851,]    -0.88721318 -1.86779013   -0.9370948    NaN
## [852,]    -0.64050868  1.06142554    2.0673313    NaN
## [853,]    -0.39380417 -1.86779013    0.5651182    NaN
## [854,]    -0.02374741 -0.89138490   -0.9370948    NaN
## [855,]    -0.27045191  0.08502032    0.5651182    NaN
## [856,]    -1.01056544  0.08502032   -0.9370948    NaN
## [857,]    -0.76386093  0.08502032   -0.9370948    NaN
## [858,]     0.09960485  1.06142554   -0.9370948    NaN
## [859,]    -0.27045191 -0.89138490    0.5651182    NaN
## [860,]     0.71636612 -1.86779013   -0.9370948    NaN
## [861,]    -0.76386093  1.06142554   -0.9370948    NaN
## [862,]    -0.88721318  0.08502032   -0.1859883    NaN
## [863,]     0.96307062  0.08502032   -0.9370948    NaN
## [864,]    -0.88721318  0.08502032   -1.6882013    NaN
## [865,]    -0.51715642 -0.89138490   -0.9370948    NaN
## [866,]     2.44329767  1.06142554   -0.9370948    NaN
## [867,]    -0.88721318  1.06142554    0.5651182    NaN
## [868,]    -0.88721318  0.08502032    0.5651182    NaN
## [869,]     1.20977513  1.06142554    0.5651182    NaN
## [870,]     0.71636612 -0.89138490   -0.9370948    NaN
## [871,]     0.96307062  1.06142554   -0.9370948    NaN
## [872,]     0.96307062 -0.89138490   -0.9370948    NaN
## [873,]     1.94988866  0.08502032    0.5651182    NaN
## [874,]    -0.39380417  1.06142554   -0.9370948    NaN
## [875,]    -0.27045191  1.06142554   -0.9370948    NaN
## [876,]     2.44329767  1.06142554    1.3162247    NaN
## [877,]     1.45647964  0.08502032   -0.1859883    NaN
## [878,]    -0.88721318  1.06142554    2.0673313    NaN
## [879,]    -0.88721318  2.03783076    0.5651182    NaN
```

```
## [880,]    -0.27045191  1.06142554   -0.1859883      NaN
## [881,]     0.46966161  0.08502032    1.3162247      NaN
## [882,]    -0.88721318 -0.89138490   -0.9370948      NaN
## [883,]    -1.01056544  0.08502032    2.0673313      NaN
## [884,]    -0.02374741  0.08502032    0.5651182      NaN
## [885,]     0.09960485  0.08502032    2.0673313      NaN
## [886,]     0.09960485  1.06142554   -0.9370948      NaN
## [887,]    -1.01056544  0.08502032    0.5651182      NaN
## [888,]     2.07324091  2.03783076    0.5651182      NaN
## [889,]    -0.14709966 -0.89138490   -0.1859883      NaN
## [890,]     0.59301386  0.08502032   -0.9370948      NaN
## [891,]    -1.01056544  1.06142554   -0.9370948      NaN
## [892,]    -0.88721318 -1.86779013   -0.9370948      NaN
## [893,]     0.09960485  0.08502032    0.5651182      NaN
## [894,]    -1.01056544  0.08502032   -0.9370948      NaN
## [895,]    -0.76386093  0.08502032   -0.9370948      NaN
## [896,]     0.22295710 -0.89138490    0.5651182      NaN
## [897,]     1.82653640  0.08502032    0.5651182      NaN
## [898,]    -0.76386093  0.08502032   -0.9370948      NaN
## [899,]    -0.76386093  0.08502032   -0.9370948      NaN
## [900,]    -0.64050868 -0.89138490    0.5651182      NaN
## [901,]    -0.76386093  0.08502032    2.0673313      NaN
## [902,]    -0.88721318 -0.89138490    2.0673313      NaN
## [903,]    -0.64050868 -0.89138490   -0.9370948      NaN
## [904,]    -0.27045191  0.08502032   -0.9370948      NaN
## [905,]    -1.01056544  0.08502032   -0.9370948      NaN
## [906,]    -1.01056544  0.08502032   -0.9370948      NaN
## [907,]     1.33312739  0.08502032    2.0673313      NaN
## [908,]    -0.51715642  0.08502032   -0.1859883      NaN
## [909,]     0.09960485  2.03783076   -0.1859883      NaN
## [910,]     1.94988866  0.08502032   -0.9370948      NaN
## [911,]    -1.01056544 -0.89138490   -0.9370948      NaN
## [912,]     1.82653640 -1.86779013   -0.9370948      NaN
## [913,]    -0.64050868 -0.89138490   -0.9370948      NaN
## [914,]    -0.88721318  0.08502032   -0.1859883      NaN
## [915,]    -0.14709966 -1.86779013    0.5651182      NaN
## [916,]     0.09960485 -0.89138490   -0.9370948      NaN
## [917,]    -0.64050868 -0.89138490   -0.1859883      NaN
## [918,]    -0.88721318  0.08502032   -0.1859883      NaN
## [919,]    -0.02374741  0.08502032   -0.9370948      NaN
## [920,]     1.08642288  1.06142554    0.5651182      NaN
## [921,]     1.20977513  0.08502032    0.5651182      NaN
## [922,]    -1.01056544  1.06142554    0.5651182      NaN
## [923,]    -0.64050868 -0.89138490   -0.9370948      NaN
## [924,]     0.22295710  0.08502032   -0.9370948      NaN
## [925,]    -0.39380417 -1.86779013   -0.9370948      NaN
## [926,]    -0.27045191  1.06142554    0.5651182      NaN
## [927,]    -0.64050868  1.06142554   -0.1859883      NaN
## [928,]    -0.88721318  1.06142554   -0.9370948      NaN
## [929,]     0.71636612  0.08502032    0.5651182      NaN
## [930,]    -0.88721318  0.08502032   -0.9370948      NaN
## [931,]    -0.39380417 -0.89138490    0.5651182      NaN
## [932,]    -0.02374741 -0.89138490    0.5651182      NaN
## [933,]    -0.27045191  0.08502032    2.0673313      NaN
```

```
## [934,]    -1.01056544  0.08502032    2.0673313    NaN
## [935,]    -1.01056544  0.08502032    0.5651182    NaN
## [936,]    -0.14709966  0.08502032    0.5651182    NaN
## [937,]     1.94988866  0.08502032    0.5651182    NaN
## [938,]     0.46966161  1.06142554    0.5651182    NaN
## [939,]     1.70318415  1.06142554   -0.9370948    NaN
## [940,]    -0.27045191 -0.89138490   -0.9370948    NaN
## [941,]     1.70318415  0.08502032    0.5651182    NaN
## [942,]    -0.39380417  0.08502032    2.0673313    NaN
## [943,]     0.09960485  1.06142554    2.0673313    NaN
## [944,]    -1.01056544 -0.89138490   -0.9370948    NaN
## [945,]    -1.01056544  0.08502032   -0.9370948    NaN
## [946,]     2.31994542  0.08502032   -0.9370948    NaN
## [947,]     1.94988866  1.06142554   -0.1859883    NaN
## [948,]    -0.51715642  0.08502032   -0.9370948    NaN
## [949,]     0.96307062  1.06142554    0.5651182    NaN
## [950,]     1.08642288 -0.89138490   -0.9370948    NaN
## [951,]    -0.88721318  1.06142554   -0.9370948    NaN
## [952,]     0.09960485 -0.89138490    0.5651182    NaN
## [953,]    -1.01056544  0.08502032   -0.9370948    NaN
## [954,]    -0.76386093  0.08502032   -0.9370948    NaN
## [955,]    -0.88721318 -1.86779013   -0.9370948    NaN
## [956,]    -0.88721318 -0.89138490    0.5651182    NaN
## [957,]    -0.14709966  1.06142554   -0.9370948    NaN
## [958,]     0.83971837 -0.89138490   -0.9370948    NaN
## [959,]    -0.02374741  0.08502032   -0.9370948    NaN
## [960,]    -0.88721318  0.08502032   -0.9370948    NaN
## [961,]    -1.01056544  0.08502032   -0.1859883    NaN
## [962,]    -0.64050868  1.06142554   -0.9370948    NaN
## [963,]    -0.51715642  0.08502032   -0.9370948    NaN
## [964,]    -0.88721318 -0.89138490   -0.9370948    NaN
## [965,]     0.71636612 -0.89138490    0.5651182    NaN
## [966,]     1.20977513 -1.86779013    0.5651182    NaN
## [967,]    -0.27045191  1.06142554    0.5651182    NaN
## [968,]    -1.01056544  1.06142554   -0.9370948    NaN
## [969,]    -0.27045191  0.08502032   -0.1859883    NaN
## [970,]    -0.64050868  0.08502032   -0.9370948    NaN
## [971,]     0.22295710  0.08502032    0.5651182    NaN
## [972,]     0.22295710 -0.89138490    2.0673313    NaN
## [973,]    -1.01056544  0.08502032   -0.9370948    NaN
## [974,]    -1.01056544  0.08502032    0.5651182    NaN
## [975,]    -0.88721318 -1.86779013   -0.9370948    NaN
## [976,]     0.46966161  1.06142554   -0.1859883    NaN
## [977,]     1.70318415  0.08502032   -0.9370948    NaN
## [978,]     2.07324091 -1.86779013    2.0673313    NaN
## [979,]    -0.88721318 -1.86779013    0.5651182    NaN
## [980,]     2.44329767  0.08502032    0.5651182    NaN
## [981,]    -0.88721318  0.08502032   -0.9370948    NaN
## [982,]     1.08642288  1.06142554   -0.1859883    NaN
## [983,]    -0.27045191  0.08502032   -0.9370948    NaN
## [984,]    -0.88721318  1.06142554    2.0673313    NaN
## [985,]     2.07324091  0.08502032   -0.9370948    NaN
## [986,]     1.57983189  1.06142554    0.5651182    NaN
## [987,]     1.45647964  1.06142554   -0.9370948    NaN
```

```
## [988,]    -0.88721318  0.08502032   -0.1859883    NaN
## [989,]     1.57983189  0.08502032   -0.9370948    NaN
## [990,]    -0.64050868 -1.86779013   -0.9370948    NaN
## [991,]    -0.51715642 -1.86779013   -0.9370948    NaN
## [992,]    -0.88721318 -1.86779013   -0.1859883    NaN
## [993,]     1.94988866 -0.89138490   -0.9370948    NaN
## [994,]     1.08642288 -1.86779013   -0.9370948    NaN
## [995,]     2.31994542 -0.89138490    0.5651182    NaN
## [996,]    -0.39380417  0.08502032    0.5651182    NaN
## [997,]     0.09960485  0.08502032   -0.1859883    NaN
## [998,]     0.96307062  1.06142554   -0.9370948    NaN
## [999,]    -0.88721318 -1.86779013    0.5651182    NaN
## [1000,]    0.09960485  0.08502032   -1.6882013    NaN
## [1001,]   -0.14709966  1.06142554    1.3162247    NaN
## [1002,]    0.22295710  0.08502032    0.5651182    NaN
## [1003,]    1.08642288 -0.89138490   -0.9370948    NaN
## [1004,]   -1.01056544  0.08502032    2.0673313    NaN
## [1005,]   -0.27045191  0.08502032    1.3162247    NaN
## [1006,]    0.96307062  0.08502032    1.3162247    NaN
## [1007,]    2.31994542 -0.89138490   -0.9370948    NaN
## [1008,]    0.59301386 -1.86779013    1.3162247    NaN
## [1009,]   -1.01056544  0.08502032    0.5651182    NaN
## [1010,]   -1.01056544  0.08502032    0.5651182    NaN
## [1011,]   -1.01056544  1.06142554    0.5651182    NaN
## [1012,]   -0.76386093  1.06142554   -0.1859883    NaN
## [1013,]   -1.01056544  1.06142554   -0.9370948    NaN
## [1014,]   -0.27045191  1.06142554   -0.1859883    NaN
## [1015,]   -0.14709966  2.03783076   -0.9370948    NaN
## [1016,]   -1.01056544  1.06142554    1.3162247    NaN
## [1017,]   -0.14709966  0.08502032   -0.9370948    NaN
## [1018,]    0.22295710 -1.86779013   -0.9370948    NaN
## [1019,]   -0.64050868  1.06142554   -0.9370948    NaN
## [1020,]    0.83971837  1.06142554   -0.1859883    NaN
## [1021,]   -1.01056544  0.08502032    2.0673313    NaN
## [1022,]   -0.02374741 -0.89138490   -0.9370948    NaN
## [1023,]   -0.51715642 -0.89138490    2.0673313    NaN
## [1024,]   -1.01056544 -0.89138490   -0.9370948    NaN
## [1025,]   -0.88721318  1.06142554    0.5651182    NaN
## [1026,]   -0.64050868 -1.86779013    0.5651182    NaN
## [1027,]   -0.27045191  2.03783076   -0.1859883    NaN
## [1028,]   -1.01056544  0.08502032   -0.9370948    NaN
## [1029,]   -0.51715642  2.03783076    0.5651182    NaN
## [1030,]   -0.02374741  1.06142554    1.3162247    NaN
## [1031,]   -0.14709966 -0.89138490   -0.9370948    NaN
## [1032,]   -0.02374741  0.08502032   -0.1859883    NaN
## [1033,]   -0.88721318  0.08502032   -0.9370948    NaN
## [1034,]   -1.01056544  2.03783076   -0.9370948    NaN
## [1035,]    1.33312739  0.08502032    0.5651182    NaN
## [1036,]   -0.14709966 -0.89138490    0.5651182    NaN
## [1037,]   -0.88721318  0.08502032   -0.9370948    NaN
## [1038,]    2.44329767  0.08502032    2.0673313    NaN
## [1039,]   -0.27045191  0.08502032   -0.1859883    NaN
## [1040,]   -0.02374741  1.06142554    2.0673313    NaN
## [1041,]   -0.14709966 -1.86779013    0.5651182    NaN
```

```
## [1042,]       -0.51715642  0.08502032    0.5651182          NaN
## [1043,]       -0.51715642  0.08502032   -0.9370948          NaN
## [1044,]       -0.88721318  0.08502032    0.5651182          NaN
## [1045,]       -0.51715642  1.06142554    2.0673313          NaN
## [1046,]       -0.88721318  0.08502032    0.5651182          NaN
## [1047,]        1.33312739  0.08502032   -0.9370948          NaN
## [1048,]       -0.27045191  0.08502032    0.5651182          NaN
## [1049,]       -0.76386093  0.08502032    1.3162247          NaN
## [1050,]        0.83971837 -1.86779013   -0.9370948          NaN
## [1051,]       -0.02374741 -0.89138490    0.5651182          NaN
## [1052,]       -1.01056544  2.03783076   -0.1859883          NaN
## [1053,]       -0.27045191  0.08502032    2.0673313          NaN
## [1054,]       -1.01056544 -0.89138490   -0.9370948          NaN
## [1055,]       -0.27045191  1.06142554   -0.9370948          NaN
## [1056,]        0.71636612  0.08502032    0.5651182          NaN
## [1057,]       -1.01056544  0.08502032    2.0673313          NaN
## [1058,]        0.46966161  0.08502032    2.0673313          NaN
## [1059,]        1.82653640  1.06142554    0.5651182          NaN
## [1060,]       -0.27045191 -1.86779013   -0.9370948          NaN
## [1061,]       -0.02374741  0.08502032    0.5651182          NaN
## [1062,]        0.46966161 -0.89138490   -0.9370948          NaN
## [1063,]       -0.88721318 -1.86779013    0.5651182          NaN
## [1064,]        1.20977513  0.08502032   -0.9370948          NaN
## [1065,]       -1.01056544  0.08502032   -0.9370948          NaN
## [1066,]       -0.64050868  1.06142554   -0.9370948          NaN
## [1067,]       -0.64050868  1.06142554    0.5651182          NaN
## [1068,]        0.59301386  0.08502032    0.5651182          NaN
## [1069,]       -0.88721318 -0.89138490    0.5651182          NaN
## [1070,]       -1.01056544  0.08502032   -0.9370948          NaN
## [1071,]       -0.27045191  0.08502032   -0.9370948          NaN
## [1072,]       -0.76386093 -0.89138490    0.5651182          NaN
## [1073,]       -0.88721318 -1.86779013   -0.9370948          NaN
## [1074,]        2.44329767 -1.86779013   -0.9370948          NaN
## [1075,]       -0.14709966  2.03783076   -0.9370948          NaN
## [1076,]        0.09960485  0.08502032    0.5651182          NaN
## [1077,]        0.22295710  1.06142554    0.5651182          NaN
## [1078,]       -1.01056544  1.06142554    2.0673313          NaN
## [1079,]        2.31994542  0.08502032   -0.9370948          NaN
## [1080,]       -0.39380417  0.08502032   -0.9370948          NaN
## [1081,]       -0.76386093  0.08502032   -0.9370948          NaN
## [1082,]        0.83971837  0.08502032   -0.9370948          NaN
## [1083,]        1.33312739 -1.86779013   -0.9370948          NaN
## [1084,]       -0.02374741  1.06142554   -0.9370948          NaN
## [1085,]       -1.01056544  0.08502032    2.0673313          NaN
## [1086,]       -0.76386093  0.08502032   -0.9370948          NaN
## [1087,]        1.57983189  2.03783076    0.5651182          NaN
## [1088,]       -0.27045191 -0.89138490    2.0673313          NaN
## [1089,]       -0.88721318  0.08502032    0.5651182          NaN
## [1090,]        0.46966161  0.08502032    0.5651182          NaN
## [1091,]       -0.14709966 -1.86779013    1.3162247          NaN
## [1092,]        1.94988866  0.08502032   -0.9370948          NaN
## [1093,]        2.31994542  0.08502032    2.0673313          NaN
## [1094,]       -0.88721318  0.08502032   -0.9370948          NaN
## [1095,]       -0.02374741 -0.89138490    0.5651182          NaN
```

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## [1096,]      2.31994542  1.06142554    -0.9370948        NaN
## [1097,]     -0.39380417 -0.89138490     0.5651182        NaN
## [1098,]      1.45647964 -0.89138490     2.0673313        NaN
## [1099,]     -0.14709966 -0.89138490    -0.9370948        NaN
## [1100,]     -1.01056544  1.06142554     2.0673313        NaN
## [1101,]      2.31994542  1.06142554    -0.9370948        NaN
## [1102,]     -0.51715642 -0.89138490    -0.9370948        NaN
## [1103,]     -0.88721318  1.06142554    -0.9370948        NaN
## [1104,]      0.83971837  1.06142554    -0.9370948        NaN
## [1105,]     -0.02374741  0.08502032    -0.9370948        NaN
## [1106,]     -0.14709966  1.06142554    -0.9370948        NaN
## [1107,]     -1.01056544  0.08502032    -0.9370948        NaN
## [1108,]      0.09960485  1.06142554    -1.6882013        NaN
## [1109,]     -1.01056544  0.08502032     0.5651182        NaN
## [1110,]      2.44329767  1.06142554     2.0673313        NaN
## [1111,]     -0.88721318  0.08502032    -0.9370948        NaN
## [1112,]     -0.88721318  2.03783076     2.0673313        NaN
## [1113,]     -0.88721318  0.08502032     0.5651182        NaN
## [1114,]     -1.01056544  1.06142554     2.0673313        NaN
## [1115,]      0.71636612  1.06142554     1.3162247        NaN
## [1116,]     -0.27045191  1.06142554     0.5651182        NaN
## [1117,]      2.07324091  2.03783076    -0.1859883        NaN
## [1118,]     -1.01056544  1.06142554    -0.9370948        NaN
## [1119,]     -0.76386093  0.08502032    -0.9370948        NaN
## [1120,]      0.59301386  0.08502032    -0.9370948        NaN
## [1121,]      0.83971837  0.08502032    -0.9370948        NaN
## [1122,]     -1.01056544  1.06142554    -0.9370948        NaN
## [1123,]     -0.76386093 -1.86779013     0.5651182        NaN
## [1124,]      0.09960485  1.06142554     0.5651182        NaN
## [1125,]     -0.39380417  0.08502032     0.5651182        NaN
## [1126,]     -0.88721318 -1.86779013    -0.9370948        NaN
## [1127,]     -0.02374741  0.08502032    -0.1859883        NaN
## [1128,]      0.09960485  0.08502032     2.0673313        NaN
## [1129,]     -0.39380417  1.06142554    -0.9370948        NaN
## [1130,]     -0.02374741 -0.89138490     1.3162247        NaN
## [1131,]      2.31994542  0.08502032    -0.9370948        NaN
## [1132,]      0.09960485  1.06142554     2.0673313        NaN
## [1133,]      0.59301386 -0.89138490    -0.9370948        NaN
## [1134,]      2.19659316  0.08502032     2.0673313        NaN
## [1135,]     -0.27045191 -0.89138490    -0.9370948        NaN
## [1136,]     -1.01056544  1.06142554    -0.9370948        NaN
## [1137,]      1.82653640  0.08502032     0.5651182        NaN
## [1138,]      2.07324091 -0.89138490     1.3162247        NaN
## [1139,]      1.33312739  2.03783076     0.5651182        NaN
## [1140,]     -0.51715642  1.06142554     1.3162247        NaN
## [1141,]     -0.27045191  0.08502032     0.5651182        NaN
## [1142,]     -0.27045191  0.08502032     0.5651182        NaN
## [1143,]     -0.51715642  2.03783076     0.5651182        NaN
## [1144,]      2.07324091  0.08502032    -0.1859883        NaN
## [1145,]     -0.88721318  1.06142554     1.3162247        NaN
## [1146,]      0.34630935  1.06142554    -0.9370948        NaN
## [1147,]      0.09960485  1.06142554    -0.9370948        NaN
## [1148,]      1.94988866  1.06142554    -0.9370948        NaN
## [1149,]      0.09960485  2.03783076     0.5651182        NaN
```

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## [1150,]     1.20977513  0.08502032     1.3162247      NaN
## [1151,]     1.08642288  2.03783076    -0.9370948      NaN
## [1152,]     2.19659316  0.08502032     0.5651182      NaN
## [1153,]    -0.51715642 -1.86779013     0.5651182      NaN
## [1154,]    -0.76386093 -0.89138490     0.5651182      NaN
## [1155,]     2.07324091  1.06142554    -0.9370948      NaN
## [1156,]    -0.76386093 -0.89138490     0.5651182      NaN
## [1157,]     0.71636612  0.08502032    -0.9370948      NaN
## [1158,]    -0.14709966  1.06142554    -0.9370948      NaN
## [1159,]     1.20977513  0.08502032    -0.9370948      NaN
## [1160,]    -0.64050868  0.08502032     0.5651182      NaN
## [1161,]    -0.88721318 -0.89138490     1.3162247      NaN
## [1162,]    -0.88721318 -0.89138490     0.5651182      NaN
## [1163,]     0.09960485  0.08502032     0.5651182      NaN
## [1164,]     0.09960485  0.08502032     0.5651182      NaN
## [1165,]     0.83971837  0.08502032    -0.9370948      NaN
## [1166,]    -1.01056544  2.03783076    -1.6882013      NaN
## [1167,]    -0.64050868  2.03783076     0.5651182      NaN
## [1168,]     0.71636612 -0.89138490     0.5651182      NaN
## [1169,]    -0.88721318 -1.86779013     2.0673313      NaN
## [1170,]    -0.14709966  0.08502032     0.5651182      NaN
## [1171,]    -0.88721318  0.08502032     0.5651182      NaN
## [1172,]    -0.27045191  0.08502032    -0.9370948      NaN
## [1173,]     0.09960485  0.08502032     0.5651182      NaN
## [1174,]    -0.51715642  1.06142554    -0.9370948      NaN
## [1175,]    -0.88721318 -1.86779013    -0.9370948      NaN
## [1176,]     0.34630935  0.08502032     0.5651182      NaN
## [1177,]     1.57983189  1.06142554     1.3162247      NaN
## [1178,]     0.96307062  2.03783076    -0.9370948      NaN
## [1179,]    -0.88721318  0.08502032     0.5651182      NaN
## [1180,]    -0.76386093  0.08502032    -0.9370948      NaN
## [1181,]    -0.27045191  0.08502032    -0.9370948      NaN
## [1182,]    -0.39380417 -1.86779013    -0.9370948      NaN
## [1183,]    -1.01056544  1.06142554     0.5651182      NaN
## [1184,]    -0.76386093 -0.89138490    -0.9370948      NaN
## [1185,]     1.57983189  2.03783076     0.5651182      NaN
## [1186,]     0.71636612 -0.89138490    -0.9370948      NaN
## [1187,]     0.34630935  1.06142554     1.3162247      NaN
## [1188,]    -1.01056544  0.08502032    -0.9370948      NaN
## [1189,]    -0.51715642  0.08502032     0.5651182      NaN
## [1190,]    -0.88721318  1.06142554     0.5651182      NaN
## [1191,]    -0.88721318  0.08502032     0.5651182      NaN
## [1192,]    -0.51715642  1.06142554    -0.9370948      NaN
## [1193,]     0.83971837  0.08502032     0.5651182      NaN
## [1194,]    -0.88721318  0.08502032     0.5651182      NaN
## [1195,]    -0.88721318  1.06142554    -0.9370948      NaN
## [1196,]    -1.01056544  0.08502032    -0.9370948      NaN
## [1197,]     1.70318415 -0.89138490    -0.9370948      NaN
## [1198,]    -0.02374741 -1.86779013    -0.9370948      NaN
## [1199,]     0.83971837  0.08502032    -0.9370948      NaN
## [1200,]     2.07324091  1.06142554    -0.9370948      NaN
## [1201,]    -1.01056544  0.08502032    -0.9370948      NaN
## [1202,]    -0.14709966 -1.86779013     0.5651182      NaN
## [1203,]    -0.64050868 -0.89138490     0.5651182      NaN
```

```
## [1204,]      1.82653640  1.06142554     0.5651182         NaN
## [1205,]     -0.27045191 -0.89138490     0.5651182         NaN
## [1206,]     -0.88721318  1.06142554    -0.9370948         NaN
## [1207,]     -0.27045191  0.08502032     0.5651182         NaN
## [1208,]      1.57983189  0.08502032     2.0673313         NaN
## [1209,]     -0.51715642 -0.89138490     0.5651182         NaN
## [1210,]     -1.01056544  1.06142554     0.5651182         NaN
## [1211,]      1.45647964  0.08502032     0.5651182         NaN
## [1212,]     -1.01056544  1.06142554     0.5651182         NaN
## [1213,]      1.20977513  0.08502032    -0.9370948         NaN
## [1214,]     -0.27045191  0.08502032    -0.9370948         NaN
## [1215,]     -0.88721318  0.08502032    -0.9370948         NaN
## [1216,]     -0.88721318  1.06142554     0.5651182         NaN
## [1217,]     -0.88721318  0.08502032     0.5651182         NaN
## [1218,]     -0.02374741  0.08502032     0.5651182         NaN
## [1219,]     -0.39380417  0.08502032    -0.1859883         NaN
## [1220,]     -0.02374741  1.06142554     0.5651182         NaN
## [1221,]     -0.88721318  1.06142554    -0.9370948         NaN
## [1222,]     -1.01056544 -1.86779013    -0.9370948         NaN
## [1223,]      1.57983189 -1.86779013    -1.6882013         NaN
## [1224,]     -0.02374741  0.08502032    -0.9370948         NaN
## [1225,]      0.96307062  1.06142554     0.5651182         NaN
## [1226,]      2.31994542 -0.89138490     2.0673313         NaN
## [1227,]      0.09960485  0.08502032    -0.9370948         NaN
## [1228,]     -0.88721318  1.06142554    -0.9370948         NaN
## [1229,]     -0.64050868  0.08502032    -1.6882013         NaN
## [1230,]     -0.14709966 -0.89138490    -0.9370948         NaN
## [1231,]      2.44329767 -1.86779013     0.5651182         NaN
## [1232,]      0.46966161  1.06142554    -0.9370948         NaN
## [1233,]      2.19659316  1.06142554    -0.9370948         NaN
## [1234,]      0.83971837 -1.86779013    -0.9370948         NaN
## [1235,]     -0.88721318  1.06142554    -0.1859883         NaN
## [1236,]     -0.88721318  0.08502032    -0.9370948         NaN
## [1237,]      0.46966161  2.03783076    -0.1859883         NaN
## [1238,]     -1.01056544 -0.89138490    -0.9370948         NaN
## [1239,]     -0.64050868 -1.86779013     0.5651182         NaN
## [1240,]      1.82653640 -1.86779013     2.0673313         NaN
## [1241,]     -1.01056544  0.08502032    -0.9370948         NaN
## [1242,]      1.20977513  0.08502032    -0.9370948         NaN
## [1243,]     -0.27045191  1.06142554     0.5651182         NaN
## [1244,]     -0.64050868  0.08502032    -0.9370948         NaN
## [1245,]     -0.88721318  1.06142554     2.0673313         NaN
## [1246,]      0.09960485  0.08502032     0.5651182         NaN
## [1247,]     -0.14709966  0.08502032    -1.6882013         NaN
## [1248,]     -0.51715642  0.08502032     2.0673313         NaN
## [1249,]     -0.14709966  0.08502032     0.5651182         NaN
## [1250,]     -0.02374741  0.08502032    -0.1859883         NaN
## [1251,]     -1.01056544  0.08502032    -0.9370948         NaN
## [1252,]      0.71636612 -0.89138490    -0.1859883         NaN
## [1253,]     -0.88721318  1.06142554     0.5651182         NaN
## [1254,]     -0.88721318  0.08502032    -0.1859883         NaN
## [1255,]      0.22295710  1.06142554    -0.1859883         NaN
## [1256,]      0.83971837  0.08502032    -0.9370948         NaN
## [1257,]     -0.88721318 -0.89138490     0.5651182         NaN
```

```
## [1258,]     0.83971837  1.06142554   -0.1859883      NaN
## [1259,]    -0.64050868  0.08502032    2.0673313      NaN
## [1260,]     0.83971837  0.08502032   -0.9370948      NaN
## [1261,]    -0.51715642  1.06142554    2.0673313      NaN
## [1262,]     1.08642288  0.08502032    0.5651182      NaN
## [1263,]     0.96307062  0.08502032    2.0673313      NaN
## [1264,]     0.34630935  0.08502032    0.5651182      NaN
## [1265,]    -0.88721318  0.08502032    0.5651182      NaN
## [1266,]    -0.64050868  0.08502032    2.0673313      NaN
## [1267,]    -0.02374741  1.06142554   -0.9370948      NaN
## [1268,]     0.09960485  0.08502032   -0.9370948      NaN
## [1269,]    -1.01056544  1.06142554    0.5651182      NaN
## [1270,]    -0.88721318  0.08502032   -0.9370948      NaN
## [1271,]    -0.76386093 -0.89138490   -0.9370948      NaN
## [1272,]    -0.27045191 -1.86779013   -0.1859883      NaN
## [1273,]    -0.39380417 -0.89138490    1.3162247      NaN
## [1274,]    -0.14709966 -1.86779013    0.5651182      NaN
## [1275,]     2.44329767  1.06142554   -0.1859883      NaN
## [1276,]    -0.76386093  0.08502032    2.0673313      NaN
## [1277,]    -0.02374741 -0.89138490   -0.1859883      NaN
## [1278,]    -0.88721318  1.06142554    0.5651182      NaN
## [1279,]     0.09960485  0.08502032   -0.9370948      NaN
## [1280,]    -1.01056544 -0.89138490    0.5651182      NaN
## [1281,]    -0.14709966 -0.89138490    1.3162247      NaN
## [1282,]     2.19659316  0.08502032   -0.9370948      NaN
## [1283,]    -0.14709966  1.06142554   -0.9370948      NaN
## [1284,]    -1.01056544  0.08502032   -0.9370948      NaN
## [1285,]     0.09960485 -1.86779013    0.5651182      NaN
## [1286,]     2.07324091 -0.89138490   -0.9370948      NaN
## [1287,]    -0.88721318 -0.89138490   -0.9370948      NaN
## [1288,]     0.46966161  0.08502032    0.5651182      NaN
## [1289,]    -0.88721318 -0.89138490    0.5651182      NaN
## [1290,]    -0.88721318  0.08502032   -1.6882013      NaN
## [1291,]    -0.02374741  1.06142554   -0.9370948      NaN
## [1292,]     0.09960485  1.06142554    0.5651182      NaN
## [1293,]     1.33312739  0.08502032   -0.9370948      NaN
## [1294,]    -0.02374741  0.08502032   -0.9370948      NaN
## [1295,]    -0.51715642  0.08502032   -0.9370948      NaN
## [1296,]    -0.64050868 -1.86779013   -0.1859883      NaN
## [1297,]     0.09960485  0.08502032    0.5651182      NaN
## [1298,]     1.33312739 -0.89138490    0.5651182      NaN
## [1299,]     1.45647964 -0.89138490    0.5651182      NaN
## [1300,]    -1.01056544  0.08502032   -0.9370948      NaN
## [1301,]    -0.14709966 -0.89138490    2.0673313      NaN
## [1302,]    -0.88721318  0.08502032    0.5651182      NaN
## [1303,]     1.70318415  1.06142554    0.5651182      NaN
## [1304,]    -0.64050868  0.08502032   -0.9370948      NaN
## [1305,]     0.34630935  0.08502032   -0.9370948      NaN
## [1306,]    -0.27045191  1.06142554    0.5651182      NaN
## [1307,]    -0.27045191  1.06142554   -0.1859883      NaN
## [1308,]    -1.01056544  0.08502032    0.5651182      NaN
## [1309,]    -0.88721318  1.06142554   -0.1859883      NaN
## [1310,]     0.09960485  0.08502032    0.5651182      NaN
## [1311,]     0.71636612  1.06142554   -0.9370948      NaN
```

```
## [1312,]      0.59301386  0.08502032    0.5651182        NaN
## [1313,]      1.08642288  2.03783076   -1.6882013        NaN
## [1314,]      0.46966161  0.08502032   -1.6882013        NaN
## [1315,]     -0.88721318  1.06142554   -0.9370948        NaN
## [1316,]     -0.88721318  1.06142554    1.3162247        NaN
## [1317,]     -0.88721318  1.06142554   -0.9370948        NaN
## [1318,]     -0.51715642 -0.89138490   -0.9370948        NaN
## [1319,]      1.33312739 -1.86779013    0.5651182        NaN
## [1320,]      0.09960485  1.06142554   -0.1859883        NaN
## [1321,]      0.09960485  1.06142554    2.0673313        NaN
## [1322,]     -0.02374741  1.06142554   -0.9370948        NaN
## [1323,]     -0.88721318 -0.89138490   -0.9370948        NaN
## [1324,]     -1.01056544 -0.89138490   -0.9370948        NaN
## [1325,]      2.44329767 -1.86779013   -0.9370948        NaN
## [1326,]     -0.14709966  0.08502032   -0.9370948        NaN
## [1327,]     -0.88721318  1.06142554   -0.1859883        NaN
## [1328,]     -0.76386093  0.08502032    2.0673313        NaN
## [1329,]      1.70318415 -1.86779013    0.5651182        NaN
## [1330,]     -0.39380417 -1.86779013    0.5651182        NaN
## [1331,]     -0.39380417  0.08502032    0.5651182        NaN
## [1332,]      0.09960485  0.08502032   -0.9370948        NaN
## [1333,]      1.82653640 -0.89138490   -0.9370948        NaN
## [1334,]      0.09960485  0.08502032   -0.9370948        NaN
## [1335,]      0.71636612  0.08502032   -0.9370948        NaN
## [1336,]      1.20977513  1.06142554    1.3162247        NaN
## [1337,]     -0.88721318  1.06142554    2.0673313        NaN
## [1338,]     -0.76386093  0.08502032    0.5651182        NaN
## [1339,]     -0.02374741  0.08502032    0.5651182        NaN
## [1340,]     -0.27045191 -1.86779013   -0.9370948        NaN
## [1341,]      0.09960485  1.06142554    2.0673313        NaN
## [1342,]      1.33312739  0.08502032   -0.9370948        NaN
## [1343,]     -0.64050868  0.08502032   -0.9370948        NaN
## [1344,]     -0.27045191  0.08502032   -0.9370948        NaN
## [1345,]     -0.27045191  1.06142554    0.5651182        NaN
## [1346,]      0.83971837 -0.89138490    1.3162247        NaN
## [1347,]      1.94988866 -0.89138490   -0.9370948        NaN
## [1348,]     -0.88721318 -1.86779013   -1.6882013        NaN
## [1349,]     -1.01056544  1.06142554   -0.9370948        NaN
## [1350,]     -1.01056544 -0.89138490   -0.9370948        NaN
## [1351,]     -0.88721318 -0.89138490    0.5651182        NaN
## [1352,]      1.57983189  0.08502032    0.5651182        NaN
## [1353,]     -1.01056544  1.06142554   -0.9370948        NaN
## [1354,]      0.83971837  1.06142554    2.0673313        NaN
## [1355,]      1.82653640 -0.89138490   -0.9370948        NaN
## [1356,]      0.96307062 -0.89138490   -0.1859883        NaN
## [1357,]     -0.14709966  0.08502032   -0.1859883        NaN
## [1358,]     -0.39380417  0.08502032    0.5651182        NaN
## [1359,]      0.09960485 -0.89138490    0.5651182        NaN
## [1360,]     -0.76386093 -1.86779013    0.5651182        NaN
## [1361,]     -0.64050868  0.08502032    0.5651182        NaN
## [1362,]     -0.39380417  0.08502032    1.3162247        NaN
## [1363,]     -1.01056544  1.06142554    0.5651182        NaN
## [1364,]      0.09960485  1.06142554   -0.1859883        NaN
## [1365,]     -1.01056544 -0.89138490   -0.9370948        NaN
```

```
## [1366,]      1.82653640  0.08502032      2.0673313       NaN
## [1367,]      1.45647964  1.06142554     -0.9370948       NaN
## [1368,]     -0.88721318  1.06142554      2.0673313       NaN
## [1369,]      1.57983189  1.06142554      1.3162247       NaN
## [1370,]      0.46966161 -0.89138490     -0.1859883       NaN
## [1371,]      0.59301386  1.06142554      2.0673313       NaN
## [1372,]      0.22295710  2.03783076     -0.1859883       NaN
## [1373,]     -0.02374741 -0.89138490      0.5651182       NaN
## [1374,]     -0.14709966  0.08502032      0.5651182       NaN
## [1375,]      1.45647964  0.08502032     -0.9370948       NaN
## [1376,]     -0.51715642 -0.89138490     -0.9370948       NaN
## [1377,]     -0.02374741 -0.89138490     -0.9370948       NaN
## [1378,]     -0.88721318 -1.86779013     -0.9370948       NaN
## [1379,]      0.34630935  1.06142554     -0.1859883       NaN
## [1380,]      1.57983189  0.08502032     -1.6882013       NaN
## [1381,]      1.08642288  1.06142554      0.5651182       NaN
## [1382,]      0.83971837  0.08502032      0.5651182       NaN
## [1383,]     -0.76386093 -0.89138490      0.5651182       NaN
## [1384,]     -0.02374741  1.06142554     -0.9370948       NaN
## [1385,]     -1.01056544  0.08502032     -0.1859883       NaN
## [1386,]      0.46966161  1.06142554      0.5651182       NaN
## [1387,]     -1.01056544  0.08502032      0.5651182       NaN
## [1388,]     -1.01056544  0.08502032     -0.9370948       NaN
## [1389,]      0.71636612  1.06142554      0.5651182       NaN
## [1390,]     -1.01056544  0.08502032     -0.9370948       NaN
## [1391,]      0.96307062  0.08502032      2.0673313       NaN
## [1392,]     -1.01056544  0.08502032     -0.9370948       NaN
## [1393,]     -0.27045191  1.06142554     -0.9370948       NaN
## [1394,]     -0.02374741  0.08502032     -0.1859883       NaN
## [1395,]     -0.51715642  1.06142554     -0.9370948       NaN
## [1396,]      2.07324091  1.06142554     -0.1859883       NaN
## [1397,]      1.82653640  1.06142554     -0.9370948       NaN
## [1398,]     -0.02374741 -0.89138490     -0.9370948       NaN
## [1399,]     -0.27045191 -0.89138490     -0.9370948       NaN
## [1400,]      0.22295710  0.08502032     -0.9370948       NaN
## [1401,]     -1.01056544  1.06142554      1.3162247       NaN
## [1402,]      2.07324091  1.06142554     -1.6882013       NaN
## [1403,]     -0.88721318 -1.86779013      0.5651182       NaN
## [1404,]      0.71636612  1.06142554     -0.1859883       NaN
## [1405,]      1.70318415 -0.89138490     -0.9370948       NaN
## [1406,]      0.09960485  0.08502032      0.5651182       NaN
## [1407,]      0.09960485  0.08502032      0.5651182       NaN
## [1408,]     -1.01056544 -0.89138490     -0.9370948       NaN
## [1409,]      0.34630935 -0.89138490      1.3162247       NaN
## [1410,]      0.22295710  0.08502032      2.0673313       NaN
## [1411,]     -0.88721318 -0.89138490     -0.1859883       NaN
## [1412,]     -0.88721318  0.08502032     -1.6882013       NaN
## [1413,]     -1.01056544 -0.89138490      0.5651182       NaN
## [1414,]     -0.88721318 -1.86779013      1.3162247       NaN
## [1415,]      1.94988866  0.08502032      0.5651182       NaN
## [1416,]     -1.01056544 -0.89138490      0.5651182       NaN
## [1417,]     -1.01056544  1.06142554     -0.9370948       NaN
## [1418,]     -0.88721318 -0.89138490     -0.9370948       NaN
## [1419,]     -0.39380417  1.06142554     -0.9370948       NaN
```

```
## [1420,]      1.08642288  1.06142554    -0.9370948         NaN
## [1421,]     -1.01056544  0.08502032    -0.9370948         NaN
## [1422,]     -1.01056544 -1.86779013     0.5651182         NaN
## [1423,]      0.22295710  1.06142554     0.5651182         NaN
## [1424,]     -1.01056544 -0.89138490    -0.9370948         NaN
## [1425,]     -0.02374741  1.06142554     0.5651182         NaN
## [1426,]      0.71636612 -0.89138490     0.5651182         NaN
## [1427,]      2.44329767  1.06142554    -0.9370948         NaN
## [1428,]     -1.01056544  1.06142554    -0.9370948         NaN
## [1429,]     -1.01056544  1.06142554     0.5651182         NaN
## [1430,]      1.82653640 -1.86779013    -0.9370948         NaN
## [1431,]      0.09960485  0.08502032     0.5651182         NaN
## [1432,]     -1.01056544  1.06142554    -0.1859883         NaN
## [1433,]      0.09960485  0.08502032    -0.9370948         NaN
## [1434,]     -0.14709966 -0.89138490     1.3162247         NaN
## [1435,]      2.44329767  1.06142554    -0.9370948         NaN
## [1436,]     -1.01056544  0.08502032     0.5651182         NaN
## [1437,]     -0.51715642 -1.86779013     0.5651182         NaN
## [1438,]     -0.02374741  0.08502032    -0.9370948         NaN
## [1439,]     -0.02374741  0.08502032    -0.1859883         NaN
## [1440,]     -0.76386093  0.08502032     0.5651182         NaN
## [1441,]     -0.64050868 -0.89138490    -0.9370948         NaN
## [1442,]     -1.01056544  1.06142554    -0.9370948         NaN
## [1443,]     -1.01056544  1.06142554     0.5651182         NaN
## [1444,]     -0.88721318  0.08502032    -0.9370948         NaN
## [1445,]     -0.27045191 -0.89138490     2.0673313         NaN
## [1446,]      2.31994542  1.06142554    -0.9370948         NaN
## [1447,]      2.31994542  0.08502032    -0.1859883         NaN
## [1448,]      0.71636612  1.06142554    -0.1859883         NaN
## [1449,]     -0.76386093  0.08502032    -0.9370948         NaN
## [1450,]     -0.88721318  0.08502032     2.0673313         NaN
## [1451,]      2.07324091  1.06142554    -0.9370948         NaN
## [1452,]      0.09960485 -0.89138490    -0.9370948         NaN
## [1453,]     -1.01056544  1.06142554    -0.9370948         NaN
## [1454,]      0.22295710  1.06142554    -0.1859883         NaN
## [1455,]      1.33312739  0.08502032    -0.9370948         NaN
## [1456,]     -0.88721318  1.06142554    -0.9370948         NaN
## [1457,]      1.08642288  1.06142554    -0.9370948         NaN
## [1458,]     -0.88721318  1.06142554     0.5651182         NaN
## [1459,]     -1.01056544  1.06142554    -0.9370948         NaN
## [1460,]      0.46966161 -0.89138490     1.3162247         NaN
## [1461,]      2.31994542  1.06142554     0.5651182         NaN
## [1462,]      2.31994542  0.08502032    -0.1859883         NaN
## [1463,]      1.82653640 -1.86779013    -0.1859883         NaN
## [1464,]     -0.51715642  0.08502032     0.5651182         NaN
## [1465,]     -0.51715642  0.08502032     1.3162247         NaN
## [1466,]      1.70318415 -0.89138490     0.5651182         NaN
## [1467,]     -0.39380417 -1.86779013     0.5651182         NaN
## [1468,]     -0.64050868  0.08502032    -0.9370948         NaN
## [1469,]     -0.88721318  0.08502032     0.5651182         NaN
## [1470,]     -0.14709966  0.08502032     0.5651182         NaN
##           EmployeeNumber EnvironmentSatisfaction    Gender   HourlyRate
##    [1,] -1.7007041856                -0.6603060 -1.2243282  1.382667732
##    [2,] -1.6990431232                 0.2545383  0.8162188 -0.240594893
```

```
##   [3,]  -1.6957209984       1.1693826  0.8162188  1.284288179
##   [4,]  -1.6940599359       1.1693826 -1.2243282 -0.486543776
##   [5,]  -1.6907378111      -1.5751502  0.8162188 -1.273580200
##   [6,]  -1.6890767487       1.1693826  0.8162188  0.644821084
##   [7,]  -1.6857546238       0.2545383 -1.2243282  0.743200637
##   [8,]  -1.6840935614       1.1693826  0.8162188  0.054543766
##   [9,]  -1.6824324990       1.1693826  0.8162188 -1.076821094
##  [10,]  -1.6807714366       0.2545383  0.8162188  1.382667732
##  [11,]  -1.6791103741      -1.5751502  0.8162188  0.890769967
##  [12,]  -1.6774493117       1.1693826 -1.2243282 -0.830872211
##  [13,]  -1.6757882493      -1.5751502  0.8162188 -1.716288189
##  [14,]  -1.6724661244      -0.6603060  0.8162188  1.333477955
##  [15,]  -1.6708050620       0.2545383  0.8162188 -0.781682435
##  [16,]  -1.6691439996      -0.6603060 -1.2243282 -0.732492658
##  [17,]  -1.6674829372      -1.5751502  0.8162188  0.694010860
##  [18,]  -1.6658218748       1.1693826  0.8162188  1.481047285
##  [19,]  -1.6641608123      -1.5751502 -1.2243282  0.595631307
##  [20,]  -1.6624997499       1.1693826  0.8162188 -1.027631318
##  [21,]  -1.6591776251      -1.5751502 -1.2243282  1.481047285
##  [22,]  -1.6575165626       0.2545383  0.8162188  0.792390413
##  [23,]  -1.6558555002      -1.5751502 -1.2243282 -0.634113105
##  [24,]  -1.6525333754       0.2545383  0.8162188  1.481047285
##  [25,]  -1.6508723130      -0.6603060  0.8162188  0.841580190
##  [26,]  -1.6492112505       0.2545383 -1.2243282 -0.388164223
##  [27,]  -1.6475501881      -0.6603060 -1.2243282  0.300492648
##  [28,]  -1.6442280633       0.2545383  0.8162188 -0.880061988
##  [29,]  -1.6425670008      -1.5751502 -1.2243282 -1.175200647
##  [30,]  -1.6392448760      -0.6603060 -1.2243282  0.841580190
##  [31,]  -1.6375838136       0.2545383  0.8162188  0.595631307
##  [32,]  -1.6359227511       1.1693826  0.8162188 -1.224390424
##  [33,]  -1.6342616887       1.1693826  0.8162188  0.841580190
##  [34,]  -1.6326006263       1.1693826  0.8162188 -0.486543776
##  [35,]  -1.6276174390      -0.6603060  0.8162188 -0.240594893
##  [36,]  -1.6259563766       1.1693826 -1.2243282  0.300492648
##  [37,]  -1.6242953142      -1.5751502  0.8162188  0.989149520
##  [38,]  -1.6209731893       1.1693826 -1.2243282  1.530237061
##  [39,]  -1.6176510645      -0.6603060 -1.2243282  0.792390413
##  [40,]  -1.6159900021       0.2545383 -1.2243282 -1.175200647
##  [41,]  -1.6143289397       0.2545383  0.8162188  0.448061978
##  [42,]  -1.6126678772       1.1693826 -1.2243282 -1.617908636
##  [43,]  -1.6110068148      -1.5751502  0.8162188 -0.880061988
##  [44,]  -1.6093457524       1.1693826  0.8162188 -1.421149530
##  [45,]  -1.6076846900       0.2545383 -1.2243282 -0.388164223
##  [46,]  -1.6060236275      -0.6603060 -1.2243282 -0.830872211
##  [47,]  -1.6027015027      -0.6603060  0.8162188  0.300492648
##  [48,]  -1.6010404403      -0.6603060  0.8162188  0.349682425
##  [49,]  -1.5993793779      -1.5751502  0.8162188  1.579426838
##  [50,]  -1.5977183154       1.1693826  0.8162188 -1.470339306
##  [51,]  -1.5960572530      -1.5751502  0.8162188  1.579426838
##  [52,]  -1.5943961906       0.2545383  0.8162188 -0.781682435
##  [53,]  -1.5894130033      -0.6603060 -1.2243282  0.448061978
##  [54,]  -1.5860908785       0.2545383  0.8162188  0.644821084
##  [55,]  -1.5827687536       0.2545383 -1.2243282 -0.929251764
##  [56,]  -1.5811076912      -1.5751502 -1.2243282  1.579426838
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##  [57,]  -1.5794466288      -0.6603060  0.8162188  0.251302872
##  [58,]  -1.5777855664       0.2545383 -1.2243282 -1.765477965
##  [59,]  -1.5761245039       1.1693826  0.8162188 -0.880061988
##  [60,]  -1.5744634415      -1.5751502  0.8162188 -0.732492658
##  [61,]  -1.5728023791      -1.5751502  0.8162188 -1.617908636
##  [62,]  -1.5711413167       1.1693826 -1.2243282 -0.781682435
##  [63,]  -1.5694802543      -0.6603060 -1.2243282 -1.126010871
##  [64,]  -1.5678191918      -1.5751502 -1.2243282  1.628616614
##  [65,]  -1.5644970670       0.2545383 -1.2243282 -0.338974446
##  [66,]  -1.5628360046       1.1693826 -1.2243282 -1.617908636
##  [67,]  -1.5611749421      -0.6603060  0.8162188  1.431857508
##  [68,]  -1.5595138797      -0.6603060  0.8162188 -0.338974446
##  [69,]  -1.5561917549      -0.6603060  0.8162188  0.644821084
##  [70,]  -1.5528696300       1.1693826  0.8162188  0.644821084
##  [71,]  -1.5512085676      -1.5751502 -1.2243282 -0.437353999
##  [72,]  -1.5462253803       0.2545383  0.8162188  0.497251754
##  [73,]  -1.5445643179       0.2545383  0.8162188  1.038339296
##  [74,]  -1.5429032555      -0.6603060  0.8162188  0.005353989
##  [75,]  -1.5412421931      -0.6603060 -1.2243282 -0.535733552
##  [76,]  -1.5395811306       0.2545383 -1.2243282 -0.240594893
##  [77,]  -1.5362590058       0.2545383  0.8162188 -1.667098412
##  [78,]  -1.5345979434       1.1693826  0.8162188 -0.683302882
##  [79,]  -1.5329368810      -1.5751502  0.8162188 -1.765477965
##  [80,]  -1.5312758185      -0.6603060  0.8162188  0.694010860
##  [81,]  -1.5296147561       1.1693826  0.8162188 -0.535733552
##  [82,]  -1.5279536937      -0.6603060  0.8162188 -1.765477965
##  [83,]  -1.5262926313      -1.5751502  0.8162188  0.202113095
##  [84,]  -1.5246315688      -0.6603060 -1.2243282  0.644821084
##  [85,]  -1.5196483816      -1.5751502  0.8162188  1.382667732
##  [86,]  -1.5163262567       1.1693826  0.8162188 -0.830872211
##  [87,]  -1.5146651943       0.2545383  0.8162188 -0.191405117
##  [88,]  -1.5096820070       1.1693826  0.8162188  1.481047285
##  [89,]  -1.5080209446       0.2545383  0.8162188  1.628616614
##  [90,]  -1.5063598822       0.2545383  0.8162188 -0.093025564
##  [91,]  -1.5046988198       0.2545383  0.8162188  0.595631307
##  [92,]  -1.5030377574       0.2545383  0.8162188  0.251302872
##  [93,]  -1.5013766949       0.2545383 -1.2243282 -0.142215340
##  [94,]  -1.4963935077       0.2545383  0.8162188 -1.273580200
##  [95,]  -1.4947324452      -0.6603060  0.8162188  1.038339296
##  [96,]  -1.4930713828      -1.5751502 -1.2243282 -0.289784670
##  [97,]  -1.4897492580      -1.5751502 -1.2243282 -1.617908636
##  [98,]  -1.4880881956      -0.6603060  0.8162188 -1.126010871
##  [99,]  -1.4847660707       1.1693826  0.8162188 -1.421149530
## [100,]  -1.4831050083      -0.6603060  0.8162188  0.054543766
## [101,]  -1.4814439459       0.2545383  0.8162188 -0.142215340
## [102,]  -1.4797828834       1.1693826  0.8162188  0.251302872
## [103,]  -1.4747996962       1.1693826 -1.2243282  0.005353989
## [104,]  -1.4731386338      -1.5751502 -1.2243282 -1.224390424
## [105,]  -1.4714775713       0.2545383  0.8162188  1.677806391
## [106,]  -1.4698165089       0.2545383 -1.2243282 -1.667098412
## [107,]  -1.4681554465      -1.5751502 -1.2243282  0.349682425
## [108,]  -1.4664943841       0.2545383  0.8162188 -0.978441541
## [109,]  -1.4648333216       1.1693826  0.8162188 -0.093025564
## [110,]  -1.4631722592      -0.6603060 -1.2243282 -0.338974446
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## [113,]  -1.4565280095         1.1693826 -1.2243282 -1.765477965
## [114,]  -1.4532058847        -0.6603060  0.8162188 -0.683302882
## [115,]  -1.4515448223         0.2545383 -1.2243282 -1.027631318
## [116,]  -1.4498837598         0.2545383  0.8162188  1.038339296
## [117,]  -1.4482226974         0.2545383 -1.2243282 -1.027631318
## [118,]  -1.4465616350        -0.6603060 -1.2243282  1.284288179
## [119,]  -1.4449005726        -1.5751502 -1.2243282 -1.322769977
## [120,]  -1.4399173853         0.2545383  0.8162188  1.284288179
## [121,]  -1.4382563229        -1.5751502  0.8162188  1.481047285
## [122,]  -1.4365952605         0.2545383  0.8162188  1.431857508
## [123,]  -1.4349341980        -0.6603060 -1.2243282  0.300492648
## [124,]  -1.4332731356        -1.5751502  0.8162188 -0.732492658
## [125,]  -1.4316120732        -0.6603060  0.8162188  0.497251754
## [126,]  -1.4299510108         0.2545383 -1.2243282 -0.978441541
## [127,]  -1.4282899483         1.1693826 -1.2243282  1.382667732
## [128,]  -1.4249678235         1.1693826  0.8162188 -0.781682435
## [129,]  -1.4216456987         0.2545383  0.8162188  1.677806391
## [130,]  -1.4199846362         0.2545383 -1.2243282  1.481047285
## [131,]  -1.4183235738        -0.6603060 -1.2243282  0.300492648
## [132,]  -1.4133403865         0.2545383 -1.2243282  0.546441531
## [133,]  -1.4116793241        -0.6603060 -1.2243282  0.251302872
## [134,]  -1.4100182617         0.2545383  0.8162188  1.481047285
## [135,]  -1.4083571993         0.2545383 -1.2243282 -0.240594893
## [136,]  -1.4066961369        -0.6603060  0.8162188  0.890769967
## [137,]  -1.4050350744        -1.5751502  0.8162188 -0.634113105
## [138,]  -1.4000518872         1.1693826 -1.2243282 -0.929251764
## [139,]  -1.3983908247        -1.5751502  0.8162188 -1.224390424
## [140,]  -1.3967297623         0.2545383  0.8162188 -0.880061988
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## [142,]  -1.3834412629         0.2545383  0.8162188  0.841580190
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## [144,]  -1.3801191381        -1.5751502 -1.2243282  0.448061978
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## [146,]  -1.3751359508         1.1693826 -1.2243282  0.890769967
## [147,]  -1.3734748884        -0.6603060  0.8162188 -1.519529083
## [148,]  -1.3718138260         1.1693826  0.8162188  1.235098402
## [149,]  -1.3701527636         0.2545383  0.8162188  1.382667732
## [150,]  -1.3684917011        -0.6603060 -1.2243282  0.644821084
## [151,]  -1.3668306387        -0.6603060 -1.2243282 -0.584923329
## [152,]  -1.3635085139         0.2545383  0.8162188  1.382667732
## [153,]  -1.3618474514        -0.6603060  0.8162188 -1.568718859
## [154,]  -1.3601863890        -0.6603060  0.8162188 -0.289784670
## [155,]  -1.3585253266        -0.6603060 -1.2243282 -1.126010871
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## [162,]  -1.3402536400         1.1693826  0.8162188 -0.437353999
## [163,]  -1.3352704527         0.2545383  0.8162188 -1.175200647
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## [165,] -1.3302872654       0.2545383  0.8162188  0.644821084
## [166,] -1.3269651406       0.2545383 -1.2243282 -0.634113105
## [167,] -1.3253040782      -1.5751502  0.8162188 -0.486543776
## [168,] -1.3236430157      -0.6603060 -1.2243282 -1.224390424
## [169,] -1.3203208909      -1.5751502 -1.2243282 -0.338974446
## [170,] -1.3186598285       0.2545383  0.8162188 -1.126010871
## [171,] -1.3153377036       0.2545383  0.8162188 -0.732492658
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## [174,] -1.3053713291       0.2545383  0.8162188  0.005353989
## [175,] -1.3037102667       0.2545383 -1.2243282 -1.765477965
## [176,] -1.3020492042       0.2545383 -1.2243282  0.054543766
## [177,] -1.3003881418       0.2545383  0.8162188  1.185908626
## [178,] -1.2987270794      -0.6603060  0.8162188 -0.929251764
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## [181,] -1.2937438921       0.2545383 -1.2243282  1.431857508
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## [192,] -1.2704890182       1.1693826 -1.2243282  1.628616614
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## [194,] -1.2671668934       1.1693826  0.8162188 -1.421149530
## [195,] -1.2638447685      -1.5751502  0.8162188 -0.043835787
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## [199,] -1.2522173316       1.1693826  0.8162188  1.087529073
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## [215,] -1.2090297086       1.1693826 -1.2243282  1.087529073
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## [270,]   -1.0827889645              1.1693826  0.8162188 -0.929251764
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## [384,] -0.8535623502       -1.5751502 -1.2243282 -1.126010871
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## [576,]  -0.3751763725        1.1693826 -1.2243282  1.431857508
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## [578,]  -0.3701931853        1.1693826 -1.2243282  0.792390413
## [579,]  -0.3685321228       -1.5751502 -1.2243282  0.448061978
## [580,]  -0.3668710604        0.2545383 -1.2243282  0.989149520
## [581,]  -0.3652099980       -1.5751502 -1.2243282  0.300492648
## [582,]  -0.3635489356        1.1693826  0.8162188 -1.371959753
## [583,]  -0.3618878731        0.2545383 -1.2243282 -1.371959753
## [584,]  -0.3602268107        0.2545383 -1.2243282  1.333477955
## [585,]  -0.3585657483       -0.6603060  0.8162188  0.005353989
## [586,]  -0.3552436235        0.2545383  0.8162188 -0.142215340
## [587,]  -0.3535825610        0.2545383  0.8162188 -0.289784670
## [588,]  -0.3519214986        1.1693826 -1.2243282  0.792390413
## [589,]  -0.3485993738        0.2545383  0.8162188 -0.093025564
## [590,]  -0.3469383113       -0.6603060 -1.2243282 -1.470339306
## [591,]  -0.3452772489        0.2545383  0.8162188 -0.830872211
## [592,]  -0.3419551241       -1.5751502 -1.2243282  0.152923319
## [593,]  -0.3402940617        0.2545383 -1.2243282 -1.617908636
## [594,]  -0.3353108744        0.2545383 -1.2243282 -1.519529083
## [595,]  -0.3336498120        0.2545383  0.8162188  0.743200637
## [596,]  -0.3319887495        1.1693826  0.8162188 -1.716288189
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## [597,]  -0.3303276871        1.1693826 -1.2243282 -1.273580200
## [598,]  -0.3286666247        1.1693826 -1.2243282 -1.126010871
## [599,]  -0.3270055623        0.2545383  0.8162188 -0.978441541
## [600,]  -0.3253444999        0.2545383  0.8162188 -1.470339306
## [601,]  -0.3236834374        0.2545383 -1.2243282  1.579426838
## [602,]  -0.3203613126       -1.5751502  0.8162188 -0.732492658
## [603,]  -0.3187002502        0.2545383 -1.2243282 -0.683302882
## [604,]  -0.3170391877       -0.6603060 -1.2243282  1.431857508
## [605,]  -0.3137170629       -0.6603060  0.8162188  1.579426838
## [606,]  -0.3120560005       -1.5751502  0.8162188 -1.027631318
## [607,]  -0.3103949381        0.2545383 -1.2243282  1.677806391
## [608,]  -0.3070728132        0.2545383 -1.2243282 -1.126010871
## [609,]  -0.3037506884        0.2545383  0.8162188 -1.421149530
## [610,]  -0.3020896259       -0.6603060  0.8162188  1.382667732
## [611,]  -0.3004285635        0.2545383  0.8162188 -1.175200647
## [612,]  -0.2987675011        0.2545383  0.8162188 -0.338974446
## [613,]  -0.2971064387       -0.6603060 -1.2243282  0.743200637
## [614,]  -0.2954453763        0.2545383  0.8162188  1.087529073
## [615,]  -0.2937843138        0.2545383 -1.2243282  1.087529073
## [616,]  -0.2904621890        1.1693826  0.8162188 -0.781682435
## [617,]  -0.2888011266       -1.5751502 -1.2243282  0.005353989
## [618,]  -0.2871400641        1.1693826  0.8162188 -0.781682435
## [619,]  -0.2838179393       -1.5751502  0.8162188 -0.043835787
## [620,]  -0.2821568769       -1.5751502  0.8162188 -0.880061988
## [621,]  -0.2804958145        0.2545383 -1.2243282 -0.634113105
## [622,]  -0.2788347520       -0.6603060  0.8162188 -0.486543776
## [623,]  -0.2755126272       -0.6603060  0.8162188  0.349682425
## [624,]  -0.2721905023       -0.6603060  0.8162188  0.448061978
## [625,]  -0.2705294399       -1.5751502 -1.2243282  0.595631307
## [626,]  -0.2672073151        1.1693826  0.8162188  0.398872201
## [627,]  -0.2655462526        0.2545383 -1.2243282  1.235098402
## [628,]  -0.2622241278        0.2545383 -1.2243282  0.743200637
## [629,]  -0.2605630654        1.1693826  0.8162188  0.005353989
## [630,]  -0.2589020030       -0.6603060  0.8162188 -0.142215340
## [631,]  -0.2539188157        1.1693826  0.8162188 -1.617908636
## [632,]  -0.2505966908       -1.5751502  0.8162188 -0.191405117
## [633,]  -0.2489356284       -0.6603060  0.8162188 -1.519529083
## [634,]  -0.2439524412       -1.5751502  0.8162188  0.546441531
## [635,]  -0.2422913787        0.2545383  0.8162188  1.579426838
## [636,]  -0.2406303163        1.1693826 -1.2243282  0.005353989
## [637,]  -0.2389692539        1.1693826 -1.2243282  1.481047285
## [638,]  -0.2373081915        1.1693826  0.8162188 -0.240594893
## [639,]  -0.2323250042        0.2545383  0.8162188  1.038339296
## [640,]  -0.2290028794        0.2545383 -1.2243282 -1.470339306
## [641,]  -0.2273418169       -1.5751502  0.8162188 -0.978441541
## [642,]  -0.2256807545       -0.6603060  0.8162188 -0.880061988
## [643,]  -0.2190365048       -0.6603060  0.8162188  1.579426838
## [644,]  -0.2173754424        0.2545383 -1.2243282  1.431857508
## [645,]  -0.2157143800        1.1693826  0.8162188 -0.880061988
## [646,]  -0.2140533176       -0.6603060 -1.2243282 -0.880061988
## [647,]  -0.2123922551       -1.5751502  0.8162188  0.349682425
## [648,]  -0.2090701303        1.1693826  0.8162188  0.595631307
## [649,]  -0.2074090679        0.2545383 -1.2243282 -0.584923329
## [650,]  -0.2057480054        1.1693826 -1.2243282  0.300492648
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## [651,]  -0.2040869430          1.1693826 -1.2243282 -1.617908636
## [652,]  -0.2024258806          0.2545383 -1.2243282 -1.519529083
## [653,]  -0.2007648182         -1.5751502  0.8162188 -1.667098412
## [654,]  -0.1991037558         -1.5751502  0.8162188  1.579426838
## [655,]  -0.1924595061          1.1693826 -1.2243282 -1.175200647
## [656,]  -0.1907984436          1.1693826  0.8162188 -0.437353999
## [657,]  -0.1891373812         -1.5751502  0.8162188  1.038339296
## [658,]  -0.1874763188         -1.5751502 -1.2243282 -0.191405117
## [659,]  -0.1858152564         -0.6603060  0.8162188 -0.240594893
## [660,]  -0.1808320691         -1.5751502  0.8162188  1.579426838
## [661,]  -0.1775099443          1.1693826  0.8162188 -0.437353999
## [662,]  -0.1741878194         -1.5751502 -1.2243282 -0.535733552
## [663,]  -0.1708656946          0.2545383 -1.2243282 -0.830872211
## [664,]  -0.1692046321          1.1693826 -1.2243282 -0.043835787
## [665,]  -0.1675435697          0.2545383  0.8162188  0.103733542
## [666,]  -0.1658825073          1.1693826 -1.2243282 -0.043835787
## [667,]  -0.1642214449         -0.6603060 -1.2243282 -1.568718859
## [668,]  -0.1625603825         -0.6603060 -1.2243282 -0.437353999
## [669,]  -0.1575771952          0.2545383 -1.2243282  0.546441531
## [670,]  -0.1542550703          1.1693826  0.8162188  0.202113095
## [671,]  -0.1525940079         -0.6603060 -1.2243282  0.497251754
## [672,]  -0.1509329455         -0.6603060  0.8162188  0.841580190
## [673,]  -0.1476108207          0.2545383 -1.2243282  0.103733542
## [674,]  -0.1426276334          0.2545383  0.8162188  1.677806391
## [675,]  -0.1409665710          0.2545383 -1.2243282 -1.421149530
## [676,]  -0.1393055085         -0.6603060  0.8162188 -1.224390424
## [677,]  -0.1376444461          1.1693826 -1.2243282 -0.732492658
## [678,]  -0.1343223213         -1.5751502 -1.2243282 -0.732492658
## [679,]  -0.1326612589          1.1693826  0.8162188 -0.732492658
## [680,]  -0.1293391340          1.1693826 -1.2243282 -1.027631318
## [681,]  -0.1260170092         -0.6603060  0.8162188 -0.043835787
## [682,]  -0.1243559467          1.1693826 -1.2243282  0.694010860
## [683,]  -0.1226948843          0.2545383 -1.2243282  0.202113095
## [684,]  -0.1210338219          0.2545383  0.8162188 -1.470339306
## [685,]  -0.1177116971         -1.5751502  0.8162188  0.054543766
## [686,]  -0.1143895722          0.2545383  0.8162188 -0.683302882
## [687,]  -0.1127285098          1.1693826  0.8162188 -0.338974446
## [688,]  -0.1110674474          0.2545383  0.8162188  0.644821084
## [689,]  -0.1094063849          1.1693826  0.8162188 -1.421149530
## [690,]  -0.1077453225         -1.5751502  0.8162188  0.890769967
## [691,]  -0.1060842601          1.1693826 -1.2243282 -1.224390424
## [692,]  -0.1011010728          1.1693826  0.8162188 -1.519529083
## [693,]  -0.0977789480          0.2545383 -1.2243282  1.333477955
## [694,]  -0.0961178856          0.2545383  0.8162188 -0.732492658
## [695,]  -0.0927957607         -0.6603060 -1.2243282 -1.175200647
## [696,]  -0.0911346983         -1.5751502  0.8162188 -0.978441541
## [697,]  -0.0878125734          0.2545383  0.8162188 -0.437353999
## [698,]  -0.0844904486          0.2545383 -1.2243282  0.890769967
## [699,]  -0.0828293862          0.2545383 -1.2243282  0.989149520
## [700,]  -0.0811683238          1.1693826  0.8162188  0.202113095
## [701,]  -0.0795072613          1.1693826  0.8162188 -0.732492658
## [702,]  -0.0728630116          0.2545383  0.8162188 -1.027631318
## [703,]  -0.0712019492          0.2545383  0.8162188 -0.191405117
## [704,]  -0.0695408868          0.2545383 -1.2243282  0.939959743
```

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## [705,]  -0.0678798244          1.1693826   0.8162188   1.284288179
## [706,]  -0.0662187620         -1.5751502   0.8162188  -1.224390424
## [707,]  -0.0645576995         -0.6603060  -1.2243282   1.677806391
## [708,]  -0.0628966371          0.2545383   0.8162188  -0.093025564
## [709,]  -0.0579134498         -1.5751502   0.8162188   0.890769967
## [710,]  -0.0562523874          0.2545383   0.8162188  -0.978441541
## [711,]  -0.0545913250          1.1693826   0.8162188  -1.371959753
## [712,]  -0.0512692002          1.1693826  -1.2243282   1.284288179
## [713,]  -0.0496081377         -0.6603060  -1.2243282  -0.634113105
## [714,]  -0.0479470753          1.1693826  -1.2243282   1.235098402
## [715,]  -0.0462860129          1.1693826   0.8162188   0.005353989
## [716,]  -0.0446249505          0.2545383  -1.2243282   0.890769967
## [717,]  -0.0429638880         -1.5751502   0.8162188  -0.093025564
## [718,]  -0.0396417632          0.2545383  -1.2243282  -1.421149530
## [719,]  -0.0379807008          1.1693826   0.8162188  -1.175200647
## [720,]  -0.0363196384          1.1693826  -1.2243282   0.841580190
## [721,]  -0.0346585759         -1.5751502  -1.2243282  -0.880061988
## [722,]  -0.0329975135          1.1693826   0.8162188   1.431857508
## [723,]  -0.0313364511          0.2545383   0.8162188   0.005353989
## [724,]  -0.0296753887          1.1693826   0.8162188   0.448061978
## [725,]  -0.0263532638          1.1693826  -1.2243282  -1.224390424
## [726,]  -0.0246922014          0.2545383   0.8162188  -1.322769977
## [727,]  -0.0230311390          0.2545383  -1.2243282   1.481047285
## [728,]  -0.0213700766         -0.6603060   0.8162188   0.349682425
## [729,]  -0.0197090141          0.2545383  -1.2243282  -0.486543776
## [730,]  -0.0180479517          0.2545383  -1.2243282  -0.437353999
## [731,]  -0.0163868893         -0.6603060  -1.2243282   0.349682425
## [732,]  -0.0147258269          1.1693826  -1.2243282   1.579426838
## [733,]  -0.0130647644         -0.6603060  -1.2243282  -0.289784670
## [734,]  -0.0114037020          1.1693826   0.8162188  -1.667098412
## [735,]  -0.0097426396         -0.6603060   0.8162188   1.382667732
## [736,]  -0.0047594523         -1.5751502   0.8162188   1.530237061
## [737,]  -0.0014373275          0.2545383   0.8162188   0.595631307
## [738,]   0.0002237349          1.1693826  -1.2243282  -1.175200647
## [739,]   0.0018847974          1.1693826  -1.2243282  -0.043835787
## [740,]   0.0035458598         -1.5751502  -1.2243282  -0.929251764
## [741,]   0.0052069222         -0.6603060   0.8162188  -1.027631318
## [742,]   0.0068679846          1.1693826   0.8162188   1.185908626
## [743,]   0.0085290471         -1.5751502   0.8162188  -0.093025564
## [744,]   0.0118511719          0.2545383  -1.2243282   0.152923319
## [745,]   0.0135122343         -1.5751502  -1.2243282  -0.240594893
## [746,]   0.0151732967          0.2545383   0.8162188  -0.191405117
## [747,]   0.0168343592         -0.6603060  -1.2243282  -0.535733552
## [748,]   0.0184954216         -0.6603060   0.8162188  -1.175200647
## [749,]   0.0201564840         -0.6603060   0.8162188   0.644821084
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## [751,]   0.0234786089          1.1693826  -1.2243282  -0.634113105
## [752,]   0.0251396713          1.1693826  -1.2243282   1.431857508
## [753,]   0.0284617961          0.2545383  -1.2243282  -1.126010871
## [754,]   0.0301228585          1.1693826  -1.2243282   0.792390413
## [755,]   0.0317839210         -0.6603060  -1.2243282   1.087529073
## [756,]   0.0334449834          1.1693826  -1.2243282   1.185908626
## [757,]   0.0351060458          1.1693826  -1.2243282   0.152923319
## [758,]   0.0367671082         -0.6603060   0.8162188   0.448061978
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## [759,]   0.0384281707      -0.6603060   0.8162188   0.005353989
## [760,]   0.0400892331      -0.6603060   0.8162188  -1.470339306
## [761,]   0.0417502955       0.2545383  -1.2243282  -1.371959753
## [762,]   0.0450724203      -1.5751502   0.8162188   0.743200637
## [763,]   0.0467334828      -1.5751502   0.8162188  -0.437353999
## [764,]   0.0500556076       0.2545383  -1.2243282   1.038339296
## [765,]   0.0517166700       1.1693826   0.8162188   0.398872201
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## [767,]   0.0600219821      -0.6603060   0.8162188  -0.191405117
## [768,]   0.0616830446       1.1693826  -1.2243282  -1.519529083
## [769,]   0.0683272943       0.2545383   0.8162188   0.398872201
## [770,]   0.0716494191      -1.5751502  -1.2243282   0.005353989
## [771,]   0.0733104815       1.1693826   0.8162188  -1.273580200
## [772,]   0.0749715439       0.2545383  -1.2243282  -1.224390424
## [773,]   0.0766326064      -1.5751502  -1.2243282  -0.142215340
## [774,]   0.0799547312       1.1693826  -1.2243282  -0.732492658
## [775,]   0.0816157936       0.2545383   0.8162188  -1.273580200
## [776,]   0.0849379185       0.2545383   0.8162188   0.644821084
## [777,]   0.0865989809       1.1693826  -1.2243282  -0.584923329
## [778,]   0.0899211057       0.2545383  -1.2243282  -1.470339306
## [779,]   0.0915821682       1.1693826  -1.2243282   0.398872201
## [780,]   0.0932432306      -1.5751502   0.8162188  -1.568718859
## [781,]   0.0949042930      -0.6603060   0.8162188   0.300492648
## [782,]   0.0965653554      -1.5751502   0.8162188  -0.338974446
## [783,]   0.0982264179       0.2545383   0.8162188   0.939959743
## [784,]   0.0998874803      -0.6603060  -1.2243282  -1.126010871
## [785,]   0.1048706676       0.2545383  -1.2243282  -0.043835787
## [786,]   0.1115149172      -1.5751502   0.8162188  -0.240594893
## [787,]   0.1148370421      -1.5751502   0.8162188   1.038339296
## [788,]   0.1181591669       1.1693826   0.8162188  -0.043835787
## [789,]   0.1198202294       0.2545383  -1.2243282  -0.338974446
## [790,]   0.1214812918      -0.6603060   0.8162188   1.235098402
## [791,]   0.1231423542       1.1693826   0.8162188  -1.568718859
## [792,]   0.1248034166       1.1693826   0.8162188   0.989149520
## [793,]   0.1264644790      -1.5751502  -1.2243282  -0.584923329
## [794,]   0.1281255415      -1.5751502   0.8162188  -0.781682435
## [795,]   0.1297866039      -1.5751502   0.8162188  -1.027631318
## [796,]   0.1331087287       1.1693826  -1.2243282   1.087529073
## [797,]   0.1347697912       1.1693826   0.8162188  -1.667098412
## [798,]   0.1364308536      -1.5751502   0.8162188  -1.421149530
## [799,]   0.1380919160      -1.5751502   0.8162188  -0.535733552
## [800,]   0.1397529784       1.1693826   0.8162188  -1.519529083
## [801,]   0.1430751033      -1.5751502   0.8162188  -1.027631318
## [802,]   0.1463972281       1.1693826   0.8162188   0.743200637
## [803,]   0.1480582905       1.1693826  -1.2243282  -1.765477965
## [804,]   0.1497193530       0.2545383   0.8162188  -1.273580200
## [805,]   0.1513804154      -1.5751502   0.8162188  -1.519529083
## [806,]   0.1530414778      -0.6603060  -1.2243282  -0.043835787
## [807,]   0.1547025402      -0.6603060   0.8162188   1.038339296
## [808,]   0.1563636026       0.2545383   0.8162188   0.349682425
## [809,]   0.1580246651       0.2545383  -1.2243282   1.333477955
## [810,]   0.1596857275       1.1693826  -1.2243282   1.333477955
## [811,]   0.1646689148      -1.5751502   0.8162188  -0.683302882
## [812,]   0.1663299772       1.1693826   0.8162188  -1.667098412
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## [813,]  0.1679910396          0.2545383 -1.2243282  0.841580190
## [814,]  0.1696521020         -1.5751502  0.8162188  0.890769967
## [815,]  0.1713131644          0.2545383  0.8162188 -1.076821094
## [816,]  0.1762963517          1.1693826 -1.2243282  0.202113095
## [817,]  0.1779574141          0.2545383  0.8162188  0.202113095
## [818,]  0.1796184766         -1.5751502  0.8162188  0.595631307
## [819,]  0.1829406014          0.2545383  0.8162188  0.054543766
## [820,]  0.1846016638         -1.5751502  0.8162188  0.054543766
## [821,]  0.1862627263          1.1693826  0.8162188 -0.584923329
## [822,]  0.1879237887          1.1693826  0.8162188 -0.486543776
## [823,]  0.1912459135          1.1693826  0.8162188  1.431857508
## [824,]  0.1962291008          1.1693826 -1.2243282 -0.240594893
## [825,]  0.2045344129         -0.6603060  0.8162188 -0.486543776
## [826,]  0.2078565377         -0.6603060  0.8162188  0.644821084
## [827,]  0.2111786626          0.2545383  0.8162188 -1.421149530
## [828,]  0.2145007874          0.2545383  0.8162188 -1.322769977
## [829,]  0.2178229123          0.2545383  0.8162188  0.694010860
## [830,]  0.2194839747         -1.5751502 -1.2243282  0.546441531
## [831,]  0.2211450371         -0.6603060  0.8162188 -0.978441541
## [832,]  0.2244671620          0.2545383  0.8162188  0.300492648
## [833,]  0.2261282244          0.2545383 -1.2243282 -0.683302882
## [834,]  0.2277892868          1.1693826  0.8162188 -0.535733552
## [835,]  0.2294503492         -0.6603060 -1.2243282  0.202113095
## [836,]  0.2311114117          0.2545383  0.8162188  1.677806391
## [837,]  0.2327724741          1.1693826 -1.2243282 -1.027631318
## [838,]  0.2344335365         -0.6603060 -1.2243282  1.087529073
## [839,]  0.2360945989          0.2545383  0.8162188 -1.076821094
## [840,]  0.2427388486         -0.6603060  0.8162188 -1.027631318
## [841,]  0.2443999110          1.1693826  0.8162188 -0.388164223
## [842,]  0.2460609735          1.1693826  0.8162188 -0.830872211
## [843,]  0.2493830983          0.2545383 -1.2243282  0.644821084
## [844,]  0.2527052231         -1.5751502  0.8162188  0.792390413
## [845,]  0.2560273480          0.2545383  0.8162188  0.300492648
## [846,]  0.2576884104          0.2545383 -1.2243282  1.284288179
## [847,]  0.2610105353          0.2545383  0.8162188 -1.076821094
## [848,]  0.2643326601          1.1693826  0.8162188  1.530237061
## [849,]  0.2659937225          1.1693826  0.8162188 -0.929251764
## [850,]  0.2709769098         -1.5751502 -1.2243282  0.939959743
## [851,]  0.2742990346          0.2545383 -1.2243282  0.497251754
## [852,]  0.2759600971          1.1693826 -1.2243282  1.284288179
## [853,]  0.2776211595         -0.6603060 -1.2243282 -0.584923329
## [854,]  0.2792822219          0.2545383  0.8162188 -0.584923329
## [855,]  0.2826043468         -1.5751502 -1.2243282  0.841580190
## [856,]  0.2842654092          1.1693826 -1.2243282 -0.486543776
## [857,]  0.2875875340         -1.5751502  0.8162188  1.038339296
## [858,]  0.2909096589          0.2545383  0.8162188  1.481047285
## [859,]  0.2925707213          1.1693826 -1.2243282 -0.781682435
## [860,]  0.2942317837         -0.6603060 -1.2243282  0.152923319
## [861,]  0.2958928461          0.2545383  0.8162188 -0.880061988
## [862,]  0.2975539086          0.2545383 -1.2243282  0.152923319
## [863,]  0.3008760334          1.1693826  0.8162188  0.398872201
## [864,]  0.3025370958         -0.6603060  0.8162188  1.628616614
## [865,]  0.3075202831         -1.5751502  0.8162188  1.431857508
## [866,]  0.3091813455          0.2545383  0.8162188 -0.240594893
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## [867,]  0.3108424079     -0.6603060  0.8162188 -0.191405117
## [868,]  0.3158255952      1.1693826 -1.2243282 -1.765477965
## [869,]  0.3174866576      1.1693826  0.8162188  0.595631307
## [870,]  0.3191477200      1.1693826  0.8162188 -0.683302882
## [871,]  0.3208087825      0.2545383  0.8162188  1.382667732
## [872,]  0.3224698449      1.1693826 -1.2243282  1.530237061
## [873,]  0.3241309073     -0.6603060 -1.2243282  0.792390413
## [874,]  0.3257919697      0.2545383  0.8162188 -0.289784670
## [875,]  0.3307751570      0.2545383  0.8162188 -0.830872211
## [876,]  0.3324362194      1.1693826  0.8162188 -1.667098412
## [877,]  0.3340972818      0.2545383  0.8162188 -1.126010871
## [878,]  0.3374194067      1.1693826  0.8162188 -0.289784670
## [879,]  0.3424025940      1.1693826  0.8162188  0.644821084
## [880,]  0.3457247188     -0.6603060  0.8162188 -0.683302882
## [881,]  0.3473857812      0.2545383 -1.2243282  0.546441531
## [882,]  0.3490468436      1.1693826 -1.2243282 -1.371959753
## [883,]  0.3523689685      0.2545383 -1.2243282  0.546441531
## [884,]  0.3540300309     -1.5751502  0.8162188 -0.289784670
## [885,]  0.3556910933     -0.6603060 -1.2243282  0.890769967
## [886,]  0.3573521558      0.2545383  0.8162188 -0.437353999
## [887,]  0.3590132182      1.1693826  0.8162188 -0.142215340
## [888,]  0.3606742806     -1.5751502 -1.2243282 -0.289784670
## [889,]  0.3623353430      0.2545383 -1.2243282  0.595631307
## [890,]  0.3639964054     -1.5751502  0.8162188 -1.175200647
## [891,]  0.3656574679      1.1693826 -1.2243282 -0.634113105
## [892,]  0.3673185303     -1.5751502 -1.2243282  0.300492648
## [893,]  0.3706406551     -1.5751502 -1.2243282  1.481047285
## [894,]  0.3723017176     -1.5751502 -1.2243282  1.530237061
## [895,]  0.3739627800      1.1693826  0.8162188  0.939959743
## [896,]  0.3756238424      0.2545383  0.8162188  0.694010860
## [897,]  0.3772849048      0.2545383 -1.2243282  1.481047285
## [898,]  0.3806070297      0.2545383 -1.2243282 -0.880061988
## [899,]  0.3822680921      0.2545383  0.8162188  1.481047285
## [900,]  0.3839291545     -1.5751502  0.8162188  0.939959743
## [901,]  0.3855902169      0.2545383  0.8162188 -0.978441541
## [902,]  0.3872512794      1.1693826  0.8162188  0.497251754
## [903,]  0.3889123418     -1.5751502  0.8162188  0.497251754
## [904,]  0.3905734042      0.2545383  0.8162188  0.792390413
## [905,]  0.3955565915      1.1693826  0.8162188  0.497251754
## [906,]  0.3972176539      1.1693826 -1.2243282  1.038339296
## [907,]  0.3988787163      0.2545383 -1.2243282  1.136718849
## [908,]  0.4022008412     -0.6603060  0.8162188  1.087529073
## [909,]  0.4038619036      1.1693826  0.8162188  0.792390413
## [910,]  0.4055229660     -0.6603060 -1.2243282 -0.437353999
## [911,]  0.4071840284      1.1693826  0.8162188 -0.929251764
## [912,]  0.4121672157      0.2545383  0.8162188  0.349682425
## [913,]  0.4154893405      0.2545383  0.8162188 -0.634113105
## [914,]  0.4188114654     -1.5751502 -1.2243282  1.382667732
## [915,]  0.4204725278      1.1693826  0.8162188 -1.421149530
## [916,]  0.4221335902     -1.5751502 -1.2243282 -1.027631318
## [917,]  0.4237946527      1.1693826 -1.2243282 -1.617908636
## [918,]  0.4254557151      0.2545383 -1.2243282  0.989149520
## [919,]  0.4271167775      1.1693826  0.8162188  0.841580190
## [920,]  0.4287778399      1.1693826  0.8162188  0.054543766
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## [921,]   0.4320999648              0.2545383 -1.2243282 -0.978441541
## [922,]   0.4337610272              1.1693826  0.8162188 -1.076821094
## [923,]   0.4370831520              0.2545383  0.8162188  1.284288179
## [924,]   0.4387442145              0.2545383  0.8162188 -0.486543776
## [925,]   0.4420663393              0.2545383  0.8162188  0.005353989
## [926,]   0.4437274017             -0.6603060 -1.2243282  0.595631307
## [927,]   0.4453884641              1.1693826 -1.2243282 -0.486543776
## [928,]   0.4470495266              0.2545383 -1.2243282 -0.634113105
## [929,]   0.4487105890             -1.5751502 -1.2243282  0.349682425
## [930,]   0.4503716514              1.1693826  0.8162188 -0.683302882
## [931,]   0.4520327138             -0.6603060 -1.2243282 -1.273580200
## [932,]   0.4536937763              0.2545383 -1.2243282  0.300492648
## [933,]   0.4553548387             -0.6603060 -1.2243282 -1.322769977
## [934,]   0.4586769635              1.1693826  0.8162188  0.890769967
## [935,]   0.4619990884              1.1693826 -1.2243282 -1.273580200
## [936,]   0.4636601508              0.2545383  0.8162188 -0.486543776
## [937,]   0.4669822756             -0.6603060 -1.2243282  0.841580190
## [938,]   0.4686433381              0.2545383 -1.2243282  1.382667732
## [939,]   0.4703044005             -1.5751502  0.8162188  1.087529073
## [940,]   0.4719654629              1.1693826  0.8162188  0.644821084
## [941,]   0.4736265253              0.2545383  0.8162188  1.333477955
## [942,]   0.4752875878             -1.5751502 -1.2243282 -0.880061988
## [943,]   0.4769486502              1.1693826 -1.2243282 -0.142215340
## [944,]   0.4802707750              1.1693826 -1.2243282 -1.076821094
## [945,]   0.4819318374              0.2545383 -1.2243282 -0.535733552
## [946,]   0.4852539623              1.1693826 -1.2243282 -1.126010871
## [947,]   0.4869150247              1.1693826  0.8162188 -0.437353999
## [948,]   0.4885760871             -0.6603060  0.8162188 -0.093025564
## [949,]   0.4918982120             -0.6603060 -1.2243282  1.431857508
## [950,]   0.4935592744             -1.5751502  0.8162188 -1.667098412
## [951,]   0.4968813992              1.1693826 -1.2243282 -0.437353999
## [952,]   0.5051867114              0.2545383  0.8162188 -1.273580200
## [953,]   0.5085088362              1.1693826 -1.2243282 -0.584923329
## [954,]   0.5118309610             -1.5751502  0.8162188  1.136718849
## [955,]   0.5134920235              0.2545383  0.8162188 -1.421149530
## [956,]   0.5168141483              1.1693826 -1.2243282 -0.388164223
## [957,]   0.5201362732              1.1693826  0.8162188  1.628616614
## [958,]   0.5234583980              0.2545383  0.8162188  0.398872201
## [959,]   0.5301026477              1.1693826  0.8162188  0.989149520
## [960,]   0.5334247725              0.2545383  0.8162188  1.579426838
## [961,]   0.5384079598              0.2545383 -1.2243282  0.005353989
## [962,]   0.5400690222              0.2545383  0.8162188  1.038339296
## [963,]   0.5433911471              0.2545383  0.8162188  0.890769967
## [964,]   0.5483743343             -0.6603060 -1.2243282 -1.716288189
## [965,]   0.5500353968              0.2545383 -1.2243282  0.005353989
## [966,]   0.5533575216              1.1693826  0.8162188  0.054543766
## [967,]   0.5566796465              0.2545383 -1.2243282 -0.634113105
## [968,]   0.5583407089             -0.6603060  0.8162188  1.087529073
## [969,]   0.5600017713             -1.5751502 -1.2243282  0.841580190
## [970,]   0.5616628337              1.1693826  0.8162188 -0.584923329
## [971,]   0.5633238961              0.2545383 -1.2243282  1.579426838
## [972,]   0.5683070834              1.1693826 -1.2243282  0.792390413
## [973,]   0.5699681458              1.1693826 -1.2243282  1.530237061
## [974,]   0.5716292083              1.1693826 -1.2243282 -0.289784670
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##  [975,]   0.5749513331          1.1693826  0.8162188 -1.126010871
##  [976,]   0.5766123955         -1.5751502  0.8162188  0.939959743
##  [977,]   0.5782734579          1.1693826  0.8162188  0.103733542
##  [978,]   0.5799345204         -1.5751502 -1.2243282  1.284288179
##  [979,]   0.5815955828         -0.6603060 -1.2243282  1.136718849
##  [980,]   0.5849177076         -0.6603060  0.8162188  0.989149520
##  [981,]   0.5882398325          0.2545383 -1.2243282  1.185908626
##  [982,]   0.5899008949          1.1693826 -1.2243282  0.054543766
##  [983,]   0.5932230197          1.1693826  0.8162188 -0.437353999
##  [984,]   0.5948840822          0.2545383 -1.2243282  1.579426838
##  [985,]   0.6015283319          0.2545383  0.8162188 -0.880061988
##  [986,]   0.6048504567          1.1693826  0.8162188  1.579426838
##  [987,]   0.6065115191         -1.5751502  0.8162188 -1.076821094
##  [988,]   0.6081725815         -0.6603060  0.8162188 -0.683302882
##  [989,]   0.6098336440          1.1693826 -1.2243282  0.448061978
##  [990,]   0.6131557688          0.2545383  0.8162188 -0.584923329
##  [991,]   0.6148168312         -0.6603060  0.8162188 -0.240594893
##  [992,]   0.6164778937          0.2545383  0.8162188 -1.470339306
##  [993,]   0.6181389561          0.2545383  0.8162188  0.251302872
##  [994,]   0.6214610809         -1.5751502  0.8162188  1.333477955
##  [995,]   0.6247832058          1.1693826 -1.2243282 -0.338974446
##  [996,]   0.6264442682         -1.5751502 -1.2243282  0.349682425
##  [997,]   0.6281053306          1.1693826 -1.2243282  1.579426838
##  [998,]   0.6314274555          1.1693826 -1.2243282 -0.732492658
##  [999,]   0.6347495803         -1.5751502  0.8162188 -1.470339306
## [1000,]   0.6364106427          0.2545383 -1.2243282 -1.716288189
## [1001,]   0.6380717051          0.2545383 -1.2243282 -0.584923329
## [1002,]   0.6413938300         -1.5751502 -1.2243282  1.382667732
## [1003,]   0.6430548924          0.2545383  0.8162188 -0.289784670
## [1004,]   0.6480380797         -1.5751502  0.8162188  0.743200637
## [1005,]   0.6513602045          0.2545383  0.8162188  1.677806391
## [1006,]   0.6546823294         -0.6603060  0.8162188 -0.732492658
## [1007,]   0.6563433918         -1.5751502  0.8162188  1.530237061
## [1008,]   0.6580044542          0.2545383 -1.2243282  0.890769967
## [1009,]   0.6596655166          1.1693826 -1.2243282 -0.584923329
## [1010,]   0.6613265791          1.1693826 -1.2243282  0.497251754
## [1011,]   0.6629876415         -0.6603060  0.8162188  0.743200637
## [1012,]   0.6646487039         -1.5751502 -1.2243282  1.628616614
## [1013,]   0.6679708288         -0.6603060 -1.2243282 -0.781682435
## [1014,]   0.6696318912          1.1693826 -1.2243282  0.349682425
## [1015,]   0.6729540160         -1.5751502 -1.2243282  1.333477955
## [1016,]   0.6746150784          1.1693826  0.8162188  1.235098402
## [1017,]   0.6779372033         -1.5751502 -1.2243282 -1.568718859
## [1018,]   0.6795982657         -0.6603060  0.8162188  1.235098402
## [1019,]   0.6812593281         -1.5751502  0.8162188 -1.421149530
## [1020,]   0.6829203906          0.2545383 -1.2243282  1.579426838
## [1021,]   0.6862425154         -1.5751502  0.8162188  0.398872201
## [1022,]   0.6879035778         -1.5751502  0.8162188  0.103733542
## [1023,]   0.6895646402          0.2545383  0.8162188  0.890769967
## [1024,]   0.6912257027         -1.5751502 -1.2243282  1.185908626
## [1025,]   0.6945478275         -1.5751502 -1.2243282  0.792390413
## [1026,]   0.6978699524          1.1693826 -1.2243282 -1.175200647
## [1027,]   0.6995310148          1.1693826  0.8162188  1.530237061
## [1028,]   0.7011920772          1.1693826 -1.2243282  0.989149520
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## [1029,]   0.7028531396         -0.6603060  0.8162188  1.185908626
## [1030,]   0.7045142020          0.2545383  0.8162188  0.743200637
## [1031,]   0.7111584517         -1.5751502  0.8162188 -1.716288189
## [1032,]   0.7178027014         -1.5751502  0.8162188 -0.683302882
## [1033,]   0.7194637638         -1.5751502 -1.2243282 -0.584923329
## [1034,]   0.7211248263          0.2545383 -1.2243282  1.677806391
## [1035,]   0.7227858887         -0.6603060  0.8162188  1.431857508
## [1036,]   0.7244469511          1.1693826 -1.2243282  1.481047285
## [1037,]   0.7294301384         -0.6603060  0.8162188  1.382667732
## [1038,]   0.7310912008         -0.6603060  0.8162188 -0.535733552
## [1039,]   0.7327522632          0.2545383  0.8162188  1.481047285
## [1040,]   0.7344133256         -1.5751502 -1.2243282 -0.683302882
## [1041,]   0.7360743881          1.1693826  0.8162188 -0.535733552
## [1042,]   0.7377354505          1.1693826  0.8162188  0.890769967
## [1043,]   0.7410575753          0.2545383  0.8162188  1.185908626
## [1044,]   0.7427186378          1.1693826  0.8162188 -1.322769977
## [1045,]   0.7443797002         -1.5751502  0.8162188  1.481047285
## [1046,]   0.7460407626          0.2545383  0.8162188  0.103733542
## [1047,]   0.7477018250          1.1693826  0.8162188 -0.830872211
## [1048,]   0.7510239499          1.1693826  0.8162188 -0.584923329
## [1049,]   0.7526850123          1.1693826  0.8162188  0.743200637
## [1050,]   0.7543460747          1.1693826  0.8162188  1.481047285
## [1051,]   0.7560071371         -1.5751502 -1.2243282  0.398872201
## [1052,]   0.7576681996         -1.5751502 -1.2243282  0.644821084
## [1053,]   0.7593292620          0.2545383  0.8162188 -0.093025564
## [1054,]   0.7609903244         -0.6603060  0.8162188  1.333477955
## [1055,]   0.7626513868          0.2545383  0.8162188 -1.519529083
## [1056,]   0.7643124493         -0.6603060  0.8162188  0.251302872
## [1057,]   0.7659735117         -1.5751502  0.8162188  1.284288179
## [1058,]   0.7676345741         -1.5751502 -1.2243282 -0.732492658
## [1059,]   0.7709566989         -1.5751502 -1.2243282 -1.273580200
## [1060,]   0.7759398862          1.1693826  0.8162188  0.497251754
## [1061,]   0.7792620111         -0.6603060  0.8162188  1.136718849
## [1062,]   0.7809230735          1.1693826 -1.2243282  0.595631307
## [1063,]   0.7825841359         -0.6603060  0.8162188  0.989149520
## [1064,]   0.7842451983          0.2545383  0.8162188  0.546441531
## [1065,]   0.7875673232          0.2545383  0.8162188 -0.978441541
## [1066,]   0.7908894480          1.1693826  0.8162188 -1.765477965
## [1067,]   0.7925505104         -1.5751502 -1.2243282  0.792390413
## [1068,]   0.7942115729          0.2545383 -1.2243282  0.595631307
## [1069,]   0.7958726353          0.2545383  0.8162188 -1.371959753
## [1070,]   0.7991947601         -1.5751502  0.8162188  0.300492648
## [1071,]   0.8008558225          0.2545383  0.8162188 -0.535733552
## [1072,]   0.8041779474          0.2545383 -1.2243282 -1.126010871
## [1073,]   0.8108221971          1.1693826 -1.2243282  1.530237061
## [1074,]   0.8124832595          0.2545383  0.8162188  1.481047285
## [1075,]   0.8141443219          1.1693826  0.8162188  0.152923319
## [1076,]   0.8158053843          0.2545383  0.8162188 -0.093025564
## [1077,]   0.8224496340         -0.6603060 -1.2243282  1.038339296
## [1078,]   0.8257717589         -1.5751502  0.8162188  1.677806391
## [1079,]   0.8274328213          1.1693826  0.8162188 -1.667098412
## [1080,]   0.8307549462         -0.6603060 -1.2243282 -1.667098412
## [1081,]   0.8340770710          0.2545383 -1.2243282 -0.732492658
## [1082,]   0.8373991958          1.1693826 -1.2243282  1.235098402
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## [1083,]   0.8440434455           -1.5751502  0.8162188  1.530237061
## [1084,]   0.8457045080            1.1693826  0.8162188  0.989149520
## [1085,]   0.8473655704            1.1693826  0.8162188 -0.093025564
## [1086,]   0.8506876952            1.1693826 -1.2243282 -1.617908636
## [1087,]   0.8540098201            0.2545383  0.8162188  1.087529073
## [1088,]   0.8573319449           -0.6603060  0.8162188 -0.535733552
## [1089,]   0.8589930073            0.2545383  0.8162188  0.103733542
## [1090,]   0.8606540698           -1.5751502  0.8162188 -0.929251764
## [1091,]   0.8623151322            0.2545383 -1.2243282 -1.322769977
## [1092,]   0.8639761946            1.1693826  0.8162188 -1.076821094
## [1093,]   0.8656372570            1.1693826  0.8162188  1.530237061
## [1094,]   0.8672983194            1.1693826  0.8162188 -1.273580200
## [1095,]   0.8689593819           -1.5751502  0.8162188 -0.929251764
## [1096,]   0.8706204443           -0.6603060  0.8162188  0.644821084
## [1097,]   0.8722815067            0.2545383  0.8162188 -1.371959753
## [1098,]   0.8739425691            0.2545383  0.8162188 -0.437353999
## [1099,]   0.8756036316            1.1693826  0.8162188  0.300492648
## [1100,]   0.8772646940           -1.5751502  0.8162188  0.005353989
## [1101,]   0.8789257564           -0.6603060 -1.2243282  1.579426838
## [1102,]   0.8805868188            1.1693826 -1.2243282  0.054543766
## [1103,]   0.8822478812            0.2545383  0.8162188  0.202113095
## [1104,]   0.8839089437            0.2545383 -1.2243282  1.481047285
## [1105,]   0.8855700061            0.2545383  0.8162188  1.235098402
## [1106,]   0.8888921309           -1.5751502  0.8162188 -0.978441541
## [1107,]   0.8922142558           -0.6603060  0.8162188 -0.093025564
## [1108,]   0.8938753182            0.2545383  0.8162188  0.251302872
## [1109,]   0.8955363806            1.1693826  0.8162188  0.103733542
## [1110,]   0.9021806303            0.2545383  0.8162188 -1.617908636
## [1111,]   0.9038416927           -1.5751502 -1.2243282  0.152923319
## [1112,]   0.9088248800            0.2545383 -1.2243282  0.595631307
## [1113,]   0.9104859424            0.2545383  0.8162188  0.743200637
## [1114,]   0.9121470048            1.1693826  0.8162188 -0.191405117
## [1115,]   0.9154691297            0.2545383 -1.2243282 -0.043835787
## [1116,]   0.9171301921           -1.5751502  0.8162188 -1.519529083
## [1117,]   0.9187912545            0.2545383  0.8162188 -0.289784670
## [1118,]   0.9221133794           -0.6603060  0.8162188 -1.027631318
## [1119,]   0.9237744418           -1.5751502 -1.2243282  1.136718849
## [1120,]   0.9254355042            0.2545383  0.8162188  0.694010860
## [1121,]   0.9270965667           -0.6603060 -1.2243282  1.185908626
## [1122,]   0.9304186915           -0.6603060 -1.2243282  0.349682425
## [1123,]   0.9320797539           -0.6603060  0.8162188  1.038339296
## [1124,]   0.9337408163           -1.5751502 -1.2243282 -0.732492658
## [1125,]   0.9354018788            1.1693826  0.8162188 -1.371959753
## [1126,]   0.9387240036           -1.5751502  0.8162188  1.038339296
## [1127,]   0.9403850660            0.2545383  0.8162188 -0.338974446
## [1128,]   0.9420461285            1.1693826  0.8162188 -1.027631318
## [1129,]   0.9453682533           -1.5751502  0.8162188  0.694010860
## [1130,]   0.9470293157            1.1693826  0.8162188  1.333477955
## [1131,]   0.9486903781           -0.6603060  0.8162188 -0.978441541
## [1132,]   0.9503514406            1.1693826  0.8162188  1.284288179
## [1133,]   0.9520125030            1.1693826 -1.2243282  0.890769967
## [1134,]   0.9536735654            1.1693826  0.8162188  1.038339296
## [1135,]   0.9569956903            0.2545383  0.8162188 -0.142215340
## [1136,]   0.9586567527            1.1693826  0.8162188 -0.486543776
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## [1137,]   0.9619788775          0.2545383   0.8162188  -0.732492658
## [1138,]   0.9636399399         -0.6603060  -1.2243282   0.939959743
## [1139,]   0.9653010024         -0.6603060   0.8162188  -1.224390424
## [1140,]   0.9669620648         -0.6603060  -1.2243282  -1.519529083
## [1141,]   0.9686231272         -0.6603060  -1.2243282  -1.716288189
## [1142,]   0.9702841896         -0.6603060   0.8162188  -0.880061988
## [1143,]   0.9736063145          0.2545383  -1.2243282  -0.781682435
## [1144,]   0.9752673769         -1.5751502   0.8162188  -0.683302882
## [1145,]   0.9769284393          1.1693826   0.8162188  -0.584923329
## [1146,]   0.9785895017          0.2545383  -1.2243282   0.497251754
## [1147,]   0.9802505642          0.2545383   0.8162188  -1.175200647
## [1148,]   0.9835726890          0.2545383  -1.2243282   0.890769967
## [1149,]   0.9852337514         -0.6603060   0.8162188   0.497251754
## [1150,]   0.9868948139          1.1693826   0.8162188   0.054543766
## [1151,]   0.9902169387         -0.6603060   0.8162188  -0.880061988
## [1152,]   0.9918780011         -0.6603060  -1.2243282  -1.322769977
## [1153,]   0.9935390635          0.2545383   0.8162188   1.530237061
## [1154,]   0.9952001260         -0.6603060  -1.2243282   0.202113095
## [1155,]   0.9968611884          1.1693826  -1.2243282   1.579426838
## [1156,]   1.0001833132          0.2545383   0.8162188   0.497251754
## [1157,]   1.0018443757         -1.5751502  -1.2243282   0.694010860
## [1158,]   1.0051665005          0.2545383  -1.2243282  -0.683302882
## [1159,]   1.0068275629          0.2545383   0.8162188   0.939959743
## [1160,]   1.0101496878         -1.5751502  -1.2243282   0.743200637
## [1161,]   1.0134718126          1.1693826  -1.2243282  -0.338974446
## [1162,]   1.0184549999          1.1693826  -1.2243282  -0.584923329
## [1163,]   1.0201160623          1.1693826   0.8162188  -0.535733552
## [1164,]   1.0217771247         -0.6603060  -1.2243282   0.251302872
## [1165,]   1.0234381872          0.2545383  -1.2243282   0.890769967
## [1166,]   1.0250992496         -1.5751502   0.8162188  -1.421149530
## [1167,]   1.0284213744          0.2545383   0.8162188   1.136718849
## [1168,]   1.0300824368         -1.5751502   0.8162188  -0.338974446
## [1169,]   1.0317434993         -1.5751502  -1.2243282  -1.667098412
## [1170,]   1.0334045617         -0.6603060  -1.2243282   0.989149520
## [1171,]   1.0350656241          1.1693826   0.8162188   1.038339296
## [1172,]   1.0367266865         -1.5751502   0.8162188   0.349682425
## [1173,]   1.0383877490          0.2545383   0.8162188  -1.175200647
## [1174,]   1.0400488114         -0.6603060  -1.2243282  -1.175200647
## [1175,]   1.0433709362          1.1693826   0.8162188   0.546441531
## [1176,]   1.0450319986          1.1693826   0.8162188   0.005353989
## [1177,]   1.0466930611         -1.5751502  -1.2243282   0.300492648
## [1178,]   1.0483541235          1.1693826  -1.2243282  -0.781682435
## [1179,]   1.0500151859          0.2545383  -1.2243282  -1.716288189
## [1180,]   1.0516762483          1.1693826  -1.2243282   0.005353989
## [1181,]   1.0533373108         -1.5751502   0.8162188   0.546441531
## [1182,]   1.0566594356          0.2545383  -1.2243282  -1.224390424
## [1183,]   1.0583204980          1.1693826  -1.2243282  -1.617908636
## [1184,]   1.0616426229          1.1693826   0.8162188   0.644821084
## [1185,]   1.0633036853         -0.6603060  -1.2243282   1.235098402
## [1186,]   1.0649647477          0.2545383   0.8162188  -0.043835787
## [1187,]   1.0666258101          1.1693826   0.8162188  -1.470339306
## [1188,]   1.0682868726          1.1693826   0.8162188   1.185908626
## [1189,]   1.0699479350         -1.5751502   0.8162188  -1.126010871
## [1190,]   1.0716089974          1.1693826   0.8162188   1.333477955
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## [1191,]  1.0732700598        1.1693826  0.8162188 -1.027631318
## [1192,]  1.0765921847       -1.5751502 -1.2243282  0.054543766
## [1193,]  1.0782532471        1.1693826 -1.2243282  0.398872201
## [1194,]  1.0799143095        1.1693826 -1.2243282 -1.175200647
## [1195,]  1.0815753719       -0.6603060 -1.2243282 -0.929251764
## [1196,]  1.0832364344        0.2545383  0.8162188 -1.470339306
## [1197,]  1.0848974968        1.1693826  0.8162188  0.694010860
## [1198,]  1.0882196216        1.1693826  0.8162188 -0.584923329
## [1199,]  1.0898806840        0.2545383 -1.2243282 -1.470339306
## [1200,]  1.0915417465       -1.5751502  0.8162188  0.694010860
## [1201,]  1.0932028089        0.2545383 -1.2243282 -1.076821094
## [1202,]  1.0948638713        1.1693826  0.8162188  1.333477955
## [1203,]  1.0998470586        1.1693826 -1.2243282  1.038339296
## [1204,]  1.1031691834       -0.6603060  0.8162188 -0.880061988
## [1205,]  1.1064913083        1.1693826 -1.2243282  1.431857508
## [1206,]  1.1081523707        1.1693826  0.8162188  1.431857508
## [1207,]  1.1098134331        1.1693826  0.8162188  0.497251754
## [1208,]  1.1114744955       -1.5751502  0.8162188  1.382667732
## [1209,]  1.1147966204       -0.6603060  0.8162188 -0.437353999
## [1210,]  1.1164576828        0.2545383  0.8162188  1.284288179
## [1211,]  1.1181187452       -0.6603060  0.8162188  0.644821084
## [1212,]  1.1214408701        0.2545383  0.8162188 -1.716288189
## [1213,]  1.1231019325       -0.6603060 -1.2243282 -1.519529083
## [1214,]  1.1247629949        0.2545383  0.8162188  1.628616614
## [1215,]  1.1264240573        0.2545383 -1.2243282  1.481047285
## [1216,]  1.1280851198       -1.5751502  0.8162188  0.644821084
## [1217,]  1.1314072446        1.1693826  0.8162188  0.349682425
## [1218,]  1.1330683070        0.2545383  0.8162188 -0.191405117
## [1219,]  1.1347293695        1.1693826  0.8162188 -1.519529083
## [1220,]  1.1363904319        1.1693826 -1.2243282 -1.126010871
## [1221,]  1.1380514943        0.2545383 -1.2243282 -0.732492658
## [1222,]  1.1413736191        0.2545383  0.8162188  0.398872201
## [1223,]  1.1446957440        1.1693826  0.8162188 -0.388164223
## [1224,]  1.1480178688        0.2545383  0.8162188  0.792390413
## [1225,]  1.1513399937        1.1693826  0.8162188 -0.191405117
## [1226,]  1.1530010561        1.1693826 -1.2243282 -0.880061988
## [1227,]  1.1546621185       -1.5751502  0.8162188 -0.486543776
## [1228,]  1.1563231809       -0.6603060  0.8162188  0.152923319
## [1229,]  1.1579842434        0.2545383  0.8162188 -0.289784670
## [1230,]  1.1613063682       -0.6603060 -1.2243282  1.284288179
## [1231,]  1.1629674306       -0.6603060  0.8162188  1.235098402
## [1232,]  1.1662895555        0.2545383  0.8162188 -1.568718859
## [1233,]  1.1679506179        1.1693826  0.8162188 -0.830872211
## [1234,]  1.1696116803       -0.6603060  0.8162188 -1.617908636
## [1235,]  1.1729338052        0.2545383  0.8162188  1.038339296
## [1236,]  1.1745948676        0.2545383  0.8162188  0.398872201
## [1237,]  1.1762559300       -0.6603060  0.8162188  1.481047285
## [1238,]  1.1779169924       -1.5751502  0.8162188 -1.568718859
## [1239,]  1.1795780549        0.2545383 -1.2243282 -0.732492658
## [1240,]  1.1812391173        1.1693826 -1.2243282 -1.765477965
## [1241,]  1.1829001797        1.1693826  0.8162188  0.546441531
## [1242,]  1.1862223045        1.1693826  0.8162188  0.694010860
## [1243,]  1.1878833670       -0.6603060  0.8162188  1.087529073
## [1244,]  1.1945276167        0.2545383 -1.2243282 -0.486543776
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## [1245,]    1.1961886791              1.1693826 -1.2243282  0.595631307
## [1246,]    1.1978497415             -1.5751502  0.8162188 -0.338974446
## [1247,]    1.1995108039              0.2545383 -1.2243282  0.005353989
## [1248,]    1.2028329288             -1.5751502  0.8162188 -0.732492658
## [1249,]    1.2061550536              0.2545383 -1.2243282  0.054543766
## [1250,]    1.2078161160             -0.6603060 -1.2243282 -0.683302882
## [1251,]    1.2094771785              1.1693826  0.8162188  0.202113095
## [1252,]    1.2111382409              0.2545383  0.8162188  1.382667732
## [1253,]    1.2127993033              1.1693826  0.8162188  1.530237061
## [1254,]    1.2144603657              1.1693826 -1.2243282 -0.191405117
## [1255,]    1.2161214282              1.1693826 -1.2243282  0.694010860
## [1256,]    1.2177824906             -1.5751502 -1.2243282  0.398872201
## [1257,]    1.2211046154              0.2545383 -1.2243282  0.448061978
## [1258,]    1.2227656778             -1.5751502  0.8162188  0.202113095
## [1259,]    1.2244267403              1.1693826 -1.2243282  1.235098402
## [1260,]    1.2260878027              0.2545383  0.8162188 -0.388164223
## [1261,]    1.2277488651             -0.6603060  0.8162188 -0.043835787
## [1262,]    1.2310709900             -0.6603060  0.8162188 -0.289784670
## [1263,]    1.2327320524              0.2545383  0.8162188 -1.371959753
## [1264,]    1.2343931148             -0.6603060  0.8162188 -0.437353999
## [1265,]    1.2377152396              0.2545383  0.8162188 -0.289784670
## [1266,]    1.2393763021              1.1693826  0.8162188  1.185908626
## [1267,]    1.2410373645              0.2545383  0.8162188  1.382667732
## [1268,]    1.2443594893              1.1693826  0.8162188  1.038339296
## [1269,]    1.2460205518             -1.5751502 -1.2243282 -0.289784670
## [1270,]    1.2510037390             -0.6603060  0.8162188  1.530237061
## [1271,]    1.2526648014              1.1693826 -1.2243282 -1.667098412
## [1272,]    1.2543258639             -0.6603060  0.8162188 -1.716288189
## [1273,]    1.2576479887              1.1693826 -1.2243282 -1.273580200
## [1274,]    1.2593090511              0.2545383 -1.2243282  0.644821084
## [1275,]    1.2609701136             -1.5751502 -1.2243282  1.235098402
## [1276,]    1.2642922384             -1.5751502 -1.2243282 -0.634113105
## [1277,]    1.2659533008             -0.6603060  0.8162188 -0.978441541
## [1278,]    1.2692754257              0.2545383  0.8162188 -0.978441541
## [1279,]    1.2709364881              1.1693826  0.8162188  1.185908626
## [1280,]    1.2742586129              0.2545383  0.8162188  1.628616614
## [1281,]    1.2775807378              0.2545383  0.8162188  1.136718849
## [1282,]    1.2825639250              0.2545383  0.8162188  0.890769967
## [1283,]    1.2842249875              1.1693826  0.8162188  1.185908626
## [1284,]    1.2858860499              0.2545383  0.8162188  0.792390413
## [1285,]    1.2875471123              0.2545383  0.8162188 -0.043835787
## [1286,]    1.2892081747             -0.6603060  0.8162188  1.579426838
## [1287,]    1.2908692372              0.2545383 -1.2243282  1.628616614
## [1288,]    1.2925302996             -0.6603060  0.8162188  1.431857508
## [1289,]    1.2941913620             -0.6603060  0.8162188  1.185908626
## [1290,]    1.2958524244             -1.5751502  0.8162188  1.677806391
## [1291,]    1.2991745493              1.1693826  0.8162188  1.333477955
## [1292,]    1.3024966741              1.1693826  0.8162188 -0.388164223
## [1293,]    1.3074798614              0.2545383  0.8162188  0.841580190
## [1294,]    1.3091409238             -1.5751502  0.8162188 -0.683302882
## [1295,]    1.3108019862             -0.6603060  0.8162188  0.939959743
## [1296,]    1.3124630487              0.2545383 -1.2243282  0.743200637
## [1297,]    1.3141241111             -1.5751502 -1.2243282 -0.093025564
## [1298,]    1.3174462359              1.1693826 -1.2243282  0.152923319
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## [1299,]   1.3224294232          1.1693826 -1.2243282  0.005353989
## [1300,]   1.3240904856          0.2545383 -1.2243282 -0.683302882
## [1301,]   1.3257515480         -0.6603060  0.8162188  1.284288179
## [1302,]   1.3274126105         -0.6603060  0.8162188 -0.683302882
## [1303,]   1.3307347353         -0.6603060  0.8162188  1.235098402
## [1304,]   1.3323957977          0.2545383 -1.2243282  1.284288179
## [1305,]   1.3357179226         -0.6603060 -1.2243282 -0.929251764
## [1306,]   1.3373789850          1.1693826 -1.2243282  0.103733542
## [1307,]   1.3423621723         -1.5751502 -1.2243282  0.103733542
## [1308,]   1.3440232347          0.2545383 -1.2243282  0.054543766
## [1309,]   1.3456842971         -0.6603060 -1.2243282  0.546441531
## [1310,]   1.3473453595          0.2545383  0.8162188 -0.978441541
## [1311,]   1.3490064219         -1.5751502  0.8162188  1.038339296
## [1312,]   1.3523285468         -0.6603060 -1.2243282 -1.617908636
## [1313,]   1.3573117341          1.1693826  0.8162188  1.136718849
## [1314,]   1.3606338589         -1.5751502  0.8162188 -0.486543776
## [1315,]   1.3622949213          0.2545383 -1.2243282  0.054543766
## [1316,]   1.3656170462          1.1693826 -1.2243282  0.349682425
## [1317,]   1.3689391710         -1.5751502  0.8162188  1.284288179
## [1318,]   1.3706002334          1.1693826 -1.2243282 -0.634113105
## [1319,]   1.3739223583          1.1693826  0.8162188 -1.273580200
## [1320,]   1.3755834207          1.1693826  0.8162188  0.644821084
## [1321,]   1.3772444831          0.2545383  0.8162188 -1.371959753
## [1322,]   1.3805666080         -0.6603060 -1.2243282 -0.093025564
## [1323,]   1.3822276704          1.1693826  0.8162188  0.792390413
## [1324,]   1.3838887328          0.2545383  0.8162188 -1.126010871
## [1325,]   1.3855497952          1.1693826  0.8162188  1.333477955
## [1326,]   1.3872108577          1.1693826  0.8162188  0.743200637
## [1327,]   1.3905329825          0.2545383  0.8162188  0.792390413
## [1328,]   1.3921940449         -1.5751502 -1.2243282 -1.027631318
## [1329,]   1.3938551074         -0.6603060 -1.2243282 -1.470339306
## [1330,]   1.3955161698          1.1693826  0.8162188  1.038339296
## [1331,]   1.3971772322         -1.5751502 -1.2243282  0.743200637
## [1332,]   1.3988382946          1.1693826  0.8162188  1.235098402
## [1333,]   1.4004993570          1.1693826  0.8162188  0.349682425
## [1334,]   1.4021604195          0.2545383 -1.2243282 -0.093025564
## [1335,]   1.4038214819          1.1693826 -1.2243282  0.546441531
## [1336,]   1.4054825443          1.1693826  0.8162188 -1.224390424
## [1337,]   1.4088046692         -0.6603060  0.8162188  1.579426838
## [1338,]   1.4121267940         -0.6603060 -1.2243282  0.595631307
## [1339,]   1.4137878564         -0.6603060  0.8162188  1.136718849
## [1340,]   1.4171099813          1.1693826  0.8162188  0.448061978
## [1341,]   1.4204321061         -0.6603060 -1.2243282 -0.142215340
## [1342,]   1.4220931685         -0.6603060  0.8162188  1.136718849
## [1343,]   1.4237542310          0.2545383  0.8162188 -0.093025564
## [1344,]   1.4254152934          1.1693826  0.8162188 -0.338974446
## [1345,]   1.4287374182          1.1693826  0.8162188  0.595631307
## [1346,]   1.4303984806          1.1693826 -1.2243282 -1.076821094
## [1347,]   1.4337206055         -0.6603060 -1.2243282  1.333477955
## [1348,]   1.4370427303         -0.6603060  0.8162188  1.382667732
## [1349,]   1.4403648552         -1.5751502  0.8162188  1.579426838
## [1350,]   1.4420259176         -0.6603060 -1.2243282  1.185908626
## [1351,]   1.4503312297         -1.5751502 -1.2243282  1.136718849
## [1352,]   1.4536533546          1.1693826 -1.2243282 -0.388164223
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## [1353,]   1.4586365418          -0.6603060   0.8162188   0.595631307
## [1354,]   1.4619586667           1.1693826   0.8162188   0.939959743
## [1355,]   1.4652807915          -1.5751502   0.8162188   1.530237061
## [1356,]   1.4669418539           0.2545383   0.8162188  -1.617908636
## [1357,]   1.4686029164           0.2545383  -1.2243282  -0.584923329
## [1358,]   1.4719250412           0.2545383   0.8162188   0.841580190
## [1359,]   1.4735861036           0.2545383  -1.2243282   0.989149520
## [1360,]   1.4785692909           1.1693826  -1.2243282   0.448061978
## [1361,]   1.4802303533          -1.5751502  -1.2243282  -0.191405117
## [1362,]   1.4835524782           0.2545383   0.8162188  -0.240594893
## [1363,]   1.4901967279          -0.6603060   0.8162188  -1.076821094
## [1364,]   1.4935188527          -0.6603060   0.8162188  -1.126010871
## [1365,]   1.4985020400           0.2545383   0.8162188  -1.175200647
## [1366,]   1.5001631024           0.2545383   0.8162188  -1.027631318
## [1367,]   1.5018241648          -1.5751502  -1.2243282  -1.667098412
## [1368,]   1.5051462897          -0.6603060   0.8162188  -1.224390424
## [1369,]   1.5068073521           0.2545383   0.8162188   0.989149520
## [1370,]   1.5084684145           1.1693826  -1.2243282   0.890769967
## [1371,]   1.5101294769           0.2545383   0.8162188  -0.093025564
## [1372,]   1.5117905393           1.1693826  -1.2243282   1.136718849
## [1373,]   1.5134516018          -1.5751502   0.8162188   1.038339296
## [1374,]   1.5151126642           1.1693826  -1.2243282  -0.388164223
## [1375,]   1.5167737266           1.1693826  -1.2243282   0.300492648
## [1376,]   1.5184347890          -1.5751502  -1.2243282  -0.929251764
## [1377,]   1.5200958515          -0.6603060   0.8162188   0.251302872
## [1378,]   1.5217569139          -0.6603060   0.8162188  -1.175200647
## [1379,]   1.5250790387          -0.6603060   0.8162188   0.546441531
## [1380,]   1.5267401011          -1.5751502  -1.2243282  -0.388164223
## [1381,]   1.5284011636          -0.6603060   0.8162188   0.251302872
## [1382,]   1.5317232884           0.2545383   0.8162188  -0.830872211
## [1383,]   1.5333843508           0.2545383   0.8162188  -0.880061988
## [1384,]   1.5350454133          -1.5751502   0.8162188   0.005353989
## [1385,]   1.5367064757          -1.5751502   0.8162188  -1.667098412
## [1386,]   1.5383675381           1.1693826   0.8162188  -1.322769977
## [1387,]   1.5400286005           0.2545383   0.8162188   1.431857508
## [1388,]   1.5433507254          -1.5751502   0.8162188   1.136718849
## [1389,]   1.5450117878           0.2545383  -1.2243282  -1.568718859
## [1390,]   1.5466728502           1.1693826   0.8162188  -0.880061988
## [1391,]   1.5533170999           0.2545383   0.8162188  -1.667098412
## [1392,]   1.5549781623          -1.5751502   0.8162188  -0.338974446
## [1393,]   1.5566392247           0.2545383  -1.2243282  -0.535733552
## [1394,]   1.5616224120           1.1693826   0.8162188  -1.076821094
## [1395,]   1.5632834744           1.1693826   0.8162188  -0.486543776
## [1396,]   1.5649445369          -1.5751502   0.8162188  -0.142215340
## [1397,]   1.5666055993          -1.5751502   0.8162188   0.005353989
## [1398,]   1.5682666617          -1.5751502  -1.2243282   0.054543766
## [1399,]   1.5699277241           1.1693826   0.8162188  -1.470339306
## [1400,]   1.5715887866          -1.5751502   0.8162188  -1.765477965
## [1401,]   1.5732498490           1.1693826   0.8162188   1.087529073
## [1402,]   1.5749109114           0.2545383   0.8162188   0.251302872
## [1403,]   1.5765719738           1.1693826  -1.2243282  -0.338974446
## [1404,]   1.5782330362          -0.6603060   0.8162188   0.546441531
## [1405,]   1.5798940987           1.1693826   0.8162188  -1.421149530
## [1406,]   1.5848772859           0.2545383  -1.2243282  -1.273580200
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## [1407,]    1.5865383484         0.2545383 -1.2243282  0.546441531
## [1408,]    1.5881994108        -0.6603060  0.8162188 -1.027631318
## [1409,]    1.5898604732         1.1693826  0.8162188  0.595631307
## [1410,]    1.5948436605         1.1693826 -1.2243282  0.349682425
## [1411,]    1.5965047229        -0.6603060 -1.2243282  1.284288179
## [1412,]    1.5981657853         0.2545383 -1.2243282  0.792390413
## [1413,]    1.6014879102         1.1693826  0.8162188  0.497251754
## [1414,]    1.6064710974         1.1693826  0.8162188 -0.437353999
## [1415,]    1.6081321598        -1.5751502  0.8162188  0.890769967
## [1416,]    1.6097932223        -0.6603060  0.8162188 -0.338974446
## [1417,]    1.6114542847         1.1693826  0.8162188  0.989149520
## [1418,]    1.6131153471        -1.5751502  0.8162188 -0.584923329
## [1419,]    1.6147764095        -1.5751502  0.8162188  0.300492648
## [1420,]    1.6164374720         1.1693826  0.8162188 -1.519529083
## [1421,]    1.6180985344         1.1693826  0.8162188  0.497251754
## [1422,]    1.6197595968         0.2545383 -1.2243282  1.579426838
## [1423,]    1.6247427841         1.1693826  0.8162188 -1.126010871
## [1424,]    1.6313870338         1.1693826  0.8162188 -0.142215340
## [1425,]    1.6330480962        -0.6603060  0.8162188 -0.880061988
## [1426,]    1.6347091586        -0.6603060 -1.2243282  1.431857508
## [1427,]    1.6363702210         0.2545383 -1.2243282 -0.830872211
## [1428,]    1.6396923459        -1.5751502  0.8162188  0.841580190
## [1429,]    1.6413534083        -0.6603060  0.8162188  0.103733542
## [1430,]    1.6430144707        -1.5751502  0.8162188 -0.683302882
## [1431,]    1.6446755331        -0.6603060 -1.2243282  1.628616614
## [1432,]    1.6463365956         0.2545383 -1.2243282 -0.880061988
## [1433,]    1.6479976580         0.2545383 -1.2243282 -1.175200647
## [1434,]    1.6496587204        -1.5751502 -1.2243282  0.939959743
## [1435,]    1.6513197828        -1.5751502  0.8162188 -1.273580200
## [1436,]    1.6529808453        -0.6603060  0.8162188 -1.175200647
## [1437,]    1.6546419077         0.2545383  0.8162188 -0.388164223
## [1438,]    1.6563029701         1.1693826  0.8162188  1.038339296
## [1439,]    1.6579640325         1.1693826  0.8162188 -1.617908636
## [1440,]    1.6596250949        -1.5751502 -1.2243282  1.382667732
## [1441,]    1.6612861574         1.1693826 -1.2243282  1.530237061
## [1442,]    1.6629472198         0.2545383  0.8162188 -0.437353999
## [1443,]    1.6646082822        -1.5751502  0.8162188 -1.470339306
## [1444,]    1.6712525319        -1.5751502  0.8162188 -0.486543776
## [1445,]    1.6729135943         1.1693826  0.8162188  0.300492648
## [1446,]    1.6762357192        -1.5751502 -1.2243282 -0.289784670
## [1447,]    1.6778967816         1.1693826 -1.2243282  1.431857508
## [1448,]    1.6795578440         1.1693826  0.8162188  1.087529073
## [1449,]    1.6812189064         0.2545383  0.8162188 -0.437353999
## [1450,]    1.6828799689         1.1693826  0.8162188  0.595631307
## [1451,]    1.6862020937         0.2545383 -1.2243282 -1.716288189
## [1452,]    1.6878631561        -1.5751502 -1.2243282  1.677806391
## [1453,]    1.6928463434        -0.6603060  0.8162188  1.382667732
## [1454,]    1.6945074058        -0.6603060 -1.2243282  1.677806391
## [1455,]    1.6961684682         1.1693826 -1.2243282 -0.781682435
## [1456,]    1.6994905931         0.2545383  0.8162188 -0.683302882
## [1457,]    1.7011516555         0.2545383  0.8162188  0.694010860
## [1458,]    1.7044737803         0.2545383 -1.2243282  1.579426838
## [1459,]    1.7061348428         0.2545383 -1.2243282 -0.191405117
## [1460,]    1.7077959052         1.1693826  0.8162188 -0.978441541
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## [1461,]  1.7094569676                1.1693826 -1.2243282  0.349682425
## [1462,]  1.7111180300                1.1693826  0.8162188 -1.322769977
## [1463,]  1.7127790925               -0.6603060 -1.2243282 -0.289784670
## [1464,]  1.7144401549               -0.6603060  0.8162188  0.398872201
## [1465,]  1.7194233421                1.1693826 -1.2243282 -1.765477965
## [1466,]  1.7210844046                0.2545383  0.8162188 -1.224390424
## [1467,]  1.7227454670                1.1693826  0.8162188 -1.175200647
## [1468,]  1.7260675918               -0.6603060  0.8162188  1.038339296
## [1469,]  1.7277286543                1.1693826  0.8162188 -0.142215340
## [1470,]  1.7327118415               -0.6603060  0.8162188  0.792390413
##          JobInvolvement    JobLevel    JobRole JobSatisfaction MaritalStatus
##     [1,]       0.379543 -0.05776789  1.0323644       1.1528613     1.2363997
##     [2,]      -1.025818 -0.05776789  0.6261610      -0.6606284    -0.1332367
##     [3,]      -1.025818 -0.96115930 -0.9986523       0.2461164     1.2363997
##     [4,]       0.379543 -0.96115930  0.6261610       0.2461164    -0.1332367
##     [5,]       0.379543 -0.96115930 -0.9986523      -0.6606284    -0.1332367
##     [6,]       0.379543 -0.96115930 -0.9986523       1.1528613     1.2363997
##     [7,]       1.784904 -0.96115930 -0.9986523      -1.5673732    -0.1332367
##     [8,]       0.379543 -0.96115930 -0.9986523       0.2461164    -1.5028732
##     [9,]      -1.025818  0.84562353 -0.1862456       0.2461164     1.2363997
##    [10,]       0.379543 -0.05776789 -1.8110589       0.2461164    -0.1332367
##    [11,]       1.784904 -0.96115930 -0.9986523      -0.6606284    -0.1332367
##    [12,]      -1.025818 -0.05776789 -0.9986523       0.2461164     1.2363997
##    [13,]       0.379543 -0.96115930  0.6261610       0.2461164    -1.5028732
##    [14,]       0.379543 -0.96115930 -0.9986523       1.1528613    -1.5028732
##    [15,]      -1.025818 -0.96115930 -0.9986523       0.2461164     1.2363997
##    [16,]       1.784904  0.84562353 -0.1862456      -1.5673732    -1.5028732
##    [17,]       1.784904 -0.96115930  0.6261610      -0.6606284    -1.5028732
##    [18,]       1.784904 -0.96115930 -0.9986523       1.1528613    -1.5028732
##    [19,]      -1.025818  1.74901494 -0.5924489       1.1528613    -0.1332367
##    [20,]       0.379543 -0.96115930  0.6261610       1.1528613     1.2363997
##    [21,]       1.784904 -0.05776789 -0.1862456       0.2461164    -1.5028732
##    [22,]      -1.025818 -0.96115930  1.4385677      -1.5673732     1.2363997
##    [23,]       0.379543  0.84562353  0.2199577      -0.6606284     1.2363997
##    [24,]       0.379543 -0.96115930  0.6261610       1.1528613     1.2363997
##    [25,]       0.379543 -0.96115930  0.6261610      -1.5673732     1.2363997
##    [26,]       0.379543  2.65240635 -0.5924489       0.2461164    -1.5028732
##    [27,]      -2.431178 -0.96115930  0.6261610      -1.5673732     1.2363997
##    [28,]       0.379543 -0.05776789  1.0323644      -0.6606284    -0.1332367
##    [29,]      -1.025818  0.84562353 -1.8110589       1.1528613    -0.1332367
##    [30,]       0.379543  2.65240635 -0.5924489      -1.5673732     1.2363997
##    [31,]       0.379543 -0.96115930 -0.9986523       1.1528613     1.2363997
##    [32,]       0.379543 -0.05776789 -1.8110589       1.1528613    -0.1332367
##    [33,]      -1.025818 -0.96115930 -0.9986523       0.2461164     1.2363997
##    [34,]       0.379543 -0.05776789  1.4385677       1.1528613    -0.1332367
##    [35,]       0.379543 -0.96115930  0.6261610       1.1528613    -0.1332367
##    [36,]       1.784904 -0.96115930  0.6261610       0.2461164    -1.5028732
##    [37,]      -1.025818 -0.96115930  1.4385677       0.2461164    -0.1332367
##    [38,]       0.379543 -0.96115930  1.4385677       1.1528613    -0.1332367
##    [39,]      -1.025818 -0.96115930  0.6261610      -1.5673732    -0.1332367
##    [40,]       1.784904 -0.05776789  1.0323644      -1.5673732    -0.1332367
##    [41,]       0.379543 -0.96115930 -0.9986523       1.1528613    -1.5028732
##    [42,]       0.379543 -0.96115930 -0.9986523      -1.5673732    -1.5028732
##    [43,]      -2.431178 -0.96115930 -0.9986523       0.2461164     1.2363997
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##   [44,]   0.379543  0.84562353  1.0323644    0.2461164   1.2363997
##   [45,]   0.379543 -0.05776789 -0.9986523    1.1528613   1.2363997
##   [46,]   0.379543  2.65240635  0.2199577    0.2461164  -0.1332367
##   [47,]   0.379543 -0.05776789  1.0323644    0.2461164   1.2363997
##   [48,]   0.379543 -0.96115930  0.6261610   -0.6606284  -0.1332367
##   [49,]   0.379543 -0.05776789  1.0323644    1.1528613   1.2363997
##   [50,]   1.784904 -0.96115930 -0.9986523    1.1528613  -0.1332367
##   [51,]  -1.025818  0.84562353 -0.9986523    0.2461164   1.2363997
##   [52,]   0.379543 -0.96115930 -0.9986523    0.2461164   1.2363997
##   [53,]   0.379543 -0.05776789  1.0323644   -1.5673732  -1.5028732
##   [54,]  -1.025818  0.84562353 -1.8110589   -1.5673732  -0.1332367
##   [55,]  -1.025818 -0.05776789  1.0323644    1.1528613  -0.1332367
##   [56,]   0.379543  0.84562353  0.2199577    1.1528613   1.2363997
##   [57,]   0.379543  0.84562353  1.0323644   -1.5673732  -0.1332367
##   [58,]   0.379543 -0.96115930 -0.9986523   -1.5673732  -0.1332367
##   [59,]   0.379543 -0.05776789 -0.9986523    1.1528613  -1.5028732
##   [60,]  -1.025818 -0.05776789 -0.1862456    0.2461164  -1.5028732
##   [61,]   0.379543 -0.05776789 -0.1862456    1.1528613  -0.1332367
##   [62,]   0.379543 -0.05776789 -0.9986523    1.1528613   1.2363997
##   [63,]  -1.025818  2.65240635  0.2199577    0.2461164  -1.5028732
##   [64,]   0.379543  0.84562353  1.0323644   -1.5673732   1.2363997
##   [65,]   0.379543  0.84562353 -1.8110589    0.2461164  -1.5028732
##   [66,]   0.379543  1.74901494 -0.5924489    0.2461164  -1.5028732
##   [67,]  -1.025818 -0.05776789 -0.1862456   -0.6606284   1.2363997
##   [68,]   0.379543  0.84562353  0.6261610   -1.5673732  -1.5028732
##   [69,]   0.379543 -0.96115930  0.6261610   -1.5673732  -0.1332367
##   [70,]  -1.025818 -0.96115930  0.6261610    0.2461164  -0.1332367
##   [71,]  -1.025818 -0.05776789  1.0323644    0.2461164   1.2363997
##   [72,]   0.379543 -0.96115930  0.6261610   -0.6606284  -0.1332367
##   [73,]   0.379543 -0.96115930  0.6261610   -0.6606284   1.2363997
##   [74,]   0.379543 -0.05776789  0.6261610   -0.6606284  -0.1332367
##   [75,]   1.784904 -0.96115930 -0.9986523    1.1528613  -0.1332367
##   [76,]   0.379543 -0.05776789 -0.1862456    1.1528613   1.2363997
##   [77,]  -1.025818 -0.05776789  1.0323644   -1.5673732   1.2363997
##   [78,]   0.379543  0.84562353  0.2199577   -1.5673732  -0.1332367
##   [79,]   0.379543  0.84562353  0.2199577    0.2461164   1.2363997
##   [80,]   0.379543 -0.05776789 -1.4048556   -0.6606284  -1.5028732
##   [81,]  -1.025818 -0.05776789 -0.9986523    1.1528613  -0.1332367
##   [82,]  -1.025818 -0.96115930  0.6261610    0.2461164   1.2363997
##   [83,]   0.379543  0.84562353  1.0323644    1.1528613  -0.1332367
##   [84,]  -2.431178 -0.05776789  0.6261610    1.1528613  -1.5028732
##   [85,]   0.379543 -0.05776789 -0.1862456   -0.6606284  -0.1332367
##   [86,]  -2.431178  0.84562353 -0.1862456    1.1528613   1.2363997
##   [87,]   0.379543 -0.96115930  1.4385677   -1.5673732  -1.5028732
##   [88,]   0.379543 -0.96115930 -0.9986523    1.1528613  -0.1332367
##   [89,]  -1.025818 -0.05776789 -1.8110589    1.1528613  -0.1332367
##   [90,]  -1.025818  0.84562353  1.0323644    1.1528613   1.2363997
##   [91,]  -1.025818  1.74901494 -1.8110589   -0.6606284  -0.1332367
##   [92,]   0.379543 -0.05776789  1.0323644    1.1528613   1.2363997
##   [93,]  -1.025818 -0.05776789  1.0323644   -0.6606284  -1.5028732
##   [94,]  -1.025818  0.84562353 -1.8110589   -1.5673732  -0.1332367
##   [95,]   0.379543 -0.05776789  1.0323644    0.2461164   1.2363997
##   [96,]   0.379543  0.84562353  0.2199577    0.2461164  -0.1332367
##   [97,]   0.379543 -0.05776789  1.0323644    0.2461164  -0.1332367
```

```
##  [98,]      0.379543 -0.05776789  1.0323644    0.2461164   -0.1332367
##  [99,]      0.379543  1.74901494  1.0323644    0.2461164    1.2363997
## [100,]      0.379543 -0.05776789 -0.9986523   -0.6606284   -0.1332367
## [101,]      0.379543 -0.96115930 -1.4048556   -1.5673732   -1.5028732
## [102,]      0.379543 -0.96115930  0.6261610   -1.5673732    1.2363997
## [103,]     -1.025818 -0.96115930 -0.9986523    1.1528613    1.2363997
## [104,]      0.379543 -0.05776789  0.6261610    0.2461164    1.2363997
## [105,]     -1.025818 -0.05776789 -1.8110589    1.1528613   -1.5028732
## [106,]     -1.025818  2.65240635 -0.5924489    1.1528613   -0.1332367
## [107,]      0.379543  2.65240635  0.2199577   -0.6606284   -0.1332367
## [108,]     -1.025818 -0.05776789  1.0323644    0.2461164    1.2363997
## [109,]     -1.025818 -0.96115930  0.6261610    1.1528613   -0.1332367
## [110,]      0.379543 -0.96115930 -0.9986523    1.1528613    1.2363997
## [111,]     -1.025818  0.84562353 -1.8110589   -1.5673732    1.2363997
## [112,]     -2.431178 -0.05776789 -0.9986523    0.2461164    1.2363997
## [113,]      1.784904  1.74901494 -0.5924489    1.1528613    1.2363997
## [114,]      0.379543 -0.96115930 -0.9986523    0.2461164   -0.1332367
## [115,]     -1.025818 -0.05776789  0.6261610   -0.6606284   -1.5028732
## [116,]      0.379543  0.84562353  1.0323644    1.1528613    1.2363997
## [117,]     -1.025818  0.84562353 -0.5924489   -1.5673732    1.2363997
## [118,]      0.379543  0.84562353  1.0323644    1.1528613   -0.1332367
## [119,]      0.379543 -0.96115930 -0.9986523    1.1528613   -1.5028732
## [120,]      0.379543  1.74901494 -0.5924489    1.1528613   -0.1332367
## [121,]     -2.431178 -0.96115930  0.6261610    0.2461164   -1.5028732
## [122,]      0.379543 -0.05776789  1.0323644   -0.6606284   -0.1332367
## [123,]      0.379543 -0.96115930  0.6261610   -0.6606284   -0.1332367
## [124,]      0.379543  2.65240635  0.2199577    0.2461164    1.2363997
## [125,]     -2.431178 -0.05776789  1.0323644    0.2461164   -0.1332367
## [126,]     -1.025818 -0.96115930  0.6261610   -0.6606284   -0.1332367
## [127,]      0.379543  0.84562353 -1.8110589    1.1528613   -0.1332367
## [128,]      0.379543 -0.96115930  1.4385677    0.2461164    1.2363997
## [129,]      0.379543 -0.96115930 -0.9986523    1.1528613   -0.1332367
## [130,]      0.379543 -0.05776789 -0.1862456   -1.5673732   -0.1332367
## [131,]      1.784904 -0.96115930  0.6261610    0.2461164    1.2363997
## [132,]      0.379543  0.84562353  1.0323644    1.1528613    1.2363997
## [133,]     -2.431178 -0.05776789  1.0323644    0.2461164   -0.1332367
## [134,]      0.379543  0.84562353  1.0323644    0.2461164   -1.5028732
## [135,]      0.379543 -0.96115930 -1.4048556    0.2461164   -0.1332367
## [136,]      0.379543 -0.05776789 -0.1862456   -0.6606284   -1.5028732
## [137,]     -2.431178  0.84562353 -0.1862456    1.1528613    1.2363997
## [138,]     -1.025818 -0.05776789  1.0323644    0.2461164   -0.1332367
## [139,]     -1.025818 -0.05776789  1.0323644    0.2461164   -0.1332367
## [140,]      0.379543 -0.05776789 -1.4048556    1.1528613   -0.1332367
## [141,]      0.379543 -0.96115930 -0.9986523   -1.5673732    1.2363997
## [142,]      0.379543 -0.96115930  0.6261610    1.1528613    1.2363997
## [143,]      0.379543 -0.05776789  0.6261610    0.2461164    1.2363997
## [144,]      0.379543 -0.96115930  0.6261610    0.2461164    1.2363997
## [145,]     -2.431178 -0.05776789  1.0323644    1.1528613   -1.5028732
## [146,]      0.379543 -0.96115930  0.6261610   -1.5673732   -1.5028732
## [147,]     -1.025818 -0.96115930 -0.9986523    1.1528613    1.2363997
## [148,]     -1.025818  1.74901494 -0.5924489   -1.5673732   -1.5028732
## [149,]      0.379543 -0.96115930 -0.9986523   -1.5673732   -0.1332367
## [150,]      0.379543 -0.96115930 -0.9986523   -0.6606284    1.2363997
## [151,]      0.379543 -0.05776789  0.6261610   -0.6606284   -1.5028732
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##   [152,]   0.379543  0.84562353  1.0323644   -0.6606284   -0.1332367
##   [153,]   0.379543 -0.05776789  1.4385677    0.2461164   -0.1332367
##   [154,]   0.379543 -0.05776789 -0.9986523   -0.6606284   -1.5028732
##   [155,]   0.379543  0.84562353  1.0323644    1.1528613    1.2363997
##   [156,]   0.379543 -0.05776789 -0.1862456    0.2461164   -0.1332367
##   [157,]  -1.025818 -0.05776789 -0.1862456    0.2461164   -0.1332367
##   [158,]  -1.025818 -0.96115930  0.6261610   -0.6606284   -0.1332367
##   [159,]  -1.025818  0.84562353  1.0323644    1.1528613   -0.1332367
##   [160,]   0.379543 -0.96115930  1.4385677    0.2461164   -0.1332367
##   [161,]   0.379543 -0.96115930  0.6261610    1.1528613   -0.1332367
##   [162,]   0.379543 -0.96115930  0.6261610   -0.6606284   -1.5028732
##   [163,]   0.379543 -0.96115930  0.6261610    1.1528613   -0.1332367
##   [164,]   1.784904  0.84562353 -1.8110589    1.1528613   -1.5028732
##   [165,]  -1.025818 -0.96115930  0.6261610    0.2461164   -1.5028732
##   [166,]   0.379543  2.65240635 -0.5924489   -0.6606284    1.2363997
##   [167,]   0.379543 -0.96115930  0.6261610    0.2461164   -1.5028732
##   [168,]   0.379543  0.84562353  1.0323644    1.1528613   -0.1332367
##   [169,]  -1.025818 -0.05776789  1.0323644    1.1528613    1.2363997
##   [170,]   0.379543 -0.96115930  0.6261610    0.2461164    1.2363997
##   [171,]   0.379543 -0.96115930  0.6261610   -0.6606284   -0.1332367
##   [172,]  -2.431178 -0.96115930  1.4385677   -1.5673732    1.2363997
##   [173,]   0.379543 -0.96115930 -0.9986523   -0.6606284    1.2363997
##   [174,]   0.379543 -0.05776789 -0.9986523   -1.5673732   -1.5028732
##   [175,]   0.379543 -0.05776789  1.0323644   -1.5673732   -1.5028732
##   [176,]   0.379543 -0.96115930  0.6261610   -1.5673732   -1.5028732
##   [177,]   0.379543 -0.96115930  0.6261610    1.1528613    1.2363997
##   [178,]  -1.025818 -0.96115930 -0.9986523    1.1528613    1.2363997
##   [179,]   0.379543  0.84562353  1.0323644   -1.5673732   -1.5028732
##   [180,]   0.379543 -0.96115930 -0.9986523    1.1528613    1.2363997
##   [181,]   0.379543 -0.96115930  0.6261610    1.1528613   -0.1332367
##   [182,]   0.379543 -0.96115930  0.6261610   -0.6606284    1.2363997
##   [183,]   0.379543 -0.96115930  1.4385677   -0.6606284    1.2363997
##   [184,]  -1.025818 -0.96115930 -0.9986523    0.2461164   -0.1332367
##   [185,]   1.784904 -0.05776789 -0.1862456   -1.5673732   -1.5028732
##   [186,]   0.379543 -0.96115930  0.6261610   -0.6606284   -0.1332367
##   [187,]   0.379543  2.65240635 -0.5924489    0.2461164   -0.1332367
##   [188,]   1.784904  2.65240635  0.2199577   -0.6606284    1.2363997
##   [189,]  -1.025818 -0.05776789 -0.1862456    0.2461164   -0.1332367
##   [190,]   0.379543  1.74901494 -1.8110589   -0.6606284    1.2363997
##   [191,]  -1.025818  2.65240635 -0.5924489    0.2461164   -0.1332367
##   [192,]   0.379543 -0.96115930  0.6261610   -0.6606284    1.2363997
##   [193,]  -1.025818 -0.05776789 -0.1862456    0.2461164   -0.1332367
##   [194,]   1.784904 -0.96115930  0.6261610    1.1528613   -1.5028732
##   [195,]  -1.025818  1.74901494 -0.5924489    1.1528613   -0.1332367
##   [196,]   1.784904 -0.96115930  0.6261610   -1.5673732   -0.1332367
##   [197,]   0.379543 -0.05776789 -0.9986523   -0.6606284    1.2363997
##   [198,]   0.379543 -0.05776789 -0.1862456    0.2461164   -1.5028732
##   [199,]   0.379543 -0.05776789 -0.1862456    0.2461164   -0.1332367
##   [200,]   0.379543 -0.05776789 -0.1862456    1.1528613   -0.1332367
##   [201,]  -1.025818 -0.05776789 -0.1862456   -1.5673732   -0.1332367
##   [202,]   0.379543 -0.05776789 -0.1862456    1.1528613   -1.5028732
##   [203,]   0.379543 -0.96115930  0.6261610    0.2461164   -1.5028732
##   [204,]   0.379543 -0.05776789 -0.9986523    1.1528613   -0.1332367
##   [205,]   0.379543 -0.05776789 -1.8110589   -1.5673732   -0.1332367
```

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## [206,]      0.379543  0.84562353  1.0323644      1.1528613   -0.1332367
## [207,]      1.784904 -0.96115930  0.6261610     -0.6606284   -1.5028732
## [208,]      0.379543 -0.96115930 -0.9986523      1.1528613    1.2363997
## [209,]     -1.025818 -0.05776789 -1.8110589      1.1528613   -0.1332367
## [210,]      0.379543  0.84562353 -1.8110589     -1.5673732   -1.5028732
## [211,]     -2.431178  0.84562353  1.0323644      1.1528613   -0.1332367
## [212,]     -1.025818  0.84562353 -0.1862456      0.2461164    1.2363997
## [213,]      0.379543 -0.05776789  1.0323644      0.2461164    1.2363997
## [214,]     -1.025818  0.84562353  0.2199577     -0.6606284   -0.1332367
## [215,]      0.379543 -0.96115930  0.6261610     -1.5673732    1.2363997
## [216,]      0.379543  0.84562353 -0.5924489      1.1528613    1.2363997
## [217,]     -1.025818 -0.05776789  1.0323644     -1.5673732    1.2363997
## [218,]      0.379543 -0.96115930  0.6261610      0.2461164    1.2363997
## [219,]     -1.025818  0.84562353  1.0323644      1.1528613    1.2363997
## [220,]      0.379543 -0.05776789  1.0323644     -1.5673732   -0.1332367
## [221,]      0.379543 -0.05776789 -0.9986523     -0.6606284    1.2363997
## [222,]     -1.025818 -0.96115930  0.6261610     -0.6606284   -0.1332367
## [223,]      0.379543  0.84562353  0.2199577      1.1528613   -1.5028732
## [224,]      0.379543  0.84562353  1.0323644      0.2461164   -1.5028732
## [225,]     -2.431178 -0.05776789 -0.1862456      0.2461164   -0.1332367
## [226,]     -1.025818 -0.96115930  0.6261610      1.1528613   -0.1332367
## [227,]      0.379543 -0.96115930  1.4385677      1.1528613   -1.5028732
## [228,]      0.379543  0.84562353  1.0323644      1.1528613   -0.1332367
## [229,]      0.379543  0.84562353  1.0323644      0.2461164    1.2363997
## [230,]     -1.025818 -0.96115930  0.6261610      1.1528613    1.2363997
## [231,]     -1.025818 -0.96115930 -0.9986523      1.1528613    1.2363997
## [232,]      0.379543  2.65240635 -0.5924489      1.1528613   -0.1332367
## [233,]      0.379543 -0.96115930 -1.4048556      0.2461164   -0.1332367
## [234,]      0.379543  2.65240635 -0.5924489      1.1528613   -1.5028732
## [235,]      0.379543 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [236,]      0.379543  1.74901494 -0.5924489      1.1528613   -0.1332367
## [237,]      0.379543 -0.96115930 -0.9986523     -1.5673732   -0.1332367
## [238,]     -1.025818  2.65240635 -0.5924489      0.2461164    1.2363997
## [239,]      0.379543 -0.96115930  1.4385677     -0.6606284   -0.1332367
## [240,]     -1.025818 -0.96115930 -0.9986523      0.2461164    1.2363997
## [241,]      0.379543 -0.96115930 -0.9986523      0.2461164   -1.5028732
## [242,]      0.379543 -0.05776789  1.0323644      1.1528613   -0.1332367
## [243,]      0.379543 -0.05776789  0.6261610     -1.5673732   -1.5028732
## [244,]      0.379543 -0.05776789  0.6261610      1.1528613   -1.5028732
## [245,]      1.784904  2.65240635 -0.5924489      1.1528613   -0.1332367
## [246,]      0.379543  0.84562353  0.2199577      0.2461164   -1.5028732
## [247,]     -1.025818 -0.96115930  0.6261610      1.1528613   -0.1332367
## [248,]     -1.025818 -0.05776789 -0.1862456     -1.5673732   -0.1332367
## [249,]     -1.025818 -0.96115930  0.6261610     -1.5673732   -0.1332367
## [250,]      1.784904 -0.05776789 -0.1862456      0.2461164   -0.1332367
## [251,]      0.379543  0.84562353 -0.1862456      0.2461164   -1.5028732
## [252,]      0.379543  0.84562353 -1.8110589      0.2461164    1.2363997
## [253,]      0.379543 -0.96115930  0.6261610      1.1528613    1.2363997
## [254,]      1.784904 -0.05776789  0.6261610     -1.5673732    1.2363997
## [255,]      0.379543 -0.05776789  1.0323644      1.1528613   -1.5028732
## [256,]      0.379543 -0.05776789 -0.1862456      0.2461164   -0.1332367
## [257,]     -1.025818 -0.96115930 -0.9986523     -1.5673732   -1.5028732
## [258,]      0.379543  2.65240635  0.2199577      0.2461164   -1.5028732
## [259,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
```

```
## [260,]     -1.025818 -0.96115930 -0.9986523     -0.6606284    1.2363997
## [261,]      1.784904 -0.96115930 -0.9986523     -0.6606284   -0.1332367
## [262,]     -1.025818 -0.05776789  1.0323644      1.1528613   -0.1332367
## [263,]     -1.025818 -0.05776789 -0.9986523     -1.5673732    1.2363997
## [264,]     -2.431178  1.74901494 -0.5924489     -0.6606284   -0.1332367
## [265,]      0.379543 -0.96115930 -0.9986523      0.2461164    1.2363997
## [266,]     -1.025818 -0.05776789  1.0323644     -0.6606284   -0.1332367
## [267,]     -1.025818 -0.05776789 -1.8110589      1.1528613   -0.1332367
## [268,]      1.784904 -0.05776789 -1.8110589     -1.5673732   -1.5028732
## [269,]      0.379543  1.74901494 -1.8110589      1.1528613   -0.1332367
## [270,]      0.379543 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [271,]      0.379543  2.65240635 -0.5924489     -1.5673732    1.2363997
## [272,]      0.379543  0.84562353 -0.5924489     -0.6606284   -0.1332367
## [273,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
## [274,]      0.379543 -0.05776789  1.0323644      1.1528613   -0.1332367
## [275,]     -1.025818 -0.96115930  0.6261610      0.2461164    1.2363997
## [276,]      0.379543  0.84562353  0.2199577      1.1528613   -1.5028732
## [277,]      1.784904  0.84562353 -0.5924489     -0.6606284   -1.5028732
## [278,]      1.784904 -0.05776789  1.0323644     -1.5673732   -1.5028732
## [279,]      0.379543 -0.05776789 -0.1862456     -0.6606284   -1.5028732
## [280,]      0.379543  2.65240635  0.2199577     -0.6606284   -1.5028732
## [281,]      0.379543  1.74901494  0.2199577      0.2461164   -0.1332367
## [282,]      0.379543 -0.05776789  1.0323644      0.2461164   -0.1332367
## [283,]      0.379543 -0.05776789  1.0323644      1.1528613    1.2363997
## [284,]      0.379543 -0.05776789 -0.9986523      1.1528613   -0.1332367
## [285,]      0.379543 -0.05776789 -1.8110589     -1.5673732   -0.1332367
## [286,]      0.379543 -0.96115930  0.6261610      1.1528613    1.2363997
## [287,]      0.379543 -0.96115930 -0.9986523      0.2461164   -1.5028732
## [288,]      0.379543 -0.05776789 -1.8110589      1.1528613   -1.5028732
## [289,]      0.379543 -0.96115930 -0.9986523     -0.6606284   -1.5028732
## [290,]      0.379543 -0.96115930  0.6261610      1.1528613    1.2363997
## [291,]      0.379543  2.65240635  0.2199577     -1.5673732    1.2363997
## [292,]      0.379543 -0.05776789  0.6261610     -0.6606284    1.2363997
## [293,]      0.379543 -0.96115930  1.4385677     -0.6606284   -1.5028732
## [294,]     -1.025818 -0.05776789  1.0323644      1.1528613    1.2363997
## [295,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
## [296,]      0.379543  1.74901494  1.0323644     -0.6606284   -0.1332367
## [297,]      0.379543 -0.96115930 -0.9986523      0.2461164    1.2363997
## [298,]      0.379543  0.84562353  1.0323644     -0.6606284   -0.1332367
## [299,]      1.784904 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [300,]     -2.431178 -0.05776789 -0.1862456     -0.6606284   -1.5028732
## [301,]      0.379543  1.74901494 -0.5924489     -0.6606284    1.2363997
## [302,]     -1.025818 -0.96115930  1.4385677      0.2461164    1.2363997
## [303,]      1.784904 -0.05776789 -1.8110589     -1.5673732    1.2363997
## [304,]      1.784904 -0.05776789  1.0323644      1.1528613   -0.1332367
## [305,]      1.784904  0.84562353 -1.8110589      1.1528613   -1.5028732
## [306,]      0.379543 -0.05776789 -0.9986523     -0.6606284   -0.1332367
## [307,]     -1.025818 -0.05776789  1.0323644      0.2461164   -0.1332367
## [308,]     -1.025818  0.84562353  0.2199577     -0.6606284   -0.1332367
## [309,]     -2.431178 -0.05776789 -1.8110589      0.2461164   -1.5028732
## [310,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
## [311,]     -1.025818 -0.05776789 -1.4048556     -1.5673732   -0.1332367
## [312,]      0.379543  0.84562353 -0.9986523     -1.5673732   -1.5028732
## [313,]      0.379543 -0.96115930  0.6261610      1.1528613   -1.5028732
```

```
## [314,]      0.379543  0.84562353 -0.5924489    -0.6606284    -0.1332367
## [315,]      0.379543  1.74901494 -0.5924489    -1.5673732    -0.1332367
## [316,]      0.379543 -0.96115930 -0.9986523     1.1528613     1.2363997
## [317,]     -1.025818  1.74901494 -1.8110589     0.2461164     1.2363997
## [318,]     -1.025818 -0.05776789  0.6261610    -0.6606284    -0.1332367
## [319,]      0.379543 -0.96115930  0.6261610    -0.6606284     1.2363997
## [320,]     -1.025818 -0.05776789  1.0323644    -0.6606284    -0.1332367
## [321,]      0.379543 -0.05776789  1.0323644     0.2461164     1.2363997
## [322,]      0.379543 -0.05776789  1.0323644     1.1528613    -1.5028732
## [323,]      1.784904 -0.05776789  0.6261610     1.1528613     1.2363997
## [324,]     -2.431178 -0.96115930  0.6261610     1.1528613    -0.1332367
## [325,]      0.379543 -0.05776789  0.6261610     1.1528613    -0.1332367
## [326,]     -1.025818  0.84562353 -0.1862456     0.2461164    -0.1332367
## [327,]     -1.025818  2.65240635 -0.5924489     1.1528613    -0.1332367
## [328,]      0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [329,]     -1.025818 -0.05776789  1.0323644     1.1528613     1.2363997
## [330,]      0.379543  2.65240635  0.2199577     0.2461164    -0.1332367
## [331,]     -1.025818 -0.05776789 -0.9986523     0.2461164    -1.5028732
## [332,]      0.379543 -0.05776789  1.0323644    -0.6606284    -0.1332367
## [333,]      0.379543 -0.05776789  0.6261610     0.2461164     1.2363997
## [334,]      0.379543  0.84562353 -1.8110589    -1.5673732    -0.1332367
## [335,]      0.379543 -0.05776789  0.6261610     1.1528613    -0.1332367
## [336,]     -2.431178 -0.05776789  1.0323644     1.1528613    -0.1332367
## [337,]     -2.431178 -0.96115930 -0.9986523    -1.5673732    -0.1332367
## [338,]     -1.025818 -0.96115930 -0.9986523     1.1528613     1.2363997
## [339,]     -1.025818 -0.05776789  1.0323644     0.2461164    -1.5028732
## [340,]      0.379543 -0.05776789  1.0323644    -0.6606284    -0.1332367
## [341,]      0.379543 -0.05776789 -0.1862456     1.1528613    -1.5028732
## [342,]     -1.025818  0.84562353  0.2199577     1.1528613    -1.5028732
## [343,]      0.379543  0.84562353 -0.1862456     1.1528613     1.2363997
## [344,]     -1.025818 -0.05776789  1.0323644    -0.6606284    -1.5028732
## [345,]      0.379543  0.84562353 -0.1862456    -0.6606284     1.2363997
## [346,]      0.379543 -0.96115930  0.6261610     1.1528613    -1.5028732
## [347,]     -1.025818 -0.05776789 -0.1862456    -0.6606284     1.2363997
## [348,]      0.379543 -0.05776789  1.4385677     0.2461164     1.2363997
## [349,]      0.379543  1.74901494  0.2199577     1.1528613     1.2363997
## [350,]      0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [351,]      0.379543 -0.96115930 -1.4048556     0.2461164    -1.5028732
## [352,]      0.379543 -0.96115930 -0.9986523    -0.6606284    -0.1332367
## [353,]      0.379543  0.84562353 -0.5924489     0.2461164    -0.1332367
## [354,]      1.784904 -0.05776789  0.6261610    -1.5673732    -1.5028732
## [355,]      0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [356,]      0.379543 -0.05776789  1.0323644     0.2461164    -0.1332367
## [357,]     -1.025818 -0.05776789 -1.8110589     1.1528613     1.2363997
## [358,]     -1.025818 -0.96115930  1.4385677    -0.6606284     1.2363997
## [359,]      0.379543 -0.05776789  1.0323644     1.1528613     1.2363997
## [360,]     -1.025818  0.84562353  1.0323644     1.1528613    -0.1332367
## [361,]      0.379543 -0.05776789 -1.8110589     0.2461164    -0.1332367
## [362,]      1.784904 -0.96115930 -0.9986523     0.2461164    -0.1332367
## [363,]      0.379543 -0.96115930  1.4385677     1.1528613     1.2363997
## [364,]      0.379543 -0.96115930  1.4385677     0.2461164     1.2363997
## [365,]      0.379543 -0.96115930 -0.9986523    -1.5673732    -0.1332367
## [366,]      0.379543 -0.05776789 -0.1862456     0.2461164    -0.1332367
## [367,]      0.379543 -0.05776789  1.0323644    -0.6606284     1.2363997
```

```
## [368,]    -1.025818  0.84562353 -1.8110589     1.1528613    1.2363997
## [369,]    -1.025818 -0.05776789  1.0323644     0.2461164   -0.1332367
## [370,]    -1.025818 -0.96115930  0.6261610    -0.6606284    1.2363997
## [371,]     1.784904 -0.96115930  1.4385677    -0.6606284    1.2363997
## [372,]     0.379543 -0.96115930  0.6261610     1.1528613    1.2363997
## [373,]    -1.025818 -0.05776789 -1.8110589    -0.6606284    1.2363997
## [374,]     0.379543 -0.96115930 -0.9986523    -0.6606284   -1.5028732
## [375,]     0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [376,]    -1.025818  0.84562353 -1.8110589     0.2461164    1.2363997
## [377,]     0.379543 -0.05776789  1.0323644     1.1528613   -0.1332367
## [378,]     0.379543 -0.96115930  0.6261610     0.2461164   -0.1332367
## [379,]     1.784904 -0.05776789  1.0323644     1.1528613    1.2363997
## [380,]     0.379543  1.74901494 -0.5924489     1.1528613    1.2363997
## [381,]     0.379543 -0.05776789  1.0323644     0.2461164   -1.5028732
## [382,]     0.379543 -0.96115930  1.4385677    -0.6606284   -0.1332367
## [383,]     0.379543 -0.96115930  0.6261610    -1.5673732    1.2363997
## [384,]     0.379543 -0.96115930  0.6261610    -0.6606284   -0.1332367
## [385,]    -1.025818  0.84562353  1.0323644     0.2461164   -0.1332367
## [386,]     0.379543 -0.96115930  0.6261610     1.1528613    1.2363997
## [387,]     0.379543 -0.96115930 -0.9986523    -1.5673732   -1.5028732
## [388,]     0.379543 -0.05776789  1.0323644    -0.6606284   -1.5028732
## [389,]     0.379543 -0.96115930 -0.9986523    -1.5673732   -1.5028732
## [390,]     0.379543 -0.05776789 -0.1862456    -0.6606284    1.2363997
## [391,]    -1.025818  1.74901494  0.2199577    -0.6606284   -1.5028732
## [392,]    -1.025818 -0.05776789 -0.9986523     0.2461164   -0.1332367
## [393,]     0.379543  2.65240635  0.2199577    -1.5673732   -0.1332367
## [394,]     0.379543 -0.05776789  1.0323644     0.2461164   -0.1332367
## [395,]     0.379543 -0.05776789 -0.1862456    -1.5673732   -0.1332367
## [396,]     0.379543 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [397,]     0.379543 -0.05776789 -1.8110589     0.2461164   -1.5028732
## [398,]    -1.025818 -0.05776789  1.0323644     1.1528613    1.2363997
## [399,]     0.379543 -0.05776789  0.6261610     0.2461164   -0.1332367
## [400,]    -1.025818 -0.96115930 -0.9986523    -1.5673732   -0.1332367
## [401,]     0.379543  2.65240635 -0.5924489     0.2461164   -1.5028732
## [402,]     1.784904  1.74901494  1.0323644    -1.5673732   -0.1332367
## [403,]     0.379543 -0.05776789  1.0323644     0.2461164    1.2363997
## [404,]     1.784904  0.84562353  1.0323644    -1.5673732   -0.1332367
## [405,]     0.379543 -0.05776789 -0.9986523    -1.5673732   -1.5028732
## [406,]     0.379543 -0.96115930 -0.9986523    -1.5673732   -0.1332367
## [407,]    -1.025818  0.84562353 -0.1862456     0.2461164   -0.1332367
## [408,]     0.379543 -0.96115930  0.6261610     1.1528613   -0.1332367
## [409,]     0.379543  1.74901494 -0.5924489     1.1528613   -0.1332367
## [410,]     0.379543 -0.05776789  0.6261610     0.2461164   -1.5028732
## [411,]    -2.431178 -0.05776789 -0.1862456     1.1528613    1.2363997
## [412,]     0.379543  2.65240635 -0.5924489    -1.5673732   -0.1332367
## [413,]     0.379543 -0.05776789 -0.1862456     0.2461164   -1.5028732
## [414,]    -1.025818 -0.05776789 -1.8110589     1.1528613   -0.1332367
## [415,]     0.379543 -0.96115930  1.4385677    -0.6606284    1.2363997
## [416,]    -2.431178 -0.96115930  1.4385677     0.2461164   -1.5028732
## [417,]     0.379543 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [418,]     0.379543  2.65240635 -0.5924489     0.2461164   -0.1332367
## [419,]     0.379543 -0.96115930  0.6261610     1.1528613   -1.5028732
## [420,]     0.379543 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [421,]    -1.025818  0.84562353  0.2199577     0.2461164   -0.1332367
```

```
## [422,]     -1.025818 -0.96115930  0.6261610     -0.6606284  -0.1332367
## [423,]     -1.025818 -0.96115930 -1.4048556      1.1528613   1.2363997
## [424,]      0.379543  0.84562353  1.0323644     -1.5673732  -0.1332367
## [425,]     -1.025818  1.74901494 -0.5924489      1.1528613  -1.5028732
## [426,]     -1.025818  1.74901494 -0.5924489      0.2461164  -0.1332367
## [427,]      0.379543 -0.96115930 -0.9986523      1.1528613   1.2363997
## [428,]     -1.025818  0.84562353  1.0323644     -1.5673732  -0.1332367
## [429,]      0.379543 -0.05776789 -0.1862456      1.1528613  -1.5028732
## [430,]      0.379543  1.74901494  0.2199577      0.2461164  -0.1332367
## [431,]     -2.431178 -0.96115930 -0.9986523      0.2461164   1.2363997
## [432,]      0.379543 -0.05776789 -0.9986523      0.2461164   1.2363997
## [433,]     -1.025818 -0.96115930  0.6261610      0.2461164  -1.5028732
## [434,]     -1.025818  0.84562353  1.0323644      1.1528613  -0.1332367
## [435,]      0.379543  0.84562353 -0.1862456     -0.6606284  -1.5028732
## [436,]      0.379543  0.84562353 -0.5924489      0.2461164  -0.1332367
## [437,]     -2.431178 -0.96115930 -0.9986523      1.1528613  -1.5028732
## [438,]      0.379543 -0.96115930  1.4385677     -0.6606284   1.2363997
## [439,]      0.379543  0.84562353 -1.8110589      0.2461164  -0.1332367
## [440,]      0.379543  0.84562353 -1.8110589      0.2461164  -0.1332367
## [441,]      0.379543  0.84562353 -1.4048556     -1.5673732  -1.5028732
## [442,]      0.379543 -0.96115930 -0.9986523      0.2461164  -0.1332367
## [443,]      0.379543  0.84562353  1.0323644      1.1528613   1.2363997
## [444,]     -1.025818 -0.96115930 -0.9986523      0.2461164   1.2363997
## [445,]      0.379543 -0.05776789  1.0323644      1.1528613  -0.1332367
## [446,]      0.379543  1.74901494 -0.5924489     -0.6606284   1.2363997
## [447,]      0.379543 -0.05776789  1.0323644      1.1528613   1.2363997
## [448,]      0.379543 -0.05776789  1.0323644      0.2461164  -0.1332367
## [449,]      0.379543  1.74901494 -0.1862456      0.2461164   1.2363997
## [450,]      0.379543 -0.96115930 -0.9986523      0.2461164  -0.1332367
## [451,]      0.379543 -0.05776789  1.0323644      1.1528613   1.2363997
## [452,]      0.379543  0.84562353 -0.1862456     -1.5673732  -0.1332367
## [453,]      0.379543 -0.05776789  1.0323644     -0.6606284  -0.1332367
## [454,]      0.379543 -0.96115930 -1.4048556      0.2461164  -1.5028732
## [455,]      0.379543 -0.05776789 -0.1862456      1.1528613  -1.5028732
## [456,]      1.784904  1.74901494  0.2199577      0.2461164  -1.5028732
## [457,]     -1.025818  0.84562353 -0.5924489      1.1528613  -1.5028732
## [458,]      0.379543 -0.96115930  1.4385677     -0.6606284   1.2363997
## [459,]     -2.431178  0.84562353  1.0323644     -1.5673732  -1.5028732
## [460,]     -1.025818 -0.05776789 -1.8110589      0.2461164   1.2363997
## [461,]      0.379543 -0.05776789  1.0323644      0.2461164  -1.5028732
## [462,]      0.379543 -0.05776789  1.0323644      0.2461164   1.2363997
## [463,]      1.784904 -0.05776789  1.0323644      1.1528613   1.2363997
## [464,]     -2.431178 -0.96115930 -0.9986523      1.1528613   1.2363997
## [465,]      0.379543  0.84562353 -0.1862456      1.1528613   1.2363997
## [466,]      0.379543  0.84562353 -1.8110589      0.2461164  -0.1332367
## [467,]      0.379543  1.74901494 -0.5924489     -1.5673732  -0.1332367
## [468,]      0.379543  0.84562353  1.0323644     -0.6606284  -1.5028732
## [469,]      0.379543 -0.05776789  0.6261610     -1.5673732  -1.5028732
## [470,]      1.784904 -0.05776789  1.0323644      0.2461164  -0.1332367
## [471,]      0.379543 -0.96115930  1.4385677      1.1528613  -0.1332367
## [472,]      0.379543 -0.05776789 -1.8110589      0.2461164  -0.1332367
## [473,]      0.379543 -0.05776789 -0.1862456     -0.6606284  -0.1332367
## [474,]     -1.025818  2.65240635  0.2199577      0.2461164  -1.5028732
## [475,]      1.784904 -0.96115930  0.6261610      1.1528613  -0.1332367
```

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```
## [476,]     0.379543 -0.05776789  1.0323644    -0.6606284 -0.1332367
## [477,]    -1.025818 -0.96115930 -0.9986523    -0.6606284 -0.1332367
## [478,]     0.379543  2.65240635 -0.5924489    -0.6606284 -0.1332367
## [479,]     0.379543 -0.96115930  1.4385677     0.2461164 -0.1332367
## [480,]     0.379543 -0.96115930 -0.9986523     0.2461164 -0.1332367
## [481,]    -1.025818 -0.96115930  1.4385677    -1.5673732 -0.1332367
## [482,]    -1.025818 -0.96115930  0.6261610     1.1528613 -0.1332367
## [483,]     0.379543 -0.05776789  1.0323644    -1.5673732 -1.5028732
## [484,]    -1.025818 -0.05776789 -0.9986523     1.1528613  1.2363997
## [485,]     1.784904 -0.05776789  1.0323644     1.1528613 -1.5028732
## [486,]    -1.025818 -0.96115930  0.6261610     0.2461164 -1.5028732
## [487,]     0.379543 -0.05776789  1.0323644     0.2461164 -0.1332367
## [488,]    -1.025818 -0.96115930  0.6261610    -0.6606284  1.2363997
## [489,]     0.379543 -0.05776789 -1.8110589     1.1528613 -0.1332367
## [490,]    -1.025818  1.74901494  0.2199577     1.1528613 -1.5028732
## [491,]     0.379543 -0.96115930  0.6261610    -1.5673732  1.2363997
## [492,]     0.379543 -0.05776789 -0.9986523     0.2461164 -1.5028732
## [493,]    -1.025818  1.74901494 -0.5924489    -1.5673732 -0.1332367
## [494,]    -1.025818 -0.05776789 -1.4048556     0.2461164  1.2363997
## [495,]     0.379543 -0.96115930  1.4385677     0.2461164 -1.5028732
## [496,]     0.379543 -0.96115930  1.4385677    -1.5673732 -1.5028732
## [497,]     0.379543 -0.96115930  1.4385677     0.2461164  1.2363997
## [498,]     0.379543  2.65240635 -0.5924489     1.1528613 -0.1332367
## [499,]     0.379543 -0.96115930  0.6261610     0.2461164 -0.1332367
## [500,]     0.379543 -0.05776789  1.0323644     0.2461164 -1.5028732
## [501,]     0.379543 -0.05776789  0.6261610     1.1528613 -0.1332367
## [502,]     0.379543 -0.96115930  0.6261610     0.2461164 -1.5028732
## [503,]     0.379543 -0.05776789  1.0323644    -1.5673732  1.2363997
## [504,]     0.379543 -0.96115930  0.6261610     1.1528613 -0.1332367
## [505,]     0.379543 -0.05776789  1.0323644    -1.5673732 -0.1332367
## [506,]     0.379543 -0.96115930 -0.9986523     1.1528613 -0.1332367
## [507,]     0.379543  0.84562353 -0.1862456     0.2461164 -0.1332367
## [508,]     0.379543 -0.05776789  1.0323644     0.2461164 -0.1332367
## [509,]    -2.431178 -0.05776789  0.6261610     1.1528613  1.2363997
## [510,]     0.379543 -0.05776789 -1.8110589     1.1528613 -1.5028732
## [511,]     0.379543  0.84562353 -1.4048556    -0.6606284 -0.1332367
## [512,]    -1.025818 -0.05776789 -0.1862456    -0.6606284 -1.5028732
## [513,]    -1.025818 -0.96115930  0.6261610     1.1528613  1.2363997
## [514,]     0.379543 -0.96115930  0.6261610     0.2461164  1.2363997
## [515,]     0.379543 -0.96115930  0.6261610    -1.5673732  1.2363997
## [516,]    -1.025818 -0.96115930 -0.9986523     0.2461164 -0.1332367
## [517,]     1.784904 -0.96115930  0.6261610    -1.5673732 -0.1332367
## [518,]     1.784904 -0.05776789  1.0323644    -0.6606284 -0.1332367
## [519,]    -1.025818 -0.05776789  1.0323644     1.1528613  1.2363997
## [520,]    -2.431178 -0.96115930  0.6261610     1.1528613 -1.5028732
## [521,]     1.784904 -0.05776789  1.0323644    -0.6606284 -0.1332367
## [522,]     1.784904 -0.05776789  1.0323644     1.1528613 -1.5028732
## [523,]     1.784904 -0.96115930  0.6261610     1.1528613  1.2363997
## [524,]     1.784904 -0.96115930 -0.9986523     0.2461164 -0.1332367
## [525,]    -1.025818  0.84562353 -1.8110589    -0.6606284  1.2363997
## [526,]     0.379543 -0.05776789  1.0323644     0.2461164  1.2363997
## [527,]    -1.025818 -0.05776789 -1.8110589     0.2461164  1.2363997
## [528,]     0.379543 -0.05776789  1.0323644     1.1528613  1.2363997
## [529,]     0.379543 -0.05776789  1.0323644     0.2461164 -0.1332367
```

```
## [530,]      1.784904 -0.05776789 -1.8110589      1.1528613     1.2363997
## [531,]      0.379543  0.84562353 -0.1862456     -1.5673732    -0.1332367
## [532,]      0.379543  0.84562353  0.2199577      1.1528613     1.2363997
## [533,]      0.379543 -0.05776789  1.0323644     -1.5673732     1.2363997
## [534,]     -1.025818  0.84562353  1.0323644     -1.5673732    -0.1332367
## [535,]      1.784904  1.74901494  0.2199577      0.2461164    -0.1332367
## [536,]     -1.025818  2.65240635 -0.5924489      1.1528613    -1.5028732
## [537,]      0.379543 -0.05776789  1.0323644     -1.5673732     1.2363997
## [538,]      0.379543  0.84562353 -0.1862456     -1.5673732    -1.5028732
## [539,]     -1.025818  2.65240635 -0.5924489      0.2461164    -0.1332367
## [540,]      0.379543 -0.96115930  1.4385677     -0.6606284    -0.1332367
## [541,]     -2.431178 -0.96115930  0.6261610     -0.6606284     1.2363997
## [542,]      1.784904  0.84562353  0.2199577     -1.5673732    -0.1332367
## [543,]      0.379543  0.84562353 -0.1862456      0.2461164     1.2363997
## [544,]     -2.431178 -0.96115930 -0.9986523      0.2461164     1.2363997
## [545,]      0.379543  1.74901494  1.0323644      0.2461164    -1.5028732
## [546,]      0.379543 -0.05776789  1.0323644      1.1528613    -1.5028732
## [547,]      0.379543 -0.96115930  1.4385677      0.2461164     1.2363997
## [548,]      1.784904 -0.96115930  0.6261610      0.2461164    -1.5028732
## [549,]     -1.025818 -0.05776789  1.0323644      1.1528613    -0.1332367
## [550,]      0.379543 -0.05776789 -1.8110589      0.2461164     1.2363997
## [551,]      0.379543 -0.96115930 -0.9986523     -1.5673732    -0.1332367
## [552,]      1.784904 -0.05776789 -1.4048556     -0.6606284    -0.1332367
## [553,]      0.379543  1.74901494 -1.8110589      1.1528613    -0.1332367
## [554,]     -1.025818 -0.96115930  0.6261610      1.1528613     1.2363997
## [555,]     -1.025818 -0.05776789 -1.8110589     -1.5673732     1.2363997
## [556,]      0.379543 -0.96115930  1.4385677     -0.6606284    -1.5028732
## [557,]      0.379543 -0.05776789 -0.9986523      1.1528613     1.2363997
## [558,]      0.379543 -0.05776789 -1.8110589     -1.5673732    -1.5028732
## [559,]      0.379543 -0.05776789 -0.9986523      1.1528613    -0.1332367
## [560,]      0.379543 -0.96115930  0.6261610      0.2461164    -0.1332367
## [561,]      0.379543 -0.05776789 -0.1862456     -1.5673732    -1.5028732
## [562,]     -1.025818  1.74901494 -0.5924489     -1.5673732    -0.1332367
## [563,]      0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [564,]      0.379543 -0.05776789  1.0323644      1.1528613     1.2363997
## [565,]     -2.431178 -0.05776789  1.4385677      0.2461164     1.2363997
## [566,]      1.784904 -0.96115930  0.6261610      0.2461164     1.2363997
## [567,]      1.784904 -0.05776789  1.0323644      0.2461164     1.2363997
## [568,]      0.379543 -0.05776789  1.0323644      1.1528613     1.2363997
## [569,]      0.379543  2.65240635 -0.5924489     -1.5673732    -0.1332367
## [570,]     -1.025818  0.84562353  1.0323644     -1.5673732     1.2363997
## [571,]      0.379543 -0.96115930  0.6261610      1.1528613    -0.1332367
## [572,]     -2.431178 -0.96115930 -0.9986523      1.1528613    -1.5028732
## [573,]      0.379543 -0.05776789 -1.8110589      0.2461164    -0.1332367
## [574,]     -1.025818 -0.05776789  1.0323644     -1.5673732     1.2363997
## [575,]      1.784904 -0.96115930  0.6261610      1.1528613     1.2363997
## [576,]      0.379543 -0.05776789 -0.1862456     -1.5673732    -1.5028732
## [577,]      0.379543 -0.05776789  1.0323644      1.1528613    -0.1332367
## [578,]      0.379543 -0.96115930  0.6261610     -1.5673732    -1.5028732
## [579,]      1.784904 -0.05776789 -0.1862456     -1.5673732     1.2363997
## [580,]     -1.025818 -0.96115930  0.6261610     -1.5673732     1.2363997
## [581,]      0.379543 -0.96115930  1.4385677      1.1528613    -0.1332367
## [582,]     -2.431178 -0.96115930 -0.9986523      0.2461164    -0.1332367
## [583,]      1.784904 -0.05776789 -1.8110589     -0.6606284    -0.1332367
```

```
## [584,]     0.379543 -0.05776789  1.0323644  -1.5673732  -0.1332367
## [585,]     0.379543  2.65240635 -0.5924489   1.1528613  -1.5028732
## [586,]     1.784904 -0.96115930 -0.9986523  -1.5673732  -0.1332367
## [587,]    -1.025818 -0.96115930 -0.9986523  -0.6606284  -1.5028732
## [588,]     0.379543 -0.05776789 -0.9986523   0.2461164  -0.1332367
## [589,]     0.379543  1.74901494  0.2199577   0.2461164  -0.1332367
## [590,]    -1.025818 -0.96115930 -0.9986523  -1.5673732  -0.1332367
## [591,]     0.379543  0.84562353  0.2199577   0.2461164  -0.1332367
## [592,]     0.379543 -0.05776789  1.0323644  -1.5673732   1.2363997
## [593,]     0.379543  1.74901494 -0.5924489   1.1528613  -0.1332367
## [594,]     0.379543 -0.05776789 -0.1862456  -0.6606284  -0.1332367
## [595,]     1.784904 -0.96115930  0.6261610   0.2461164  -0.1332367
## [596,]     0.379543  2.65240635  0.2199577  -0.6606284   1.2363997
## [597,]     1.784904 -0.96115930  0.6261610   0.2461164   1.2363997
## [598,]    -1.025818 -0.05776789 -0.1862456   1.1528613  -0.1332367
## [599,]     0.379543 -0.96115930  0.6261610   0.2461164   1.2363997
## [600,]     0.379543 -0.96115930 -1.4048556  -0.6606284  -0.1332367
## [601,]    -1.025818 -0.05776789 -0.1862456   0.2461164  -0.1332367
## [602,]    -1.025818 -0.05776789 -0.9986523   0.2461164   1.2363997
## [603,]    -1.025818 -0.05776789 -0.1862456   1.1528613   1.2363997
## [604,]    -1.025818 -0.96115930  0.6261610   0.2461164   1.2363997
## [605,]     0.379543 -0.05776789 -0.1862456  -0.6606284  -0.1332367
## [606,]    -1.025818 -0.05776789 -1.8110589  -1.5673732  -1.5028732
## [607,]    -1.025818 -0.96115930  0.6261610   1.1528613   1.2363997
## [608,]     0.379543  0.84562353  1.0323644   1.1528613  -0.1332367
## [609,]     0.379543 -0.05776789  1.0323644   1.1528613   1.2363997
## [610,]     0.379543  1.74901494  0.2199577  -1.5673732  -0.1332367
## [611,]    -1.025818  0.84562353  0.2199577   1.1528613  -1.5028732
## [612,]     0.379543  0.84562353 -0.1862456   0.2461164   1.2363997
## [613,]     0.379543 -0.05776789  1.0323644  -0.6606284  -0.1332367
## [614,]     0.379543 -0.96115930 -1.4048556   1.1528613  -0.1332367
## [615,]    -1.025818 -0.96115930  0.6261610   0.2461164  -0.1332367
## [616,]     0.379543 -0.96115930  0.6261610   1.1528613  -0.1332367
## [617,]     0.379543  1.74901494 -0.5924489   0.2461164  -0.1332367
## [618,]     0.379543 -0.05776789 -1.8110589  -0.6606284   1.2363997
## [619,]     1.784904 -0.96115930  0.6261610  -1.5673732   1.2363997
## [620,]     1.784904 -0.05776789  1.0323644  -1.5673732  -1.5028732
## [621,]    -1.025818 -0.96115930  0.6261610  -1.5673732   1.2363997
## [622,]     0.379543 -0.05776789  1.0323644   1.1528613  -0.1332367
## [623,]     0.379543 -0.05776789  1.0323644   1.1528613  -1.5028732
## [624,]    -1.025818 -0.96115930  0.6261610   1.1528613  -1.5028732
## [625,]    -1.025818  0.84562353  1.0323644   1.1528613  -0.1332367
## [626,]     0.379543  0.84562353  1.0323644  -1.5673732  -1.5028732
## [627,]     1.784904 -0.05776789  0.6261610   0.2461164  -0.1332367
## [628,]    -1.025818  1.74901494 -0.1862456   1.1528613  -0.1332367
## [629,]    -1.025818 -0.05776789  1.0323644   0.2461164  -1.5028732
## [630,]    -1.025818 -0.96115930 -1.4048556   1.1528613  -1.5028732
## [631,]    -1.025818 -0.05776789 -0.1862456   1.1528613  -0.1332367
## [632,]     1.784904 -0.96115930 -0.9986523   1.1528613  -0.1332367
## [633,]     0.379543 -0.96115930  0.6261610   1.1528613   1.2363997
## [634,]    -1.025818 -0.96115930 -1.4048556  -1.5673732  -0.1332367
## [635,]     0.379543 -0.05776789  1.0323644  -1.5673732  -0.1332367
## [636,]    -1.025818  0.84562353 -0.1862456   0.2461164  -0.1332367
## [637,]     0.379543 -0.96115930  0.6261610  -0.6606284  -1.5028732
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## [638,]     0.379543 -0.96115930 -0.9986523     1.1528613   -1.5028732
## [639,]    -1.025818 -0.05776789  1.0323644    -1.5673732   -0.1332367
## [640,]     0.379543 -0.96115930  0.6261610    -1.5673732   -0.1332367
## [641,]    -1.025818 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [642,]     0.379543 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [643,]    -1.025818 -0.96115930  1.4385677    -0.6606284   -0.1332367
## [644,]     1.784904 -0.05776789 -0.9986523     1.1528613   -0.1332367
## [645,]     0.379543 -0.96115930  0.6261610     1.1528613   -0.1332367
## [646,]    -1.025818 -0.96115930  1.4385677     0.2461164   -1.5028732
## [647,]     0.379543  1.74901494  1.0323644     1.1528613   -0.1332367
## [648,]    -1.025818  0.84562353 -0.1862456    -0.6606284   -0.1332367
## [649,]     0.379543 -0.96115930  1.4385677     1.1528613   -0.1332367
## [650,]     0.379543  1.74901494  0.2199577     1.1528613    1.2363997
## [651,]     0.379543 -0.05776789 -1.8110589     1.1528613   -0.1332367
## [652,]     0.379543 -0.05776789  1.0323644     1.1528613   -0.1332367
## [653,]     0.379543  0.84562353  1.0323644    -0.6606284    1.2363997
## [654,]     0.379543  1.74901494 -0.5924489    -1.5673732   -1.5028732
## [655,]    -1.025818 -0.05776789 -1.4048556     1.1528613   -0.1332367
## [656,]     0.379543 -0.96115930 -1.4048556    -0.6606284   -1.5028732
## [657,]     0.379543 -0.96115930 -0.9986523     1.1528613    1.2363997
## [658,]    -1.025818 -0.96115930 -0.9986523     1.1528613   -1.5028732
## [659,]     0.379543 -0.96115930  0.6261610    -1.5673732   -0.1332367
## [660,]     0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [661,]    -1.025818 -0.96115930 -0.9986523     1.1528613   -1.5028732
## [662,]     0.379543 -0.05776789 -0.1862456    -0.6606284   -1.5028732
## [663,]    -1.025818 -0.96115930  1.4385677     0.2461164    1.2363997
## [664,]     0.379543 -0.96115930  0.6261610     1.1528613    1.2363997
## [665,]     0.379543 -0.05776789 -1.8110589     1.1528613   -0.1332367
## [666,]    -1.025818 -0.96115930  1.4385677     1.1528613    1.2363997
## [667,]     0.379543 -0.05776789 -0.1862456     0.2461164   -0.1332367
## [668,]    -2.431178 -0.96115930 -0.9986523     1.1528613   -1.5028732
## [669,]     0.379543 -0.96115930  0.6261610     0.2461164   -1.5028732
## [670,]     0.379543 -0.96115930 -0.9986523    -1.5673732   -0.1332367
## [671,]     0.379543 -0.96115930  0.6261610     0.2461164    1.2363997
## [672,]     0.379543 -0.96115930 -0.9986523    -0.6606284   -1.5028732
## [673,]    -1.025818 -0.05776789  1.0323644     0.2461164    1.2363997
## [674,]    -1.025818 -0.96115930  0.6261610    -1.5673732    1.2363997
## [675,]    -1.025818  0.84562353 -1.8110589    -0.6606284   -1.5028732
## [676,]    -1.025818 -0.96115930  1.4385677     0.2461164   -0.1332367
## [677,]     0.379543 -0.05776789 -1.8110589     1.1528613   -0.1332367
## [678,]     0.379543  0.84562353 -0.9986523    -0.6606284   -0.1332367
## [679,]     0.379543 -0.96115930  0.6261610     0.2461164   -0.1332367
## [680,]     0.379543 -0.05776789  1.0323644     0.2461164   -0.1332367
## [681,]     0.379543 -0.96115930  0.6261610     1.1528613    1.2363997
## [682,]     0.379543  0.84562353  0.2199577    -1.5673732   -0.1332367
## [683,]    -1.025818 -0.96115930 -0.9986523    -0.6606284   -0.1332367
## [684,]    -1.025818 -0.96115930  1.4385677    -0.6606284   -0.1332367
## [685,]    -1.025818  0.84562353  1.0323644    -0.6606284   -1.5028732
## [686,]    -1.025818 -0.05776789  1.0323644    -1.5673732    1.2363997
## [687,]     0.379543 -0.96115930 -0.9986523    -1.5673732    1.2363997
## [688,]     0.379543 -0.96115930 -0.9986523     0.2461164    1.2363997
## [689,]    -1.025818 -0.96115930  1.4385677    -0.6606284    1.2363997
## [690,]     0.379543 -0.96115930 -0.9986523    -1.5673732    1.2363997
## [691,]     0.379543 -0.05776789 -1.8110589     1.1528613   -0.1332367
```

```
## [692,]      0.379543 -0.96115930  0.6261610     -0.6606284    -1.5028732
## [693,]      0.379543 -0.05776789 -0.1862456     -1.5673732    -0.1332367
## [694,]     -1.025818  0.84562353  1.0323644      1.1528613    -0.1332367
## [695,]     -1.025818 -0.05776789 -1.8110589      1.1528613     1.2363997
## [696,]     -1.025818  0.84562353  1.0323644      0.2461164    -0.1332367
## [697,]      0.379543 -0.05776789 -0.9986523     -0.6606284    -0.1332367
## [698,]      0.379543 -0.96115930  1.4385677      1.1528613    -0.1332367
## [699,]      0.379543 -0.05776789  1.0323644      0.2461164    -0.1332367
## [700,]      0.379543  1.74901494 -0.5924489      1.1528613    -0.1332367
## [701,]      0.379543 -0.96115930  0.6261610      0.2461164     1.2363997
## [702,]      0.379543  1.74901494 -0.5924489      0.2461164    -1.5028732
## [703,]      0.379543  0.84562353  1.0323644      0.2461164    -1.5028732
## [704,]      0.379543 -0.05776789  1.0323644      1.1528613     1.2363997
## [705,]      0.379543  0.84562353  1.0323644      1.1528613    -1.5028732
## [706,]      1.784904  0.84562353  1.0323644      0.2461164     1.2363997
## [707,]      1.784904  1.74901494  1.0323644     -0.6606284     1.2363997
## [708,]      1.784904 -0.05776789 -0.1862456      0.2461164    -1.5028732
## [709,]      0.379543 -0.05776789  1.0323644      1.1528613    -1.5028732
## [710,]     -1.025818 -0.96115930  0.6261610     -1.5673732     1.2363997
## [711,]      0.379543  1.74901494 -0.5924489      0.2461164     1.2363997
## [712,]     -1.025818 -0.96115930  0.6261610     -1.5673732     1.2363997
## [713,]      0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [714,]      0.379543 -0.96115930 -0.9986523      1.1528613    -1.5028732
## [715,]      0.379543  1.74901494  0.2199577      1.1528613    -1.5028732
## [716,]      1.784904 -0.05776789 -1.8110589     -0.6606284    -0.1332367
## [717,]      0.379543  2.65240635  0.2199577      0.2461164    -1.5028732
## [718,]      0.379543 -0.96115930 -0.9986523     -0.6606284    -0.1332367
## [719,]      0.379543 -0.05776789 -0.9986523     -1.5673732    -0.1332367
## [720,]      0.379543 -0.05776789  1.0323644      1.1528613     1.2363997
## [721,]      0.379543 -0.96115930  0.6261610      0.2461164    -0.1332367
## [722,]      0.379543  1.74901494 -0.1862456      0.2461164    -0.1332367
## [723,]      0.379543 -0.96115930  0.6261610      0.2461164    -0.1332367
## [724,]      0.379543  0.84562353 -0.1862456      0.2461164    -1.5028732
## [725,]     -1.025818 -0.05776789 -0.1862456      0.2461164    -1.5028732
## [726,]     -1.025818 -0.96115930 -0.9986523     -0.6606284    -1.5028732
## [727,]      0.379543 -0.05776789 -0.1862456     -1.5673732    -0.1332367
## [728,]      0.379543 -0.96115930  0.6261610      1.1528613     1.2363997
## [729,]      0.379543  0.84562353 -0.1862456      0.2461164    -0.1332367
## [730,]      0.379543  0.84562353 -1.8110589      0.2461164    -1.5028732
## [731,]      1.784904  0.84562353  0.2199577     -1.5673732    -0.1332367
## [732,]     -1.025818 -0.96115930  0.6261610     -1.5673732     1.2363997
## [733,]      0.379543 -0.96115930 -0.9986523     -0.6606284     1.2363997
## [734,]      1.784904 -0.05776789 -0.1862456      1.1528613    -0.1332367
## [735,]     -2.431178 -0.96115930 -0.9986523     -1.5673732    -0.1332367
## [736,]     -1.025818 -0.05776789 -1.8110589      0.2461164     1.2363997
## [737,]     -1.025818  0.84562353 -1.8110589      0.2461164     1.2363997
## [738,]      0.379543 -0.05776789 -0.1862456      0.2461164     1.2363997
## [739,]     -1.025818  1.74901494 -0.1862456      1.1528613    -0.1332367
## [740,]      0.379543 -0.05776789 -0.1862456      1.1528613    -0.1332367
## [741,]      0.379543 -0.96115930 -0.9986523      1.1528613    -1.5028732
## [742,]      0.379543  2.65240635 -0.5924489      0.2461164    -0.1332367
## [743,]      0.379543 -0.96115930 -0.9986523      1.1528613    -0.1332367
## [744,]     -1.025818  1.74901494 -0.1862456      1.1528613     1.2363997
## [745,]     -2.431178 -0.05776789 -1.8110589     -0.6606284    -0.1332367
```

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```
## [746,]      0.379543 -0.05776789 -1.8110589      -0.6606284      -0.1332367
## [747,]     -2.431178  2.65240635  0.2199577       0.2461164      -1.5028732
## [748,]      0.379543 -0.05776789  1.0323644       1.1528613       1.2363997
## [749,]     -2.431178 -0.05776789  1.0323644      -1.5673732       1.2363997
## [750,]     -2.431178  2.65240635 -0.5924489       1.1528613      -0.1332367
## [751,]      1.784904  1.74901494  1.0323644       1.1528613      -0.1332367
## [752,]      0.379543 -0.05776789  1.0323644       0.2461164      -0.1332367
## [753,]      1.784904 -0.96115930 -0.9986523      -1.5673732       1.2363997
## [754,]      0.379543  0.84562353 -0.1862456      -1.5673732       1.2363997
## [755,]     -1.025818 -0.96115930  1.4385677       1.1528613       1.2363997
## [756,]      0.379543  1.74901494 -0.5924489       1.1528613      -0.1332367
## [757,]      0.379543 -0.96115930 -0.9986523       0.2461164       1.2363997
## [758,]      1.784904 -0.05776789  1.0323644       1.1528613      -1.5028732
## [759,]      0.379543  0.84562353 -0.5924489       1.1528613      -0.1332367
## [760,]      0.379543 -0.96115930 -1.4048556      -0.6606284       1.2363997
## [761,]     -1.025818  0.84562353  1.0323644      -0.6606284      -0.1332367
## [762,]      0.379543 -0.05776789 -0.9986523       0.2461164      -1.5028732
## [763,]      0.379543 -0.96115930  0.6261610      -1.5673732      -0.1332367
## [764,]      0.379543 -0.96115930  1.4385677       0.2461164      -0.1332367
## [765,]      0.379543 -0.96115930  1.4385677      -0.6606284      -0.1332367
## [766,]      0.379543 -0.96115930  0.6261610       0.2461164      -0.1332367
## [767,]      0.379543  2.65240635  0.2199577       0.2461164      -0.1332367
## [768,]      0.379543 -0.05776789 -1.8110589      -0.6606284       1.2363997
## [769,]      0.379543 -0.05776789  1.0323644      -1.5673732      -0.1332367
## [770,]     -1.025818 -0.96115930  0.6261610       0.2461164      -1.5028732
## [771,]      0.379543  2.65240635  0.2199577       1.1528613      -1.5028732
## [772,]     -1.025818  0.84562353  1.0323644       0.2461164      -0.1332367
## [773,]      0.379543 -0.96115930  0.6261610       0.2461164      -0.1332367
## [774,]     -1.025818  0.84562353 -0.1862456       1.1528613       1.2363997
## [775,]     -1.025818  1.74901494 -0.5924489      -1.5673732       1.2363997
## [776,]     -1.025818  0.84562353  1.0323644       1.1528613      -1.5028732
## [777,]      0.379543 -0.96115930  1.4385677       1.1528613       1.2363997
## [778,]     -1.025818 -0.96115930 -0.9986523      -1.5673732       1.2363997
## [779,]     -1.025818 -0.05776789  0.6261610      -1.5673732      -1.5028732
## [780,]      0.379543 -0.96115930  0.6261610       0.2461164      -0.1332367
## [781,]     -1.025818  0.84562353 -1.8110589      -1.5673732       1.2363997
## [782,]     -1.025818 -0.96115930 -0.9986523      -1.5673732      -0.1332367
## [783,]      0.379543 -0.05776789 -0.1862456      -1.5673732      -0.1332367
## [784,]      1.784904 -0.96115930  0.6261610       0.2461164      -0.1332367
## [785,]     -1.025818  0.84562353 -1.8110589       0.2461164      -0.1332367
## [786,]      0.379543  0.84562353 -1.8110589       1.1528613      -0.1332367
## [787,]     -2.431178 -0.96115930 -0.9986523       0.2461164      -0.1332367
## [788,]      0.379543  0.84562353 -0.1862456      -0.6606284      -0.1332367
## [789,]      0.379543 -0.05776789  0.6261610       0.2461164       1.2363997
## [790,]     -1.025818  0.84562353 -1.4048556      -1.5673732      -0.1332367
## [791,]     -1.025818  0.84562353 -1.8110589       1.1528613      -1.5028732
## [792,]      0.379543  0.84562353  1.0323644      -1.5673732       1.2363997
## [793,]     -1.025818 -0.05776789  0.6261610       0.2461164       1.2363997
## [794,]      0.379543 -0.96115930 -0.9986523       0.2461164      -1.5028732
## [795,]      0.379543 -0.05776789 -1.8110589       1.1528613       1.2363997
## [796,]     -1.025818 -0.05776789  1.0323644       1.1528613      -1.5028732
## [797,]      0.379543 -0.96115930 -0.9986523       1.1528613      -0.1332367
## [798,]      0.379543 -0.96115930 -0.9986523       0.2461164      -1.5028732
## [799,]     -1.025818 -0.96115930  0.6261610      -0.6606284       1.2363997
```

```
## [800,]      0.379543  1.74901494 -0.5924489    -1.5673732   -0.1332367
## [801,]     -1.025818 -0.96115930 -0.9986523    -0.6606284   -1.5028732
## [802,]      0.379543 -0.05776789  1.0323644     0.2461164    1.2363997
## [803,]      0.379543 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [804,]     -1.025818 -0.96115930  0.6261610     1.1528613   -0.1332367
## [805,]      1.784904  1.74901494 -0.5924489     1.1528613    1.2363997
## [806,]     -1.025818 -0.05776789  1.0323644     0.2461164   -0.1332367
## [807,]      0.379543  0.84562353 -1.8110589    -0.6606284    1.2363997
## [808,]     -1.025818  0.84562353  1.0323644     0.2461164   -1.5028732
## [809,]      0.379543 -0.96115930  0.6261610     1.1528613   -1.5028732
## [810,]      0.379543  0.84562353 -0.1862456    -0.6606284   -1.5028732
## [811,]      0.379543  1.74901494 -0.5924489     0.2461164   -0.1332367
## [812,]      0.379543  0.84562353  1.0323644    -0.6606284    1.2363997
## [813,]      0.379543  0.84562353 -0.1862456    -1.5673732   -0.1332367
## [814,]      0.379543  1.74901494 -1.8110589     1.1528613   -1.5028732
## [815,]     -1.025818  2.65240635  0.2199577     0.2461164    1.2363997
## [816,]     -1.025818 -0.96115930  0.6261610    -0.6606284    1.2363997
## [817,]      0.379543 -0.05776789 -0.9986523    -0.6606284    1.2363997
## [818,]      0.379543 -0.05776789 -0.1862456     1.1528613    1.2363997
## [819,]      1.784904 -0.96115930  1.4385677     1.1528613   -0.1332367
## [820,]     -1.025818 -0.96115930  0.6261610    -0.6606284   -0.1332367
## [821,]      0.379543 -0.05776789  1.0323644     1.1528613   -1.5028732
## [822,]     -1.025818  1.74901494  1.0323644    -0.6606284   -0.1332367
## [823,]      0.379543 -0.05776789 -0.1862456     0.2461164    1.2363997
## [824,]      0.379543 -0.96115930  0.6261610    -0.6606284   -1.5028732
## [825,]     -2.431178 -0.05776789 -0.9986523     1.1528613    1.2363997
## [826,]     -1.025818 -0.05776789 -0.1862456     1.1528613   -0.1332367
## [827,]      1.784904 -0.96115930 -1.4048556     0.2461164   -0.1332367
## [828,]     -1.025818 -0.96115930  0.6261610     0.2461164   -1.5028732
## [829,]      0.379543 -0.96115930 -0.9986523     0.2461164    1.2363997
## [830,]      0.379543 -0.05776789  1.0323644    -1.5673732    1.2363997
## [831,]      0.379543 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [832,]      0.379543 -0.96115930 -0.9986523     0.2461164   -0.1332367
## [833,]     -1.025818 -0.05776789 -1.8110589     1.1528613   -1.5028732
## [834,]     -1.025818 -0.96115930  0.6261610     0.2461164   -0.1332367
## [835,]      0.379543 -0.05776789  1.0323644     0.2461164   -0.1332367
## [836,]      0.379543 -0.96115930 -1.4048556     0.2461164    1.2363997
## [837,]     -1.025818  0.84562353  1.0323644    -1.5673732   -0.1332367
## [838,]      0.379543  0.84562353  0.2199577     0.2461164    1.2363997
## [839,]      0.379543  1.74901494  1.0323644    -1.5673732    1.2363997
## [840,]      0.379543 -0.05776789  1.0323644    -1.5673732    1.2363997
## [841,]     -1.025818 -0.96115930 -0.9986523     0.2461164   -0.1332367
## [842,]      0.379543 -0.96115930 -0.9986523    -0.6606284    1.2363997
## [843,]      0.379543 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [844,]      1.784904 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [845,]     -1.025818 -0.05776789  1.0323644     0.2461164   -0.1332367
## [846,]     -1.025818 -0.05776789  0.6261610     1.1528613   -0.1332367
## [847,]     -1.025818  0.84562353 -0.1862456    -0.6606284   -1.5028732
## [848,]     -1.025818 -0.05776789 -1.8110589    -1.5673732    1.2363997
## [849,]     -1.025818 -0.96115930 -0.9986523     1.1528613   -0.1332367
## [850,]     -2.431178 -0.05776789  1.0323644     0.2461164    1.2363997
## [851,]      0.379543 -0.96115930  1.4385677    -1.5673732   -1.5028732
## [852,]      0.379543  2.65240635 -0.5924489    -1.5673732   -1.5028732
## [853,]      0.379543 -0.96115930 -0.9986523     1.1528613   -0.1332367
```

```
## [854,]      0.379543 -0.96115930  0.6261610    -1.5673732    1.2363997
## [855,]      0.379543 -0.96115930  0.6261610     0.2461164   -0.1332367
## [856,]     -1.025818 -0.05776789 -0.1862456     1.1528613   -0.1332367
## [857,]     -1.025818 -0.96115930 -0.9986523     0.2461164    1.2363997
## [858,]      0.379543 -0.96115930  0.6261610     0.2461164    1.2363997
## [859,]      0.379543  2.65240635 -0.5924489     0.2461164   -1.5028732
## [860,]     -2.431178 -0.96115930  0.6261610     1.1528613   -0.1332367
## [861,]     -1.025818 -0.96115930  0.6261610     1.1528613   -0.1332367
## [862,]      0.379543  1.74901494 -0.5924489    -1.5673732   -0.1332367
## [863,]     -2.431178 -0.96115930  0.6261610     0.2461164    1.2363997
## [864,]      0.379543 -0.96115930 -1.4048556     0.2461164   -0.1332367
## [865,]     -1.025818 -0.96115930  0.6261610    -1.5673732   -1.5028732
## [866,]      0.379543 -0.05776789  1.0323644    -1.5673732   -1.5028732
## [867,]      0.379543 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [868,]      0.379543  1.74901494 -0.5924489    -1.5673732   -0.1332367
## [869,]     -1.025818 -0.96115930 -0.9986523    -1.5673732   -0.1332367
## [870,]      0.379543  2.65240635  0.2199577    -0.6606284   -0.1332367
## [871,]      0.379543 -0.05776789  1.0323644    -1.5673732   -0.1332367
## [872,]      0.379543 -0.96115930 -0.9986523    -0.6606284   -0.1332367
## [873,]      0.379543 -0.05776789  1.0323644     0.2461164   -0.1332367
## [874,]     -2.431178 -0.96115930 -0.9986523     0.2461164   -1.5028732
## [875,]      0.379543 -0.05776789 -0.9986523     0.2461164   -1.5028732
## [876,]      0.379543 -0.05776789  0.6261610     1.1528613    1.2363997
## [877,]      1.784904 -0.96115930  1.4385677     1.1528613    1.2363997
## [878,]      0.379543 -0.05776789 -0.1862456     1.1528613   -1.5028732
## [879,]      1.784904 -0.05776789 -1.4048556    -1.5673732   -0.1332367
## [880,]      1.784904 -0.05776789  1.0323644     1.1528613   -1.5028732
## [881,]     -1.025818 -0.96115930 -0.9986523    -0.6606284   -0.1332367
## [882,]      0.379543 -0.05776789  0.6261610     0.2461164    1.2363997
## [883,]     -2.431178  0.84562353 -0.1862456    -1.5673732   -1.5028732
## [884,]      0.379543 -0.96115930  0.6261610     1.1528613   -0.1332367
## [885,]     -1.025818 -0.05776789  1.0323644    -0.6606284   -1.5028732
## [886,]      0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [887,]      0.379543 -0.96115930  0.6261610    -0.6606284   -0.1332367
## [888,]      0.379543  0.84562353  0.2199577    -1.5673732   -0.1332367
## [889,]     -1.025818  0.84562353  1.0323644     1.1528613   -0.1332367
## [890,]      0.379543 -0.96115930  0.6261610    -1.5673732   -0.1332367
## [891,]      0.379543  0.84562353 -0.1862456     0.2461164   -1.5028732
## [892,]      1.784904 -0.96115930  0.6261610     1.1528613   -0.1332367
## [893,]     -1.025818 -0.96115930  0.6261610    -0.6606284    1.2363997
## [894,]      0.379543 -0.96115930  0.6261610     1.1528613   -1.5028732
## [895,]      0.379543  1.74901494  0.2199577     1.1528613   -0.1332367
## [896,]      0.379543 -0.05776789 -1.8110589    -1.5673732   -0.1332367
## [897,]     -1.025818 -0.05776789 -1.8110589    -1.5673732    1.2363997
## [898,]     -1.025818 -0.05776789  1.0323644     1.1528613    1.2363997
## [899,]     -2.431178  2.65240635  0.2199577     1.1528613   -0.1332367
## [900,]     -1.025818  2.65240635 -0.5924489     0.2461164   -0.1332367
## [901,]      0.379543 -0.96115930  0.6261610    -0.6606284   -0.1332367
## [902,]      1.784904 -0.96115930 -0.9986523    -0.6606284    1.2363997
## [903,]      0.379543 -0.96115930  0.6261610     0.2461164   -1.5028732
## [904,]      0.379543 -0.05776789 -1.8110589     1.1528613   -1.5028732
## [905,]     -1.025818  2.65240635  0.2199577     1.1528613    1.2363997
## [906,]     -1.025818  1.74901494  0.2199577     1.1528613   -1.5028732
## [907,]      1.784904 -0.96115930  0.6261610     0.2461164   -0.1332367
```

```
## [908,]      0.379543  2.65240635 -0.5924489     -0.6606284     -0.1332367
## [909,]      1.784904  0.84562353  1.0323644      0.2461164     -1.5028732
## [910,]      1.784904 -0.96115930  0.6261610      1.1528613      1.2363997
## [911,]      0.379543 -0.96115930  0.6261610      0.2461164     -0.1332367
## [912,]     -2.431178 -0.96115930  1.4385677      1.1528613      1.2363997
## [913,]      0.379543 -0.96115930  0.6261610      1.1528613      1.2363997
## [914,]     -2.431178  2.65240635 -0.5924489     -0.6606284      1.2363997
## [915,]     -1.025818  1.74901494 -1.8110589     -0.6606284     -1.5028732
## [916,]     -1.025818 -0.96115930 -0.9986523      0.2461164      1.2363997
## [917,]     -1.025818  2.65240635 -0.5924489     -0.6606284     -0.1332367
## [918,]      0.379543 -0.05776789  1.0323644     -1.5673732      1.2363997
## [919,]      0.379543  2.65240635 -0.5924489     -0.6606284     -1.5028732
## [920,]      0.379543  0.84562353 -0.1862456      1.1528613      1.2363997
## [921,]      0.379543 -0.05776789 -0.9986523     -0.6606284     -1.5028732
## [922,]      0.379543 -0.96115930 -0.9986523      0.2461164      1.2363997
## [923,]      1.784904  2.65240635 -0.5924489     -1.5673732     -1.5028732
## [924,]     -1.025818 -0.05776789 -1.4048556     -0.6606284     -0.1332367
## [925,]      0.379543 -0.96115930  0.6261610      0.2461164     -0.1332367
## [926,]      1.784904 -0.05776789  0.6261610     -0.6606284     -0.1332367
## [927,]     -1.025818  0.84562353  1.0323644      1.1528613      1.2363997
## [928,]      0.379543 -0.05776789 -0.1862456     -0.6606284      1.2363997
## [929,]      0.379543  0.84562353 -1.8110589      1.1528613     -0.1332367
## [930,]     -1.025818 -0.96115930 -0.9986523      1.1528613     -0.1332367
## [931,]     -1.025818 -0.96115930 -0.9986523      0.2461164      1.2363997
## [932,]      0.379543 -0.05776789 -0.1862456      0.2461164      1.2363997
## [933,]      0.379543 -0.96115930 -0.9986523      0.2461164     -1.5028732
## [934,]      0.379543 -0.96115930  0.6261610     -1.5673732      1.2363997
## [935,]      0.379543 -0.96115930  0.6261610     -0.6606284      1.2363997
## [936,]      1.784904 -0.05776789  1.0323644      1.1528613     -0.1332367
## [937,]      0.379543  2.65240635 -0.5924489     -0.6606284      1.2363997
## [938,]     -1.025818  1.74901494 -0.5924489     -0.6606284     -1.5028732
## [939,]      0.379543 -0.96115930  0.6261610      0.2461164     -1.5028732
## [940,]      0.379543 -0.05776789 -0.9986523      0.2461164     -0.1332367
## [941,]      0.379543 -0.96115930  0.6261610     -1.5673732      1.2363997
## [942,]     -1.025818 -0.05776789 -0.9986523      1.1528613     -0.1332367
## [943,]      0.379543  0.84562353 -1.8110589      0.2461164     -0.1332367
## [944,]      0.379543 -0.96115930 -1.4048556     -1.5673732      1.2363997
## [945,]     -2.431178 -0.05776789 -0.9986523      1.1528613     -0.1332367
## [946,]      0.379543  1.74901494  0.2199577     -1.5673732     -0.1332367
## [947,]     -1.025818  0.84562353  1.0323644     -0.6606284      1.2363997
## [948,]      0.379543  0.84562353  1.0323644     -0.6606284      1.2363997
## [949,]      0.379543  0.84562353 -0.5924489     -1.5673732     -0.1332367
## [950,]      0.379543 -0.05776789 -0.1862456      0.2461164      1.2363997
## [951,]      0.379543  0.84562353  1.0323644      0.2461164     -1.5028732
## [952,]     -2.431178 -0.05776789  1.0323644     -0.6606284      1.2363997
## [953,]      0.379543 -0.96115930  1.4385677     -0.6606284      1.2363997
## [954,]      0.379543 -0.96115930 -0.9986523     -1.5673732     -0.1332367
## [955,]      0.379543  1.74901494 -0.5924489      0.2461164     -0.1332367
## [956,]     -2.431178  2.65240635 -0.5924489      0.2461164     -0.1332367
## [957,]      0.379543  2.65240635 -0.5924489     -0.6606284      1.2363997
## [958,]      0.379543 -0.96115930  0.6261610      0.2461164     -1.5028732
## [959,]      0.379543  0.84562353 -1.8110589      1.1528613     -1.5028732
## [960,]      0.379543 -0.05776789  0.6261610      1.1528613      1.2363997
## [961,]      0.379543 -0.05776789  1.0323644     -1.5673732     -1.5028732
```

```
## [962,]    0.379543 -0.05776789  0.6261610    0.2461164    1.2363997
## [963,]    0.379543  1.74901494 -0.5924489   -0.6606284   -1.5028732
## [964,]    0.379543 -0.05776789  1.0323644   -1.5673732   -1.5028732
## [965,]    0.379543 -0.05776789  1.0323644   -1.5673732    1.2363997
## [966,]    0.379543 -0.96115930 -0.9986523    1.1528613   -0.1332367
## [967,]   -1.025818  0.84562353 -0.1862456   -1.5673732   -0.1332367
## [968,]    0.379543 -0.96115930 -0.9986523   -0.6606284   -0.1332367
## [969,]    1.784904 -0.05776789  1.0323644   -1.5673732   -0.1332367
## [970,]    0.379543  0.84562353 -0.1862456    1.1528613    1.2363997
## [971,]    1.784904 -0.96115930  1.4385677    1.1528613   -0.1332367
## [972,]   -1.025818  1.74901494 -0.1862456   -0.6606284    1.2363997
## [973,]    0.379543 -0.96115930 -0.9986523    1.1528613    1.2363997
## [974,]   -1.025818 -0.05776789 -0.9986523    1.1528613   -0.1332367
## [975,]   -2.431178 -0.05776789  1.0323644    1.1528613    1.2363997
## [976,]    1.784904  1.74901494  1.0323644    0.2461164    1.2363997
## [977,]    0.379543  1.74901494 -0.1862456   -0.6606284   -0.1332367
## [978,]   -1.025818 -0.96115930  0.6261610    0.2461164   -1.5028732
## [979,]    1.784904 -0.05776789 -1.8110589    0.2461164   -1.5028732
## [980,]    0.379543 -0.05776789 -0.9986523    0.2461164   -0.1332367
## [981,]   -1.025818 -0.96115930  1.4385677    1.1528613    1.2363997
## [982,]    0.379543 -0.05776789  1.0323644    0.2461164   -0.1332367
## [983,]    1.784904 -0.96115930  0.6261610    0.2461164   -1.5028732
## [984,]    0.379543 -0.05776789 -1.8110589    1.1528613    1.2363997
## [985,]   -1.025818 -0.05776789  1.0323644   -1.5673732   -0.1332367
## [986,]    0.379543 -0.05776789 -0.1862456    0.2461164   -0.1332367
## [987,]   -1.025818 -0.05776789  1.0323644    1.1528613   -0.1332367
## [988,]    0.379543  0.84562353  1.0323644   -0.6606284   -0.1332367
## [989,]    0.379543 -0.05776789  0.6261610    1.1528613   -1.5028732
## [990,]    0.379543 -0.96115930  0.6261610    0.2461164   -0.1332367
## [991,]    0.379543 -0.05776789  1.0323644    1.1528613   -0.1332367
## [992,]    0.379543 -0.05776789  1.0323644   -0.6606284   -0.1332367
## [993,]    0.379543  0.84562353 -1.8110589    0.2461164   -0.1332367
## [994,]    1.784904 -0.05776789  1.0323644    0.2461164   -0.1332367
## [995,]    1.784904  1.74901494 -0.1862456    0.2461164   -0.1332367
## [996,]   -1.025818 -0.05776789  0.6261610    0.2461164    1.2363997
## [997,]   -1.025818 -0.05776789  1.0323644    1.1528613   -0.1332367
## [998,]    0.379543 -0.96115930  0.6261610    0.2461164    1.2363997
## [999,]   -1.025818 -0.96115930  0.6261610    1.1528613    1.2363997
## [1000,]   0.379543  1.74901494 -0.5924489   -1.5673732   -0.1332367
## [1001,]   0.379543 -0.96115930 -0.9986523   -1.5673732   -0.1332367
## [1002,]   0.379543 -0.96115930 -0.9986523    0.2461164    1.2363997
## [1003,]   0.379543  0.84562353 -0.1862456    1.1528613    1.2363997
## [1004,]   0.379543 -0.96115930 -0.9986523    1.1528613   -0.1332367
## [1005,]   1.784904 -0.96115930 -0.9986523   -1.5673732    1.2363997
## [1006,]  -1.025818  0.84562353 -1.4048556   -1.5673732    1.2363997
## [1007,]  -1.025818 -0.05776789 -0.9986523   -1.5673732    1.2363997
## [1008,]   0.379543  0.84562353 -1.8110589    1.1528613    1.2363997
## [1009,]   0.379543  1.74901494  0.2199577    1.1528613    1.2363997
## [1010,]   0.379543  2.65240635  0.2199577   -1.5673732   -0.1332367
## [1011,]   1.784904  1.74901494  0.2199577    1.1528613   -1.5028732
## [1012,]   0.379543 -0.05776789  1.0323644   -0.6606284    1.2363997
## [1013,]  -2.431178 -0.96115930  1.4385677    0.2461164    1.2363997
## [1014,]   0.379543 -0.05776789  1.0323644   -1.5673732   -1.5028732
## [1015,]   0.379543  1.74901494  0.2199577   -0.6606284    1.2363997
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## [1016,]      0.379543 -0.96115930  0.6261610     -1.5673732   -1.5028732
## [1017,]     -1.025818 -0.96115930  0.6261610     -0.6606284    1.2363997
## [1018,]      0.379543 -0.96115930 -0.9986523     -1.5673732   -0.1332367
## [1019,]     -1.025818 -0.05776789 -0.9986523      1.1528613    1.2363997
## [1020,]     -1.025818 -0.05776789  1.0323644     -1.5673732   -0.1332367
## [1021,]      0.379543 -0.96115930  0.6261610      1.1528613   -0.1332367
## [1022,]     -1.025818 -0.96115930  1.4385677     -1.5673732   -0.1332367
## [1023,]      1.784904 -0.96115930 -0.9986523      0.2461164    1.2363997
## [1024,]      0.379543 -0.96115930  0.6261610     -1.5673732   -0.1332367
## [1025,]      0.379543  1.74901494  0.2199577      0.2461164   -0.1332367
## [1026,]      0.379543 -0.05776789  1.0323644      0.2461164   -0.1332367
## [1027,]      0.379543 -0.05776789  1.0323644      1.1528613   -0.1332367
## [1028,]     -1.025818 -0.96115930 -0.9986523     -0.6606284   -0.1332367
## [1029,]      1.784904 -0.96115930  0.6261610      0.2461164   -0.1332367
## [1030,]      0.379543 -0.05776789 -0.9986523      0.2461164   -1.5028732
## [1031,]      0.379543  0.84562353  1.0323644      1.1528613   -1.5028732
## [1032,]      0.379543  0.84562353  1.0323644      1.1528613   -1.5028732
## [1033,]     -1.025818 -0.96115930 -0.9986523     -1.5673732    1.2363997
## [1034,]      1.784904  0.84562353 -0.1862456     -0.6606284    1.2363997
## [1035,]     -2.431178  0.84562353 -1.8110589     -1.5673732   -1.5028732
## [1036,]      1.784904 -0.96115930 -1.4048556     -0.6606284    1.2363997
## [1037,]      0.379543 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [1038,]      0.379543  0.84562353 -0.1862456      1.1528613   -0.1332367
## [1039,]      0.379543 -0.05776789  1.0323644     -1.5673732   -1.5028732
## [1040,]      0.379543 -0.96115930 -1.4048556      0.2461164   -0.1332367
## [1041,]     -1.025818  0.84562353  0.2199577     -0.6606284   -1.5028732
## [1042,]      0.379543 -0.05776789  1.0323644     -1.5673732    1.2363997
## [1043,]     -1.025818 -0.96115930 -0.9986523      0.2461164    1.2363997
## [1044,]      1.784904  1.74901494  0.2199577     -0.6606284    1.2363997
## [1045,]      0.379543 -0.05776789 -1.8110589      0.2461164   -0.1332367
## [1046,]      0.379543 -0.96115930  0.6261610      0.2461164   -1.5028732
## [1047,]      0.379543 -0.96115930  0.6261610     -0.6606284    1.2363997
## [1048,]      0.379543 -0.05776789  1.0323644     -1.5673732   -0.1332367
## [1049,]     -2.431178 -0.05776789  1.0323644     -1.5673732    1.2363997
## [1050,]      0.379543 -0.05776789  1.0323644      0.2461164   -0.1332367
## [1051,]      0.379543 -0.96115930 -0.9986523      1.1528613    1.2363997
## [1052,]      0.379543 -0.05776789  1.0323644      0.2461164   -0.1332367
## [1053,]      0.379543 -0.96115930  0.6261610      0.2461164   -1.5028732
## [1054,]      1.784904 -0.05776789  0.6261610      0.2461164   -0.1332367
## [1055,]      0.379543  0.84562353 -1.8110589     -0.6606284   -1.5028732
## [1056,]      0.379543  1.74901494  0.2199577     -1.5673732   -1.5028732
## [1057,]      0.379543 -0.96115930  1.4385677      0.2461164   -0.1332367
## [1058,]      0.379543 -0.05776789  1.0323644     -0.6606284    1.2363997
## [1059,]     -1.025818 -0.05776789  1.0323644     -0.6606284    1.2363997
## [1060,]      0.379543 -0.96115930  1.4385677      0.2461164   -0.1332367
## [1061,]      0.379543 -0.96115930 -0.9986523     -1.5673732    1.2363997
## [1062,]      0.379543 -0.96115930  1.4385677     -0.6606284   -0.1332367
## [1063,]      0.379543  0.84562353 -0.1862456      0.2461164    1.2363997
## [1064,]     -1.025818 -0.05776789  1.0323644      0.2461164   -1.5028732
## [1065,]      0.379543 -0.96115930 -1.4048556      0.2461164   -1.5028732
## [1066,]      0.379543 -0.05776789 -1.8110589      0.2461164   -0.1332367
## [1067,]     -1.025818 -0.96115930 -0.9986523     -0.6606284   -0.1332367
## [1068,]      0.379543 -0.05776789  1.0323644      0.2461164   -0.1332367
## [1069,]     -1.025818 -0.96115930 -0.9986523     -1.5673732    1.2363997
```

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## [1070,]        -1.025818 -0.96115930  0.6261610        0.2461164       -1.5028732
## [1071,]         0.379543 -0.05776789  1.0323644       -1.5673732        1.2363997
## [1072,]        -1.025818 -0.05776789 -0.9986523       -1.5673732       -0.1332367
## [1073,]         0.379543 -0.96115930 -0.9986523       -0.6606284       -0.1332367
## [1074,]        -2.431178 -0.05776789 -0.1862456       -0.6606284       -0.1332367
## [1075,]         0.379543 -0.05776789 -1.8110589        0.2461164        1.2363997
## [1076,]         0.379543  0.84562353 -0.5924489        1.1528613        1.2363997
## [1077,]         0.379543  1.74901494 -0.5924489        1.1528613       -1.5028732
## [1078,]        -1.025818 -0.96115930  0.6261610       -1.5673732        1.2363997
## [1079,]         0.379543  1.74901494  0.2199577       -1.5673732       -0.1332367
## [1080,]         0.379543  0.84562353 -0.1862456       -0.6606284        1.2363997
## [1081,]         0.379543  1.74901494 -0.5924489       -0.6606284       -0.1332367
## [1082,]        -1.025818  0.84562353 -1.8110589       -0.6606284        1.2363997
## [1083,]         0.379543 -0.05776789 -0.9986523        0.2461164        1.2363997
## [1084,]         0.379543 -0.96115930 -0.9986523       -1.5673732        1.2363997
## [1085,]        -1.025818  0.84562353  1.0323644        0.2461164       -0.1332367
## [1086,]         0.379543 -0.96115930  0.6261610        0.2461164        1.2363997
## [1087,]        -2.431178  1.74901494  0.2199577        1.1528613        1.2363997
## [1088,]         0.379543 -0.96115930  1.4385677        0.2461164       -0.1332367
## [1089,]        -1.025818 -0.96115930 -0.9986523       -0.6606284       -0.1332367
## [1090,]         0.379543 -0.05776789  0.6261610        1.1528613       -0.1332367
## [1091,]        -2.431178 -0.05776789 -1.8110589       -1.5673732       -0.1332367
## [1092,]        -1.025818 -0.05776789 -0.1862456       -0.6606284        1.2363997
## [1093,]         0.379543 -0.96115930  0.6261610        1.1528613       -0.1332367
## [1094,]         0.379543  0.84562353 -1.8110589        1.1528613       -0.1332367
## [1095,]         0.379543 -0.05776789  1.0323644       -1.5673732       -0.1332367
## [1096,]         0.379543 -0.05776789 -0.9986523        0.2461164       -0.1332367
## [1097,]         0.379543  1.74901494 -0.5924489        1.1528613        1.2363997
## [1098,]        -1.025818 -0.96115930 -0.9986523       -1.5673732       -1.5028732
## [1099,]         0.379543 -0.05776789 -1.8110589        1.1528613       -1.5028732
## [1100,]         0.379543  0.84562353 -1.8110589       -0.6606284       -1.5028732
## [1101,]        -1.025818 -0.96115930  1.4385677        0.2461164       -0.1332367
## [1102,]        -1.025818 -0.05776789  0.6261610       -0.6606284       -0.1332367
## [1103,]         0.379543 -0.96115930  1.4385677        1.1528613        1.2363997
## [1104,]         0.379543 -0.05776789  1.0323644        0.2461164       -1.5028732
## [1105,]         1.784904 -0.96115930  0.6261610        0.2461164       -0.1332367
## [1106,]         0.379543 -0.05776789  1.0323644       -1.5673732       -0.1332367
## [1107,]        -1.025818 -0.05776789  1.0323644       -1.5673732       -0.1332367
## [1108,]         0.379543 -0.05776789 -1.4048556        0.2461164       -0.1332367
## [1109,]        -1.025818 -0.96115930 -0.9986523       -1.5673732        1.2363997
## [1110,]         0.379543  0.84562353  1.0323644       -0.6606284       -0.1332367
## [1111,]         0.379543 -0.96115930 -0.9986523       -1.5673732       -1.5028732
## [1112,]        -1.025818  0.84562353 -0.1862456        1.1528613       -0.1332367
## [1113,]         0.379543 -0.05776789 -0.1862456       -0.6606284       -0.1332367
## [1114,]         0.379543 -0.05776789  0.6261610       -1.5673732       -0.1332367
## [1115,]         0.379543 -0.96115930  0.6261610       -1.5673732       -0.1332367
## [1116,]         0.379543 -0.96115930  0.6261610        1.1528613        1.2363997
## [1117,]        -1.025818  2.65240635 -0.5924489        1.1528613       -0.1332367
## [1118,]         0.379543 -0.05776789  0.6261610        1.1528613       -0.1332367
## [1119,]         0.379543 -0.96115930  0.6261610        1.1528613       -0.1332367
## [1120,]         0.379543 -0.05776789  1.0323644       -0.6606284       -0.1332367
## [1121,]         0.379543 -0.05776789  1.0323644       -0.6606284        1.2363997
## [1122,]         0.379543 -0.05776789  1.0323644        0.2461164        1.2363997
## [1123,]         0.379543 -0.96115930 -0.9986523       -1.5673732        1.2363997
```

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## [1124,]      0.379543 -0.05776789 -1.8110589      0.2461164    1.2363997
## [1125,]      1.784904  0.84562353  1.0323644      0.2461164   -0.1332367
## [1126,]      0.379543 -0.05776789 -1.8110589      1.1528613   -1.5028732
## [1127,]      0.379543  2.65240635 -0.5924489      0.2461164   -0.1332367
## [1128,]      1.784904 -0.96115930  0.6261610      0.2461164   -0.1332367
## [1129,]      1.784904 -0.05776789 -0.9986523     -1.5673732   -0.1332367
## [1130,]     -1.025818  2.65240635 -0.5924489      1.1528613    1.2363997
## [1131,]      1.784904 -0.05776789 -0.9986523      0.2461164   -0.1332367
## [1132,]     -1.025818 -0.05776789 -1.8110589      0.2461164   -0.1332367
## [1133,]      0.379543 -0.05776789  1.0323644     -1.5673732   -0.1332367
## [1134,]      1.784904 -0.96115930 -0.9986523     -0.6606284   -1.5028732
## [1135,]     -1.025818 -0.96115930 -0.9986523      1.1528613   -0.1332367
## [1136,]      1.784904  1.74901494 -0.5924489     -1.5673732    1.2363997
## [1137,]      0.379543 -0.96115930 -0.9986523     -0.6606284   -0.1332367
## [1138,]     -1.025818 -0.96115930  0.6261610      0.2461164   -0.1332367
## [1139,]      0.379543  1.74901494 -1.8110589      0.2461164   -0.1332367
## [1140,]      1.784904 -0.96115930  0.6261610      1.1528613   -0.1332367
## [1141,]      0.379543  2.65240635  0.2199577      1.1528613   -1.5028732
## [1142,]     -1.025818 -0.96115930  0.6261610     -0.6606284   -0.1332367
## [1143,]     -2.431178 -0.05776789 -0.9986523     -1.5673732    1.2363997
## [1144,]     -1.025818 -0.05776789  1.0323644     -1.5673732   -0.1332367
## [1145,]      0.379543 -0.05776789  1.0323644     -1.5673732    1.2363997
## [1146,]      0.379543 -0.05776789 -0.1862456      0.2461164   -0.1332367
## [1147,]      1.784904 -0.05776789 -0.1862456      1.1528613   -1.5028732
## [1148,]      0.379543 -0.96115930 -0.9986523     -1.5673732   -0.1332367
## [1149,]      0.379543 -0.05776789 -0.1862456     -1.5673732   -0.1332367
## [1150,]     -1.025818 -0.96115930 -0.9986523     -1.5673732   -1.5028732
## [1151,]      1.784904 -0.05776789  0.6261610     -1.5673732   -0.1332367
## [1152,]     -2.431178 -0.05776789 -0.1862456     -1.5673732   -1.5028732
## [1153,]      0.379543 -0.96115930  0.6261610      1.1528613    1.2363997
## [1154,]      0.379543 -0.96115930  1.4385677      1.1528613    1.2363997
## [1155,]      0.379543  2.65240635 -0.5924489      0.2461164   -0.1332367
## [1156,]     -1.025818 -0.05776789 -0.9986523      0.2461164   -1.5028732
## [1157,]     -1.025818  0.84562353 -0.1862456      0.2461164   -0.1332367
## [1158,]      0.379543 -0.05776789 -1.8110589      0.2461164   -0.1332367
## [1159,]      0.379543 -0.05776789 -0.1862456      0.2461164   -0.1332367
## [1160,]      0.379543 -0.05776789 -0.1862456      0.2461164    1.2363997
## [1161,]     -1.025818 -0.05776789 -0.1862456      1.1528613   -1.5028732
## [1162,]     -1.025818  0.84562353 -0.1862456      0.2461164   -0.1332367
## [1163,]     -1.025818  0.84562353  1.0323644     -1.5673732   -0.1332367
## [1164,]      0.379543 -0.96115930  0.6261610     -0.6606284   -0.1332367
## [1165,]      0.379543  0.84562353 -0.1862456      1.1528613    1.2363997
## [1166,]      0.379543 -0.05776789 -1.4048556      1.1528613   -0.1332367
## [1167,]     -1.025818  1.74901494 -0.5924489      1.1528613   -0.1332367
## [1168,]     -2.431178 -0.05776789  1.0323644      1.1528613   -1.5028732
## [1169,]      0.379543 -0.96115930  0.6261610      1.1528613    1.2363997
## [1170,]      1.784904 -0.96115930  0.6261610      0.2461164   -0.1332367
## [1171,]      0.379543 -0.96115930  0.6261610      1.1528613    1.2363997
## [1172,]      0.379543 -0.96115930 -0.9986523     -1.5673732    1.2363997
## [1173,]     -1.025818 -0.05776789  1.0323644      0.2461164    1.2363997
## [1174,]      0.379543  0.84562353 -1.8110589     -1.5673732   -0.1332367
## [1175,]      1.784904 -0.05776789 -0.1862456      0.2461164   -1.5028732
## [1176,]      0.379543 -0.05776789 -0.1862456     -0.6606284   -0.1332367
## [1177,]      0.379543  1.74901494  0.2199577     -0.6606284   -0.1332367
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## [1178,]      -1.025818  0.84562353  0.2199577      -1.5673732   -1.5028732
## [1179,]       0.379543 -0.96115930  1.4385677       0.2461164    1.2363997
## [1180,]       0.379543 -0.05776789  0.6261610      -0.6606284   -1.5028732
## [1181,]       0.379543 -0.96115930 -0.9986523      -0.6606284    1.2363997
## [1182,]      -1.025818  1.74901494 -1.8110589       0.2461164   -0.1332367
## [1183,]      -1.025818 -0.05776789 -0.1862456       0.2461164   -0.1332367
## [1184,]       1.784904 -0.05776789 -1.8110589      -1.5673732   -1.5028732
## [1185,]       0.379543  1.74901494 -0.5924489       0.2461164   -0.1332367
## [1186,]      -1.025818  1.74901494  0.2199577       0.2461164   -0.1332367
## [1187,]       0.379543 -0.05776789  1.0323644       1.1528613    1.2363997
## [1188,]       0.379543 -0.05776789  0.6261610       1.1528613   -0.1332367
## [1189,]      -1.025818 -0.05776789  1.0323644      -0.6606284   -1.5028732
## [1190,]       0.379543 -0.05776789  1.0323644       1.1528613   -1.5028732
## [1191,]       0.379543 -0.05776789  0.6261610      -0.6606284   -1.5028732
## [1192,]       0.379543 -0.05776789  1.0323644       1.1528613   -0.1332367
## [1193,]       0.379543 -0.96115930 -0.9986523      -1.5673732   -1.5028732
## [1194,]      -1.025818 -0.96115930 -0.9986523      -0.6606284    1.2363997
## [1195,]       1.784904  1.74901494 -0.5924489      -0.6606284   -1.5028732
## [1196,]       0.379543  1.74901494 -0.5924489       0.2461164    1.2363997
## [1197,]       0.379543  0.84562353  1.0323644       0.2461164    1.2363997
## [1198,]       0.379543 -0.96115930  1.4385677      -1.5673732    1.2363997
## [1199,]       0.379543 -0.05776789  1.0323644       1.1528613   -1.5028732
## [1200,]       0.379543 -0.05776789 -1.8110589       0.2461164   -0.1332367
## [1201,]       0.379543 -0.96115930 -1.4048556       1.1528613   -1.5028732
## [1202,]      -1.025818 -0.96115930 -0.9986523       0.2461164    1.2363997
## [1203,]       0.379543 -0.96115930 -0.9986523       0.2461164   -0.1332367
## [1204,]       1.784904  0.84562353 -1.8110589       1.1528613   -0.1332367
## [1205,]       0.379543 -0.96115930  1.4385677       0.2461164   -0.1332367
## [1206,]       0.379543 -0.96115930 -0.9986523      -0.6606284    1.2363997
## [1207,]       0.379543 -0.96115930 -0.9986523       1.1528613    1.2363997
## [1208,]      -1.025818 -0.96115930  0.6261610      -0.6606284   -1.5028732
## [1209,]      -1.025818 -0.05776789 -0.9986523       1.1528613   -0.1332367
## [1210,]      -2.431178  0.84562353 -1.8110589       1.1528613   -1.5028732
## [1211,]       1.784904 -0.96115930 -0.9986523      -0.6606284   -0.1332367
## [1212,]      -2.431178 -0.05776789  1.0323644       1.1528613   -1.5028732
## [1213,]      -1.025818 -0.96115930  0.6261610       1.1528613   -0.1332367
## [1214,]       0.379543 -0.96115930  1.4385677       1.1528613   -1.5028732
## [1215,]       1.784904  0.84562353 -1.8110589       1.1528613   -0.1332367
## [1216,]      -1.025818 -0.96115930  0.6261610       1.1528613    1.2363997
## [1217,]       0.379543 -0.05776789  1.0323644       1.1528613   -0.1332367
## [1218,]       1.784904 -0.96115930  0.6261610       0.2461164   -0.1332367
## [1219,]       0.379543  0.84562353  1.0323644       0.2461164    1.2363997
## [1220,]       0.379543 -0.96115930 -0.9986523       0.2461164   -0.1332367
## [1221,]       0.379543 -0.05776789  1.4385677       1.1528613    1.2363997
## [1222,]      -1.025818  0.84562353 -1.8110589       0.2461164   -0.1332367
## [1223,]      -2.431178 -0.96115930 -1.4048556       0.2461164   -0.1332367
## [1224,]      -2.431178  1.74901494  1.0323644       0.2461164   -0.1332367
## [1225,]      -2.431178 -0.96115930 -0.9986523       0.2461164   -0.1332367
## [1226,]      -1.025818  1.74901494  0.2199577      -0.6606284    1.2363997
## [1227,]       0.379543 -0.96115930  0.6261610       0.2461164   -0.1332367
## [1228,]       0.379543 -0.96115930 -0.9986523       0.2461164   -0.1332367
## [1229,]      -2.431178 -0.05776789 -1.4048556      -0.6606284   -0.1332367
## [1230,]       0.379543 -0.05776789 -0.1862456      -1.5673732   -0.1332367
## [1231,]       0.379543 -0.96115930 -0.9986523      -1.5673732   -1.5028732
```

```
## [1232,]      0.379543 -0.05776789 -1.8110589    -0.6606284    1.2363997
## [1233,]      0.379543 -0.05776789 -0.1862456     0.2461164   -0.1332367
## [1234,]      0.379543 -0.96115930  0.6261610     1.1528613   -0.1332367
## [1235,]      0.379543 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [1236,]      0.379543  0.84562353  1.0323644     1.1528613   -1.5028732
## [1237,]     -1.025818 -0.05776789  1.0323644    -1.5673732   -1.5028732
## [1238,]     -2.431178 -0.05776789  1.0323644    -0.6606284    1.2363997
## [1239,]      0.379543 -0.96115930 -0.9986523    -0.6606284    1.2363997
## [1240,]      0.379543 -0.05776789 -0.1862456     1.1528613    1.2363997
## [1241,]      0.379543 -0.05776789 -0.9986523     1.1528613   -0.1332367
## [1242,]     -2.431178  0.84562353  1.0323644     0.2461164   -0.1332367
## [1243,]      0.379543  2.65240635 -0.5924489    -0.6606284    1.2363997
## [1244,]     -2.431178  0.84562353 -1.4048556     0.2461164   -0.1332367
## [1245,]     -1.025818 -0.96115930  0.6261610    -1.5673732    1.2363997
## [1246,]      0.379543 -0.96115930 -1.4048556     1.1528613   -0.1332367
## [1247,]     -1.025818 -0.96115930 -1.4048556     1.1528613   -1.5028732
## [1248,]      0.379543 -0.05776789  1.0323644     0.2461164   -0.1332367
## [1249,]      0.379543 -0.96115930  0.6261610     1.1528613    1.2363997
## [1250,]     -2.431178 -0.96115930  1.4385677    -0.6606284    1.2363997
## [1251,]      1.784904 -0.05776789 -1.8110589     0.2461164    1.2363997
## [1252,]     -1.025818  0.84562353  1.0323644    -1.5673732   -1.5028732
## [1253,]      1.784904 -0.96115930  0.6261610     1.1528613   -0.1332367
## [1254,]      0.379543 -0.05776789  1.0323644    -0.6606284    1.2363997
## [1255,]      0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [1256,]      0.379543  0.84562353  1.0323644    -1.5673732    1.2363997
## [1257,]     -1.025818 -0.96115930 -0.9986523    -0.6606284   -0.1332367
## [1258,]      0.379543  0.84562353  1.0323644     0.2461164   -0.1332367
## [1259,]     -1.025818 -0.96115930  0.6261610    -1.5673732   -1.5028732
## [1260,]      1.784904 -0.05776789 -1.8110589     0.2461164   -0.1332367
## [1261,]      0.379543 -0.96115930  0.6261610    -0.6606284    1.2363997
## [1262,]     -2.431178 -0.05776789 -1.8110589     1.1528613   -0.1332367
## [1263,]     -1.025818 -0.96115930  0.6261610     0.2461164   -0.1332367
## [1264,]      0.379543 -0.96115930 -0.9986523    -0.6606284   -1.5028732
## [1265,]     -1.025818  2.65240635  0.2199577    -1.5673732   -0.1332367
## [1266,]      0.379543 -0.05776789  0.6261610    -0.6606284   -1.5028732
## [1267,]      0.379543 -0.96115930 -0.9986523    -1.5673732   -1.5028732
## [1268,]      0.379543 -0.05776789  1.0323644     0.2461164   -1.5028732
## [1269,]     -1.025818  1.74901494 -0.1862456     0.2461164   -0.1332367
## [1270,]      0.379543 -0.96115930 -1.4048556     1.1528613    1.2363997
## [1271,]     -2.431178 -0.05776789  1.0323644     1.1528613    1.2363997
## [1272,]      0.379543 -0.96115930  1.4385677    -0.6606284    1.2363997
## [1273,]     -1.025818 -0.96115930 -0.9986523     0.2461164   -0.1332367
## [1274,]      0.379543 -0.96115930 -0.9986523    -1.5673732   -0.1332367
## [1275,]     -1.025818 -0.05776789  1.0323644     1.1528613   -0.1332367
## [1276,]      0.379543  0.84562353 -0.5924489     0.2461164   -0.1332367
## [1277,]     -1.025818 -0.05776789  1.0323644    -0.6606284   -0.1332367
## [1278,]      0.379543  2.65240635  0.2199577     1.1528613   -1.5028732
## [1279,]      0.379543  0.84562353 -1.8110589    -1.5673732   -0.1332367
## [1280,]      0.379543 -0.96115930  0.6261610    -0.6606284   -1.5028732
## [1281,]      0.379543 -0.05776789 -1.4048556    -0.6606284   -1.5028732
## [1282,]      0.379543 -0.05776789  1.0323644     1.1528613    1.2363997
## [1283,]      1.784904 -0.96115930  0.6261610    -1.5673732   -0.1332367
## [1284,]      0.379543 -0.96115930  0.6261610     1.1528613   -0.1332367
## [1285,]      0.379543  0.84562353  0.2199577     0.2461164    1.2363997
```

```
## [1286,]      -1.025818 -0.05776789  1.0323644      -0.6606284    1.2363997
## [1287,]       0.379543 -0.96115930 -0.9986523      -1.5673732   -0.1332367
## [1288,]       1.784904 -0.05776789 -1.8110589      -1.5673732   -0.1332367
## [1289,]       0.379543 -0.05776789 -0.1862456       1.1528613   -1.5028732
## [1290,]       0.379543 -0.96115930 -1.4048556      -0.6606284   -1.5028732
## [1291,]       0.379543 -0.05776789 -0.9986523      -1.5673732   -0.1332367
## [1292,]       0.379543 -0.05776789 -0.1862456      -1.5673732    1.2363997
## [1293,]       0.379543 -0.05776789  1.0323644       1.1528613   -1.5028732
## [1294,]       0.379543 -0.96115930  0.6261610       0.2461164    1.2363997
## [1295,]       1.784904 -0.05776789 -1.8110589      -0.6606284    1.2363997
## [1296,]       0.379543  0.84562353  1.0323644       0.2461164   -1.5028732
## [1297,]       0.379543  0.84562353 -0.1862456       0.2461164    1.2363997
## [1298,]       0.379543 -0.96115930 -1.4048556      -0.6606284   -0.1332367
## [1299,]       0.379543 -0.05776789 -1.8110589      -0.6606284   -0.1332367
## [1300,]       0.379543 -0.05776789 -1.8110589       1.1528613   -1.5028732
## [1301,]       1.784904 -0.05776789  1.0323644       0.2461164   -0.1332367
## [1302,]       0.379543  1.74901494 -0.5924489      -0.6606284   -1.5028732
## [1303,]      -2.431178 -0.96115930 -0.9986523       0.2461164   -0.1332367
## [1304,]      -1.025818  0.84562353 -0.1862456      -0.6606284   -1.5028732
## [1305,]       0.379543 -0.05776789 -1.8110589      -1.5673732   -1.5028732
## [1306,]       0.379543 -0.05776789  0.6261610       1.1528613   -0.1332367
## [1307,]       0.379543  0.84562353  1.0323644      -1.5673732   -0.1332367
## [1308,]       0.379543 -0.96115930  0.6261610      -1.5673732   -0.1332367
## [1309,]      -2.431178 -0.05776789  1.4385677       1.1528613   -0.1332367
## [1310,]       0.379543 -0.05776789  1.0323644       1.1528613    1.2363997
## [1311,]       0.379543  1.74901494  0.2199577       0.2461164   -0.1332367
## [1312,]       0.379543 -0.96115930  0.6261610       0.2461164    1.2363997
## [1313,]       1.784904 -0.96115930 -1.4048556      -1.5673732   -0.1332367
## [1314,]      -1.025818 -0.96115930 -1.4048556      -1.5673732   -1.5028732
## [1315,]       0.379543 -0.05776789  1.0323644       0.2461164   -0.1332367
## [1316,]       0.379543 -0.05776789  0.6261610      -0.6606284   -0.1332367
## [1317,]       0.379543 -0.05776789  1.0323644       1.1528613   -0.1332367
## [1318,]       0.379543 -0.96115930 -0.9986523       1.1528613    1.2363997
## [1319,]       0.379543 -0.96115930 -0.9986523       1.1528613   -0.1332367
## [1320,]       0.379543 -0.05776789  1.0323644       1.1528613    1.2363997
## [1321,]       0.379543 -0.96115930  0.6261610       0.2461164   -0.1332367
## [1322,]       0.379543 -0.96115930 -0.9986523       0.2461164    1.2363997
## [1323,]       0.379543  0.84562353 -0.1862456       1.1528613   -1.5028732
## [1324,]       0.379543 -0.96115930 -1.4048556       1.1528613   -1.5028732
## [1325,]      -2.431178 -0.05776789 -1.8110589       0.2461164   -1.5028732
## [1326,]       0.379543 -0.96115930 -0.9986523       0.2461164    1.2363997
## [1327,]      -1.025818 -0.05776789  1.0323644      -0.6606284    1.2363997
## [1328,]       1.784904  1.74901494  1.0323644      -1.5673732   -1.5028732
## [1329,]      -1.025818 -0.05776789  1.4385677       0.2461164   -0.1332367
## [1330,]      -1.025818 -0.96115930 -1.4048556      -0.6606284   -0.1332367
## [1331,]      -1.025818  2.65240635 -0.5924489       0.2461164   -0.1332367
## [1332,]      -1.025818  2.65240635  0.2199577      -0.6606284   -0.1332367
## [1333,]      -1.025818 -0.96115930  0.6261610       1.1528613    1.2363997
## [1334,]       0.379543  0.84562353  1.0323644      -0.6606284   -0.1332367
## [1335,]      -1.025818 -0.96115930  0.6261610      -1.5673732   -0.1332367
## [1336,]       0.379543 -0.05776789  0.6261610       1.1528613   -1.5028732
## [1337,]      -1.025818 -0.96115930  0.6261610       1.1528613   -0.1332367
## [1338,]       0.379543 -0.96115930  1.4385677      -0.6606284   -0.1332367
## [1339,]       0.379543 -0.96115930  1.4385677       1.1528613    1.2363997
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## [1340,]      0.379543 -0.96115930  0.6261610      -0.6606284     1.2363997
## [1341,]     -1.025818 -0.05776789  1.0323644       0.2461164    -0.1332367
## [1342,]      0.379543 -0.05776789 -0.9986523       0.2461164    -1.5028732
## [1343,]      0.379543  0.84562353  1.0323644       1.1528613    -0.1332367
## [1344,]      0.379543 -0.96115930 -0.9986523      -1.5673732     1.2363997
## [1345,]      0.379543 -0.05776789  0.6261610      -1.5673732    -0.1332367
## [1346,]     -1.025818 -0.05776789 -0.1862456      -0.6606284    -0.1332367
## [1347,]     -1.025818 -0.05776789 -0.1862456       1.1528613    -0.1332367
## [1348,]     -1.025818 -0.05776789 -1.4048556       1.1528613     1.2363997
## [1349,]      0.379543  1.74901494 -0.5924489      -1.5673732    -1.5028732
## [1350,]     -1.025818 -0.96115930  0.6261610       0.2461164    -0.1332367
## [1351,]      1.784904 -0.05776789  1.0323644       0.2461164     1.2363997
## [1352,]      0.379543  1.74901494 -0.5924489       1.1528613    -1.5028732
## [1353,]      1.784904 -0.05776789 -1.8110589      -1.5673732    -0.1332367
## [1354,]     -2.431178 -0.96115930  0.6261610      -1.5673732    -0.1332367
## [1355,]      0.379543 -0.96115930 -0.9986523       1.1528613     1.2363997
## [1356,]     -1.025818 -0.05776789  1.0323644      -0.6606284    -0.1332367
## [1357,]      0.379543 -0.05776789  1.0323644      -0.6606284    -0.1332367
## [1358,]      0.379543  0.84562353  0.2199577      -1.5673732    -0.1332367
## [1359,]      0.379543 -0.05776789  1.0323644       1.1528613    -1.5028732
## [1360,]     -1.025818 -0.05776789  1.0323644       1.1528613    -0.1332367
## [1361,]      1.784904 -0.96115930 -0.9986523       0.2461164    -1.5028732
## [1362,]      1.784904 -0.96115930 -0.9986523       1.1528613    -0.1332367
## [1363,]      0.379543 -0.05776789 -1.8110589       0.2461164     1.2363997
## [1364,]      0.379543 -0.05776789  1.0323644       0.2461164     1.2363997
## [1365,]     -1.025818 -0.05776789  1.0323644       1.1528613    -0.1332367
## [1366,]      1.784904 -0.96115930  1.4385677      -1.5673732     1.2363997
## [1367,]     -2.431178 -0.05776789  1.0323644       0.2461164    -0.1332367
## [1368,]      0.379543 -0.96115930  0.6261610      -0.6606284    -0.1332367
## [1369,]     -1.025818 -0.05776789  0.6261610       1.1528613    -0.1332367
## [1370,]      0.379543 -0.05776789  1.0323644       0.2461164     1.2363997
## [1371,]      0.379543 -0.05776789  0.6261610      -0.6606284    -0.1332367
## [1372,]     -1.025818 -0.05776789  1.0323644      -1.5673732    -0.1332367
## [1373,]      0.379543 -0.05776789 -0.1862456      -1.5673732    -0.1332367
## [1374,]     -1.025818 -0.05776789  0.6261610      -0.6606284    -1.5028732
## [1375,]      0.379543  1.74901494 -0.5924489       1.1528613    -0.1332367
## [1376,]      1.784904 -0.96115930  0.6261610       0.2461164     1.2363997
## [1377,]      0.379543 -0.96115930  0.6261610       1.1528613    -1.5028732
## [1378,]      0.379543  2.65240635  0.2199577       1.1528613    -0.1332367
## [1379,]      0.379543 -0.05776789  1.0323644       1.1528613    -1.5028732
## [1380,]     -1.025818 -0.96115930 -1.4048556      -0.6606284    -0.1332367
## [1381,]      0.379543 -0.05776789  1.0323644      -1.5673732    -0.1332367
## [1382,]      0.379543 -0.96115930  0.6261610       0.2461164     1.2363997
## [1383,]      0.379543 -0.96115930  0.6261610      -1.5673732    -1.5028732
## [1384,]      1.784904 -0.96115930 -0.9986523      -0.6606284    -0.1332367
## [1385,]      0.379543  0.84562353  1.0323644       1.1528613     1.2363997
## [1386,]      0.379543  0.84562353  1.0323644       0.2461164    -1.5028732
## [1387,]      0.379543 -0.96115930 -0.9986523      -1.5673732     1.2363997
## [1388,]      0.379543 -0.05776789 -1.8110589      -1.5673732    -0.1332367
## [1389,]      0.379543 -0.05776789 -1.8110589       1.1528613    -1.5028732
## [1390,]     -2.431178 -0.05776789  0.6261610      -1.5673732    -0.1332367
## [1391,]     -1.025818 -0.96115930 -0.9986523       1.1528613    -1.5028732
## [1392,]     -1.025818 -0.96115930  1.4385677      -1.5673732     1.2363997
## [1393,]      0.379543 -0.05776789  1.0323644       1.1528613    -0.1332367
```

```
## [1394,]      0.379543 -0.05776789  1.0323644      1.1528613      1.2363997
## [1395,]     -1.025818 -0.05776789 -0.1862456      1.1528613      1.2363997
## [1396,]      0.379543 -0.05776789  1.0323644      1.1528613     -0.1332367
## [1397,]      0.379543  0.84562353  1.0323644     -1.5673732      1.2363997
## [1398,]      0.379543 -0.05776789  0.6261610      0.2461164     -0.1332367
## [1399,]      0.379543 -0.05776789 -1.8110589      0.2461164     -1.5028732
## [1400,]      0.379543  0.84562353 -1.8110589      0.2461164     -0.1332367
## [1401,]      0.379543 -0.96115930 -1.4048556     -0.6606284     -0.1332367
## [1402,]      1.784904  2.65240635 -0.5924489     -0.6606284     -0.1332367
## [1403,]     -2.431178 -0.96115930 -0.9986523      1.1528613     -1.5028732
## [1404,]      0.379543  1.74901494  1.0323644     -1.5673732      1.2363997
## [1405,]     -1.025818 -0.05776789  0.6261610      0.2461164      1.2363997
## [1406,]      0.379543  0.84562353  0.2199577      0.2461164     -0.1332367
## [1407,]      0.379543 -0.05776789 -0.1862456     -1.5673732      1.2363997
## [1408,]     -1.025818 -0.05776789 -1.8110589      0.2461164      1.2363997
## [1409,]      0.379543 -0.96115930 -0.9986523      1.1528613      1.2363997
## [1410,]      0.379543 -0.05776789 -0.9986523      0.2461164     -0.1332367
## [1411,]      0.379543 -0.05776789  1.0323644     -0.6606284     -0.1332367
## [1412,]      0.379543 -0.96115930 -1.4048556     -0.6606284     -0.1332367
## [1413,]      0.379543 -0.96115930 -0.9986523     -0.6606284     -0.1332367
## [1414,]      0.379543 -0.96115930 -0.9986523      0.2461164     -1.5028732
## [1415,]      0.379543  0.84562353 -1.8110589      0.2461164      1.2363997
## [1416,]     -1.025818 -0.96115930 -0.9986523      0.2461164     -1.5028732
## [1417,]      0.379543 -0.05776789  1.0323644     -0.6606284     -0.1332367
## [1418,]      0.379543 -0.96115930  1.4385677      0.2461164     -0.1332367
## [1419,]     -1.025818 -0.05776789 -0.1862456      0.2461164     -0.1332367
## [1420,]      0.379543 -0.05776789  0.6261610     -1.5673732     -1.5028732
## [1421,]      0.379543 -0.96115930  0.6261610      1.1528613     -0.1332367
## [1422,]      0.379543  0.84562353  0.2199577     -0.6606284     -0.1332367
## [1423,]      0.379543 -0.96115930 -0.9986523      0.2461164     -0.1332367
## [1424,]      0.379543 -0.96115930  0.6261610      0.2461164      1.2363997
## [1425,]      0.379543 -0.05776789  0.6261610      0.2461164      1.2363997
## [1426,]      0.379543 -0.05776789 -1.8110589      1.1528613     -0.1332367
## [1427,]     -1.025818 -0.96115930 -0.9986523     -0.6606284      1.2363997
## [1428,]      0.379543 -0.96115930 -0.9986523      1.1528613     -0.1332367
## [1429,]     -1.025818 -0.96115930  1.4385677     -0.6606284     -0.1332367
## [1430,]      0.379543 -0.05776789  0.6261610      1.1528613      1.2363997
## [1431,]     -2.431178  0.84562353  0.2199577      0.2461164     -0.1332367
## [1432,]      0.379543  0.84562353  1.0323644      1.1528613     -0.1332367
## [1433,]      1.784904  0.84562353  0.2199577      1.1528613     -0.1332367
## [1434,]      0.379543 -0.05776789  1.0323644      0.2461164     -1.5028732
## [1435,]      0.379543 -0.96115930  1.4385677      1.1528613     -1.5028732
## [1436,]      0.379543 -0.96115930  0.6261610      1.1528613      1.2363997
## [1437,]      0.379543 -0.96115930  1.4385677     -1.5673732      1.2363997
## [1438,]      0.379543  2.65240635 -0.5924489      1.1528613      1.2363997
## [1439,]      0.379543 -0.96115930  1.4385677     -1.5673732     -0.1332367
## [1440,]     -1.025818  0.84562353  1.0323644      1.1528613     -0.1332367
## [1441,]      0.379543 -0.05776789 -0.1862456     -0.6606284     -1.5028732
## [1442,]      0.379543 -0.05776789 -1.8110589      0.2461164     -1.5028732
## [1443,]      0.379543 -0.96115930  0.6261610      1.1528613     -0.1332367
## [1444,]      0.379543  2.65240635 -0.5924489      0.2461164     -0.1332367
## [1445,]      0.379543 -0.96115930 -0.9986523      0.2461164     -0.1332367
## [1446,]     -1.025818  1.74901494 -0.1862456     -0.6606284     -0.1332367
## [1447,]     -1.025818 -0.05776789  1.0323644      0.2461164     -0.1332367
```

```
## [1448,]      -2.431178 -0.05776789  1.0323644      1.1528613     -1.5028732
## [1449,]      -1.025818 -0.05776789  1.0323644     -0.6606284     -1.5028732
## [1450,]       0.379543 -0.96115930  0.6261610     -1.5673732      1.2363997
## [1451,]       0.379543  0.84562353 -1.4048556      1.1528613      1.2363997
## [1452,]       0.379543 -0.05776789  1.0323644      1.1528613     -0.1332367
## [1453,]       0.379543 -0.05776789  1.0323644      0.2461164     -1.5028732
## [1454,]      -1.025818 -0.05776789  1.0323644      1.1528613     -0.1332367
## [1455,]       0.379543 -0.05776789  1.0323644      0.2461164      1.2363997
## [1456,]      -1.025818 -0.96115930  0.6261610      0.2461164      1.2363997
## [1457,]       0.379543 -0.05776789 -1.8110589      0.2461164     -0.1332367
## [1458,]       0.379543 -0.96115930  0.6261610      0.2461164     -0.1332367
## [1459,]      -2.431178 -0.96115930  0.6261610      1.1528613     -0.1332367
## [1460,]      -1.025818 -0.05776789 -0.9986523     -0.6606284     -0.1332367
## [1461,]      -1.025818 -0.96115930  0.6261610     -1.5673732      1.2363997
## [1462,]      -1.025818  0.84562353  1.0323644     -1.5673732     -1.5028732
## [1463,]      -1.025818  1.74901494  1.0323644      1.1528613     -0.1332367
## [1464,]       0.379543 -0.05776789 -0.1862456     -1.5673732      1.2363997
## [1465,]      -1.025818 -0.96115930  1.4385677      0.2461164      1.2363997
## [1466,]       1.784904 -0.05776789 -0.9986523      1.1528613     -0.1332367
## [1467,]      -1.025818  0.84562353 -1.8110589     -1.5673732     -0.1332367
## [1468,]       1.784904 -0.05776789 -0.1862456     -0.6606284     -0.1332367
## [1469,]      -1.025818 -0.05776789  1.0323644     -0.6606284     -0.1332367
## [1470,]       1.784904 -0.05776789 -0.9986523      0.2461164     -0.1332367
##          MonthlyIncome  MonthlyRate NumCompaniesWorked Over18  OverTime
##    [1,] -0.1083126537  0.725772953       2.1244130      NaN  1.5912040
##    [2,] -0.2916193491  1.488369633      -0.6778187      NaN -0.6280274
##    [3,] -0.9373347071 -1.674271090       1.3237753      NaN  1.5912040
##    [4,] -0.7633738919  1.242787651      -0.6778187      NaN  1.5912040
##    [5,] -0.6446387323  0.325789028       2.5247318      NaN -0.6280274
##    [6,] -0.7296012794 -0.344082189      -1.0781375      NaN -0.6280274
##    [7,] -0.8141390138 -0.611019125       0.5231377      NaN  1.5912040
##    [8,] -0.8092536674 -0.137416803      -0.6778187      NaN -0.6280274
##    [9,]  0.6421190437 -0.776379533      -1.0781375      NaN -0.6280274
##   [10,] -0.2688918677  0.318061906       1.3237753      NaN -0.6280274
##   [11,] -0.8659661676  0.304293580      -1.0781375      NaN -0.6280274
##   [12,] -0.4906441157 -0.229158813      -1.0781375      NaN  1.5912040
##   [13,] -0.7629490792  0.120388080      -0.6778187      NaN -0.6280274
##   [14,] -0.8160506711 -0.780453833      -1.0781375      NaN -0.6280274
##   [15,] -0.9505039019 -0.191928135       0.9234565      NaN  1.5912040
##   [16,]  0.7385515347 -0.578565213      -0.6778187      NaN -0.6280274
##   [17,] -0.6807478149  0.103950385      -1.0781375      NaN  1.5912040
##   [18,] -0.7578513264 -0.981920973      -0.6778187      NaN  1.5912040
##   [19,]  1.8955290200  1.082906476      -0.2774999      NaN -0.6280274
##   [20,] -0.5435333013 -1.405929223       0.9234565      NaN  1.5912040
##   [21,] -0.5293020746 -0.854353217      -1.0781375      NaN -0.6280274
##   [22,] -0.6575955208 -1.029407650       1.7240942      NaN -0.6280274
##   [23,]  1.1663379594  0.980627481      -1.0781375      NaN -0.6280274
##   [24,] -1.1195793707  0.697955315      -0.6778187      NaN -0.6280274
##   [25,] -0.7525411672  0.391820797      -0.2774999      NaN -0.6280274
##   [26,]  2.6744231707 -0.502698926       0.5231377      NaN -0.6280274
##   [27,] -0.5488434605 -1.353244301      -0.6778187      NaN  1.5912040
##   [28,]  0.0684094443  0.963768306      -1.0781375      NaN -0.6280274
##   [29,]  0.7954764413 -1.716700014       0.1228189      NaN -0.6280274
##   [30,]  2.6431994347  1.195441468       0.1228189      NaN -0.6280274
```

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##      [31,] -0.8510977218 -1.073803477        0.5231377    NaN -0.6280274
##      [32,] -0.0080568481  0.675476415       -0.2774999    NaN  1.5912040
##      [33,] -0.9126955685  0.253435069       -0.6778187    NaN -0.6280274
##      [34,] -0.9381843326 -1.542348047        0.1228189    NaN -0.6280274
##      [35,] -0.8942162145 -1.586603381       -0.2774999    NaN  1.5912040
##      [36,] -0.8194491730  1.069138149       -0.6778187    NaN -0.6280274
##      [37,] -0.8113777310 -1.475613813       -0.6778187    NaN  1.5912040
##      [38,] -0.9534775911 -0.649935721       -0.6778187    NaN -0.6280274
##      [39,] -0.6550466444 -0.174366495        2.5247318    NaN  1.5912040
##      [40,] -0.2393673826 -1.562298070       -0.2774999    NaN -0.6280274
##      [41,] -0.9668591923 -0.478112629       -0.6778187    NaN -0.6280274
##      [42,] -0.8840207088  0.758929331       -0.6778187    NaN -0.6280274
##      [43,] -0.8942162145 -0.527566209       -0.6778187    NaN -0.6280274
##      [44,]  0.4721939495 -1.592925571       -0.6778187    NaN -0.6280274
##      [45,] -0.5293020746 -0.496236242       -0.6778187    NaN -0.6280274
##      [46,]  2.7702184426  0.276335448       -0.6778187    NaN -0.6280274
##      [47,] -0.4109917278 -0.601184606       -1.0781375    NaN -0.6280274
##      [48,] -0.7393719724 -0.574069433        0.5231377    NaN -0.6280274
##      [49,] -0.1552544609  0.861489312        0.5231377    NaN  1.5912040
##      [50,] -0.8993139673 -1.323600252       -0.6778187    NaN -0.6280274
##      [51,] -0.2383053508  0.699781725        2.5247318    NaN  1.5912040
##      [52,] -0.6503737043 -0.440319979       -0.6778187    NaN  1.5912040
##      [53,] -0.2227996859 -1.447655681        0.9234565    NaN  1.5912040
##      [54,]  0.7181605234 -0.844518698       -0.2774999    NaN  1.5912040
##      [55,] -0.4982907449  1.000717998        1.7240942    NaN  1.5912040
##      [56,]  1.4773008819  0.117016245       -0.6778187    NaN  1.5912040
##      [57,]  0.5450493337 -0.461112961       -0.6778187    NaN -0.6280274
##      [58,] -0.5286648555  0.237278360        0.1228189    NaN  1.5912040
##      [59,] -0.1248803504 -0.672274127        0.1228189    NaN -0.6280274
##      [60,] -0.1083126537 -1.633106605       -0.6778187    NaN -0.6280274
##      [61,] -0.0724159775 -0.482748903       -0.6778187    NaN  1.5912040
##      [62,] -0.8702142949 -1.244362130       -0.6778187    NaN -0.6280274
##      [63,]  2.5992313165  0.335483054        0.9234565    NaN  1.5912040
##      [64,]  0.2408834150 -1.680171802        1.7240942    NaN -0.6280274
##      [65,]  0.7631906734 -0.858568010       -0.6778187    NaN -0.6280274
##      [66,]  1.7530043473  0.761036728       -0.2774999    NaN  1.5912040
##      [67,] -0.0008350316  1.172119610       -0.6778187    NaN -0.6280274
##      [68,]  0.6841755046  0.628551711       -0.2774999    NaN -0.6280274
##      [69,] -0.9152444449 -1.186478963        0.5231377    NaN -0.6280274
##      [70,] -0.6616312418  1.048626153       -1.0781375    NaN  1.5912040
##      [71,] -0.2187639649  1.454791776        1.7240942    NaN -0.6280274
##      [72,] -0.8071296037 -1.314608692       -1.0781375    NaN -0.6280274
##      [73,] -0.8500356900  0.626865794       -0.6778187    NaN -0.6280274
##      [74,] -0.0600964082 -0.978830125       -0.6778187    NaN -0.6280274
##      [75,] -0.7359734705  1.080237106        0.1228189    NaN -0.6280274
##      [76,] -0.4415782447  0.894786182       -0.6778187    NaN -0.6280274
##      [77,] -0.4653677579  1.222697134       -1.0781375    NaN -0.6280274
##      [78,]  1.4320583255  0.105917289        0.5231377    NaN  1.5912040
##      [79,]  1.5210565936  1.537682719        0.5231377    NaN -0.6280274
##      [80,] -0.3147716432 -0.546251795        2.1244130    NaN  1.5912040
##      [81,] -0.2924689745  0.236716387       -0.6778187    NaN  1.5912040
##      [82,] -0.7739942103  1.680985706       -0.6778187    NaN -0.6280274
##      [83,]  0.7935647840  0.530908990        0.1228189    NaN -0.6280274
##      [84,] -0.2493504819  0.197237819        1.7240942    NaN  1.5912040
```

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##    [85,]  -0.4626064751   0.480893438     -0.6778187   NaN -0.6280274
##    [86,]   0.1608062143   1.037527196      0.5231377   NaN -0.6280274
##    [87,]  -0.8880564298  -0.673679059      0.1228189   NaN -0.6280274
##    [88,]  -0.9405208027   0.619841138      0.1228189   NaN -0.6280274
##    [89,]  -0.4993527768   0.213113543     -0.6778187   NaN -0.6280274
##    [90,]   0.6618728359  -0.100748097     -0.6778187   NaN -0.6280274
##    [91,]   1.4868591684  -0.027832166     -0.6778187   NaN -0.6280274
##    [92,]  -0.2255609687  -0.827519030     -1.0781375   NaN  1.5912040
##    [93,]  -0.2748392460   0.765251521     -0.6778187   NaN  1.5912040
##    [94,]   0.8857491476  -1.569463220     -0.2774999   NaN  1.5912040
##    [95,]  -0.3171081132   1.403230799     -0.6778187   NaN -0.6280274
##    [96,]   1.4966298613   1.361082862      2.5247318   NaN -0.6280274
##    [97,]  -0.3194445832   0.450406430     -1.0781375   NaN -0.6280274
##    [98,]  -0.4846967374  -0.765702055     -0.6778187   NaN -0.6280274
##    [99,]   1.5652371181   1.418404057     -1.0781375   NaN -0.6280274
##   [100,]  -0.9475302128   1.507476697      0.5231377   NaN -0.6280274
##   [101,]  -0.9409456154   1.311488789      0.5231377   NaN  1.5912040
##   [102,]  -0.7533907926   0.121512025     -0.6778187   NaN -0.6280274
##   [103,]  -0.7597629837   0.768482863     -0.6778187   NaN  1.5912040
##   [104,]  -0.3598017931  -0.257257438     -0.6778187   NaN -0.6280274
##   [105,]  -0.2846099389   0.215923405      0.9234565   NaN -0.6280274
##   [106,]   2.6213215788   1.068997656      2.5247318   NaN -0.6280274
##   [107,]   2.4785844996  -0.640382188      0.1228189   NaN  1.5912040
##   [108,]  -0.1612018392   1.776661524     -0.6778187   NaN  1.5912040
##   [109,]  -0.7676220193   1.767950950     -0.6778187   NaN -0.6280274
##   [110,]  -0.7714453339   1.330736347     -0.6778187   NaN -0.6280274
##   [111,]   0.2083852407   1.613268020      0.1228189   NaN -0.6280274
##   [112,]  -0.0911077379   1.204573521     -0.6778187   NaN  1.5912040
##   [113,]   2.2993135252  -0.062112488     -0.2774999   NaN  1.5912040
##   [114,]  -0.7920487516  -0.148375267     -1.0781375   NaN -0.6280274
##   [115,]  -0.4243733289   0.096504249      1.3237753   NaN -0.6280274
##   [116,]   0.1964904841   0.027100646     -0.2774999   NaN -0.6280274
##   [117,]   1.0892344479  -1.222023723     -0.2774999   NaN -0.6280274
##   [118,]   0.6871491937   1.213705574     -1.0781375   NaN -0.6280274
##   [119,]  -0.7790919631  -1.651089725      0.9234565   NaN -0.6280274
##   [120,]   2.2209355755   0.727880350     -0.6778187   NaN  1.5912040
##   [121,]  -0.8262461768   1.123508988     -0.6778187   NaN -0.6280274
##   [122,]  -0.0758144794   0.163940949     -1.0781375   NaN -0.6280274
##   [123,]  -0.3270912125  -1.377268625      2.5247318   NaN  1.5912040
##   [124,]   2.7685191917  -1.103026047      1.7240942   NaN -0.6280274
##   [125,]  -0.0702919138   0.902794290      0.5231377   NaN  1.5912040
##   [126,]  -0.8782857369   1.262597182     -0.6778187   NaN -0.6280274
##   [127,]   0.8090704488  -1.524083940     -0.6778187   NaN -0.6280274
##   [128,]  -1.0254833498   1.757132979     -0.6778187   NaN  1.5912040
##   [129,]  -0.8453627499   0.700484191     -1.0781375   NaN -0.6280274
##   [130,]   0.0136086014  -1.231296269     -0.6778187   NaN -0.6280274
##   [131,]  -0.3746702389   0.249641755      0.5231377   NaN -0.6280274
##   [132,]   0.5745738188  -1.077315805      0.5231377   NaN -0.6280274
##   [133,]  -0.4129033851   1.471650951      0.1228189   NaN  1.5912040
##   [134,]   0.3581317300   0.966999648      0.1228189   NaN  1.5912040
##   [135,]  -0.7563644818  -0.758255919     -0.6778187   NaN -0.6280274
##   [136,]  -0.3317641526  -1.614842499      1.3237753   NaN -0.6280274
##   [137,]   0.8808638011   1.522509462     -0.2774999   NaN -0.6280274
##   [138,]  -0.1276416331   0.038902068      0.5231377   NaN -0.6280274
```

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## [139,]  0.4537145955  1.478254128      -0.2774999   NaN -0.6280274
## [140,] -0.0331207995 -0.046517751      -1.0781375   NaN  1.5912040
## [141,] -0.4891572711 -0.574490913       1.7240942   NaN -0.6280274
## [142,] -0.6480372342 -0.640803667       0.9234565   NaN -0.6280274
## [143,] -0.4643057261 -1.687477444       0.1228189   NaN  1.5912040
## [144,] -0.8222104558  1.348297987      -0.6778187   NaN -0.6280274
## [145,] -0.3897510910  1.194036537      -1.0781375   NaN -0.6280274
## [146,] -0.7007140134 -0.547656726       0.9234565   NaN -0.6280274
## [147,] -0.8035186954 -0.442708362      -1.0781375   NaN -0.6280274
## [148,]  2.2680897891 -0.200217229       0.5231377   NaN -0.6280274
## [149,] -0.9058985647 -1.032919978      -0.2774999   NaN -0.6280274
## [150,] -1.0662653724  0.251327672      -0.6778187   NaN -0.6280274
## [151,] -0.1907263244 -0.816139087      -0.6778187   NaN -0.6280274
## [152,]  0.1682404372 -0.403791767      -0.6778187   NaN -0.6280274
## [153,] -0.8914549317  0.243600550      -0.2774999   NaN  1.5912040
## [154,] -0.8825338643 -0.479377068       2.1244130   NaN -0.6280274
## [155,]  0.5299684815  0.179254700      -0.6778187   NaN -0.6280274
## [156,] -0.4638809133  1.681688172      -0.6778187   NaN -0.6280274
## [157,] -0.0787881685 -0.046377258      -0.2774999   NaN -0.6280274
## [158,] -0.6705523092 -0.342817751       0.5231377   NaN  1.5912040
## [159,]  0.9244071065 -0.809395417       1.7240942   NaN -0.6280274
## [160,] -0.9073854093 -0.421353407       1.3237753   NaN -0.6280274
## [161,] -0.8878440234 -0.326099069      -0.6778187   NaN -0.6280274
## [162,] -0.9513535274 -1.172148664       1.3237753   NaN -0.6280274
## [163,] -0.8050055400 -1.073522491      -0.6778187   NaN -0.6280274
## [164,]  0.6236396897  1.276927480       0.1228189   NaN  1.5912040
## [165,] -0.8362292761  1.547236252      -0.6778187   NaN  1.5912040
## [166,]  2.8511452687  0.384936634       0.1228189   NaN -0.6280274
## [167,] -0.8606560084 -1.363359806       0.5231377   NaN -0.6280274
## [168,]  0.6193915624 -0.879501486      -0.2774999   NaN -0.6280274
## [169,]  0.4636976948 -0.194316518       0.5231377   NaN -0.6280274
## [170,] -0.7359734705 -0.264563080       0.1228189   NaN -0.6280274
## [171,] -0.7317253431 -0.133342502      -1.0781375   NaN  1.5912040
## [172,] -0.8874192107  0.937917571      -1.0781375   NaN -0.6280274
## [173,] -0.9377595199  0.105214823       0.5231377   NaN -0.6280274
## [174,] -0.7287516540 -0.463782331      -0.6778187   NaN -0.6280274
## [175,] -0.3179577387 -1.123116563       0.5231377   NaN  1.5912040
## [176,] -0.4770501081 -0.052558956       0.5231377   NaN  1.5912040
## [177,] -0.8502480963 -0.533607414      -1.0781375   NaN -0.6280274
## [178,] -1.1471921985 -0.712595654      -0.6778187   NaN -0.6280274
## [179,]  0.8390197467 -1.710658810      -0.6778187   NaN -0.6280274
## [180,] -0.8952782463 -1.123116563      -0.6778187   NaN -0.6280274
## [181,] -0.5467193968 -1.029688636       2.1244130   NaN  1.5912040
## [182,] -0.8903928999 -1.208536383      -0.2774999   NaN -0.6280274
## [183,] -0.7143080210  1.041741990      -0.6778187   NaN  1.5912040
## [184,] -0.5974845187 -1.529703665      -0.2774999   NaN -0.6280274
## [185,] -0.4360556792  1.677051899      -0.6778187   NaN -0.6280274
## [186,] -0.7958720662 -1.354368246      -0.6778187   NaN -0.6280274
## [187,]  2.6614663823 -1.097827801      -0.6778187   NaN -0.6280274
## [188,]  2.5954080019 -0.136854830       2.1244130   NaN -0.6280274
## [189,]  0.6465795775 -0.033592384      -0.6778187   NaN -0.6280274
## [190,]  1.5359250394 -1.000466066       0.1228189   NaN -0.6280274
## [191,]  2.8666509336 -1.213172656      -1.0781375   NaN -0.6280274
## [192,] -0.8971899036 -0.355743118      -0.6778187   NaN -0.6280274
```

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## [193,] -0.1246679440  0.166329332     0.1228189   NaN  1.5912040
## [194,] -0.9375471135 -1.276394562     0.5231377   NaN -0.6280274
## [195,]  2.1854637121  0.863877695     2.5247318   NaN -0.6280274
## [196,] -0.6242477210  1.217217902    -0.6778187   NaN  1.5912040
## [197,] -0.4413658384  0.235030470     0.9234565   NaN -0.6280274
## [198,] -0.2629444894  0.298673855    -0.2774999   NaN -0.6280274
## [199,]  0.0106349123 -0.991053027     2.5247318   NaN -0.6280274
## [200,] -0.0513877471 -1.422928891     0.1228189   NaN -0.6280274
## [201,] -0.4683414471 -0.651059666     0.9234565   NaN -0.6280274
## [202,]  0.0639489106  1.331860292    -0.6778187   NaN  1.5912040
## [203,] -0.5709337227 -1.171867678    -0.6778187   NaN  1.5912040
## [204,] -0.7990581617  0.310475278     2.1244130   NaN  1.5912040
## [205,]  0.0361236764 -0.415733682     1.7240942   NaN  1.5912040
## [206,]  0.2413082277  1.434701259    -0.6778187   NaN -0.6280274
## [207,] -0.8867819916 -0.269901819    -0.6778187   NaN  1.5912040
## [208,] -0.9239531060 -0.928674079    -0.6778187   NaN -0.6280274
## [209,] -0.3455705665 -0.009989539     2.5247318   NaN -0.6280274
## [210,]  0.6145062159 -0.273273654     1.7240942   NaN -0.6280274
## [211,]  0.8277622092  1.615515910    -0.6778187   NaN -0.6280274
## [212,]  0.4186675448  0.928926011    -0.6778187   NaN -0.6280274
## [213,]  0.7387639411 -0.196283422    -0.6778187   NaN -0.6280274
## [214,]  1.2716915179  0.199907189     0.9234565   NaN -0.6280274
## [215,] -0.8169002966 -0.808833444     0.9234565   NaN  1.5912040
## [216,]  1.5055509288  0.050703491     0.1228189   NaN  1.5912040
## [217,]  0.0410090229  1.215812971     0.9234565   NaN -0.6280274
## [218,] -0.9441317109  0.764830042    -1.0781375   NaN -0.6280274
## [219,]  0.5017184346  0.355011598     1.3237753   NaN -0.6280274
## [220,] -0.1195701912  0.379035922    -0.2774999   NaN -0.6280274
## [221,] -0.1250927567 -0.613688494     2.1244130   NaN -0.6280274
## [222,] -0.8243345195 -0.149639705     1.3237753   NaN -0.6280274
## [223,]  1.2069075757 -0.598093758    -0.6778187   NaN  1.5912040
## [224,]  0.8721551400 -0.655555446    -1.0781375   NaN -0.6280274
## [225,] -0.4583583478 -1.395392239    -1.0781375   NaN -0.6280274
## [226,] -0.9188553531 -0.822882757     0.1228189   NaN -0.6280274
## [227,] -0.7880130306 -1.654180574     0.5231377   NaN -0.6280274
## [228,]  0.3005696043 -1.083778489    -0.6778187   NaN -0.6280274
## [229,]  0.4855755507 -0.732967157    -0.6778187   NaN -0.6280274
## [230,] -0.8738252032  0.091025017    -0.6778187   NaN  1.5912040
## [231,] -0.6990147625 -1.547265306     1.7240942   NaN -0.6280274
## [232,]  2.7037352495 -1.317840034    -0.6778187   NaN -0.6280274
## [233,] -0.8997387800  1.593739476     2.1244130   NaN -0.6280274
## [234,]  2.7642710643  1.377520557     0.1228189   NaN -0.6280274
## [235,] -0.8638421039  1.100889595     0.9234565   NaN  1.5912040
## [236,]  2.0308318763 -0.922913861     0.9234565   NaN  1.5912040
## [237,] -0.8062799782  1.010973996     1.7240942   NaN -0.6280274
## [238,]  2.6689006052  0.943677789    -0.6778187   NaN  1.5912040
## [239,] -0.5462945840  0.938058064    -0.2774999   NaN -0.6280274
## [240,] -0.5889882640 -0.666232923    -1.0781375   NaN  1.5912040
## [241,] -0.9071730029  0.155089882     1.7240942   NaN -0.6280274
## [242,] -0.4328695836 -0.315281098    -1.0781375   NaN -0.6280274
## [243,] -0.7287516540  0.781689217    -0.2774999   NaN -0.6280274
## [244,] -0.6762872811  1.423742795    -0.6778187   NaN -0.6280274
## [245,]  2.6973630584  0.232782580    -1.0781375   NaN -0.6280274
## [246,]  1.5233930637 -0.111004095     2.5247318   NaN -0.6280274
```

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## [247,] -0.7629490792  0.065033789          -0.6778187    NaN -0.6280274
## [248,] -0.1159592829  1.316968021           1.3237753    NaN -0.6280274
## [249,] -0.5486310541  0.615907330          -0.2774999    NaN -0.6280274
## [250,] -0.0146414455 -1.291848806           0.5231377    NaN -0.6280274
## [251,]  0.7529951677  1.160458680           1.3237753    NaN -0.6280274
## [252,]  0.9420368350 -1.108926758          -1.0781375    NaN -0.6280274
## [253,] -0.8842331152  1.174507993          -0.6778187    NaN -0.6280274
## [254,]  0.0089356614  1.222697134           0.1228189    NaN  1.5912040
## [255,]  0.0909245193 -0.503120406          -0.2774999    NaN -0.6280274
## [256,] -0.3408976264 -0.956491718          -1.0781375    NaN -0.6280274
## [257,] -0.8304943041 -0.885964170          -1.0781375    NaN  1.5912040
## [258,]  2.7470661485 -1.175099019          -1.0781375    NaN -0.6280274
## [259,] -0.8028814763  1.252903156          -0.6778187    NaN -0.6280274
## [260,] -0.6423022623 -0.373866731          -1.0781375    NaN -0.6280274
## [261,] -0.7878006242  1.650639191          -0.6778187    NaN -0.6280274
## [262,] -0.2663429913  0.754293058           0.1228189    NaN -0.6280274
## [263,] -0.9190677595  0.762020179           0.5231377    NaN -0.6280274
## [264,]  2.2024562215  0.093272907           0.1228189    NaN  1.5912040
## [265,] -0.6410278241  0.087372196          -0.2774999    NaN -0.6280274
## [266,]  0.0299638918 -1.492894467          -0.2774999    NaN -0.6280274
## [267,] -0.1956116708  0.013332320          -1.0781375    NaN -0.6280274
## [268,] -0.5316385447  0.571932982          -0.6778187    NaN -0.6280274
## [269,]  1.4853723238 -0.957053690          -1.0781375    NaN  1.5912040
## [270,] -0.6994395752  0.834233645          -1.0781375    NaN -0.6280274
## [271,]  2.6640152587  0.649766173          -1.0781375    NaN  1.5912040
## [272,]  1.1355390361 -0.568309215          -0.6778187    NaN  1.5912040
## [273,] -0.9415828345 -1.643784082          -0.6778187    NaN -0.6280274
## [274,] -0.0001978125  1.195862948           0.5231377    NaN -0.6280274
## [275,] -0.6951914479 -0.531359524          -0.6778187    NaN -0.6280274
## [276,]  1.5080998052 -0.370354403          -0.2774999    NaN  1.5912040
## [277,]  1.1667627722  0.672526059           1.7240942    NaN -0.6280274
## [278,] -0.1907263244  0.685310934          -0.6778187    NaN  1.5912040
## [279,] -0.0225004811  1.749686844          -0.6778187    NaN -0.6280274
## [280,]  2.6850434891  0.211006146           0.1228189    NaN -0.6280274
## [281,]  2.3536895554  0.941710886           0.1228189    NaN  1.5912040
## [282,] -0.3389859691  1.435684711          -0.6778187    NaN -0.6280274
## [283,] -0.4139654169  0.835498084          -0.6778187    NaN -0.6280274
## [284,] -0.2310835342  0.233063566           0.1228189    NaN  1.5912040
## [285,] -0.3742454261  1.181392156          -0.6778187    NaN  1.5912040
## [286,] -0.9320245479  0.220278692          -0.6778187    NaN -0.6280274
## [287,] -0.7098474872  0.787730421           0.1228189    NaN  1.5912040
## [288,] -0.1609894329  0.644286941           2.5247318    NaN -0.6280274
## [289,] -0.8772237051 -0.018700113          -0.2774999    NaN  1.5912040
## [290,] -0.6781989384 -1.380359474          -0.6778187    NaN -0.6280274
## [291,]  2.5833008389  1.584888409           2.5247318    NaN  1.5912040
## [292,] -0.4286214563  1.681969158           0.5231377    NaN -0.6280274
## [293,] -0.7888626561 -1.461704993          -0.6778187    NaN -0.6280274
## [294,] -0.1433597043 -0.823725715          -0.6778187    NaN  1.5912040
## [295,] -0.8872068043 -0.407725574          -0.6778187    NaN  1.5912040
## [296,]  1.4915321085  0.077397184           0.9234565    NaN -0.6280274
## [297,] -1.0796469736  1.534170391          -0.6778187    NaN -0.6280274
## [298,]  0.3222350538 -1.294377682          -1.0781375    NaN -0.6280274
## [299,] -0.5979093314 -1.010300585           0.5231377    NaN -0.6280274
## [300,] -0.2168523076  0.282095667           0.9234565    NaN -0.6280274
```

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## [301,]  2.0204239643  0.222386089     -0.6778187   NaN -0.6280274
## [302,] -1.1263763745 -0.644737475     -0.6778187   NaN -0.6280274
## [303,] -0.1788315678 -1.333153784     -1.0781375   NaN -0.6280274
## [304,]  0.0904997066 -0.291116281      0.5231377   NaN -0.6280274
## [305,]  0.6605983977 -0.473616849     -1.0781375   NaN -0.6280274
## [306,] -0.1760702850 -1.037696744      1.7240942   NaN -0.6280274
## [307,] -0.2164274949  0.375383101     -0.6778187   NaN -0.6280274
## [308,]  1.1805691861  1.741257256      0.1228189   NaN -0.6280274
## [309,] -0.1790439741  0.385358113     -0.2774999   NaN  1.5912040
## [310,] -0.3572529167 -0.595143402     -1.0781375   NaN  1.5912040
## [311,] -0.0197391983  0.492975846      0.1228189   NaN -0.6280274
## [312,] -0.2746268396  0.842241753     -0.6778187   NaN -0.6280274
## [313,] -0.8088288546 -0.922492382     -1.0781375   NaN  1.5912040
## [314,]  1.1416988208  1.271588742      1.3237753   NaN -0.6280274
## [315,]  2.2440878696 -1.258551935     -0.6778187   NaN  1.5912040
## [316,] -0.8598063829 -0.511128514     -1.0781375   NaN -0.6280274
## [317,]  1.5847785040  0.491289929      1.7240942   NaN  1.5912040
## [318,] -0.3317641526  0.482438862     -0.2774999   NaN -0.6280274
## [319,] -0.8549210364  0.930752422     -0.6778187   NaN  1.5912040
## [320,] -0.2708035250  1.448610078     -0.6778187   NaN  1.5912040
## [321,] -0.4301083009 -1.274427658     -0.6778187   NaN  1.5912040
## [322,]  0.2217668419 -1.007350229      0.5231377   NaN -0.6280274
## [323,] -0.3075498266 -0.527706702      1.7240942   NaN -0.6280274
## [324,] -0.6454883578  1.464485801      0.9234565   NaN  1.5912040
## [325,] -0.1546172418 -0.334247670     -0.6778187   NaN -0.6280274
## [326,]  0.5182861313 -0.039212109     -0.6778187   NaN -0.6280274
## [327,]  2.7122315042  0.959272526     -0.6778187   NaN -0.6280274
## [328,] -0.2686794613  0.486794149      0.5231377   NaN  1.5912040
## [329,] -0.3867774018 -1.404383798      0.1228189   NaN -0.6280274
## [330,]  2.5057725147  0.289682295      0.5231377   NaN -0.6280274
## [331,] -0.2646437404 -1.136041931     -0.6778187   NaN -0.6280274
## [332,] -0.0326959867  1.094988884     -1.0781375   NaN  1.5912040
## [333,] -0.3470574111  0.361333789      0.1228189   NaN -0.6280274
## [334,]  0.7396135665 -0.709645298      2.1244130   NaN -0.6280274
## [335,] -0.5959976741 -0.707397408      2.5247318   NaN -0.6280274
## [336,]  0.2026502688 -0.146127377     -0.2774999   NaN  1.5912040
## [337,] -0.9311749225 -1.342285838     -0.6778187   NaN  1.5912040
## [338,] -0.5352494529 -0.940194516     -1.0781375   NaN -0.6280274
## [339,] -0.0817618577 -1.247874458     -0.6778187   NaN -0.6280274
## [340,] -0.0613708464 -1.531108597     -0.6778187   NaN -0.6280274
## [341,] -0.0331207995  1.245316527      1.7240942   NaN -0.6280274
## [342,]  1.0635332774  0.192320560     -1.0781375   NaN  1.5912040
## [343,]  0.1359546693  1.601607091     -0.6778187   NaN  1.5912040
## [344,]  0.3749118331 -0.343801203     -0.6778187   NaN  1.5912040
## [345,]  0.3381655314  0.555073807     -1.0781375   NaN -0.6280274
## [346,] -0.7644359238  0.249922741     -0.6778187   NaN -0.6280274
## [347,] -0.1000288053 -0.590507129      1.3237753   NaN  1.5912040
## [348,] -0.7491426653  1.606945829      0.1228189   NaN -0.6280274
## [349,]  2.0155386178  0.223088554     -0.2774999   NaN -0.6280274
## [350,] -0.3937868120  0.367374993     -0.6778187   NaN -0.6280274
## [351,] -0.8086164483  1.363330752     -1.0781375   NaN  1.5912040
## [352,] -0.8778609242 -1.455101816     -0.6778187   NaN -0.6280274
## [353,]  1.2746652070  1.357851520      0.1228189   NaN -0.6280274
## [354,] -0.1123483747  0.377630991      0.5231377   NaN  1.5912040
```

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## [355,]  -0.3753074580 -1.158239845          1.7240942    NaN  1.5912040
## [356,]  -0.2563598920  0.820886799         -0.6778187    NaN -0.6280274
## [357,]   0.0590635642  0.388448962          0.1228189    NaN -0.6280274
## [358,]  -0.9194925722 -0.725380528         -0.6778187    NaN  1.5912040
## [359,]   0.0318755491  0.135280352          0.5231377    NaN -0.6280274
## [360,]   0.6788653454 -0.992879437          0.5231377    NaN -0.6280274
## [361,]   0.0535409986 -1.594049516         -0.2774999    NaN -0.6280274
## [362,]  -0.9112087239  1.149500216          0.1228189    NaN  1.5912040
## [363,]  -0.8268833959 -1.610346719         -0.6778187    NaN -0.6280274
## [364,]  -0.7756934613 -0.725380528         -0.6778187    NaN  1.5912040
## [365,]  -0.6480372342  0.470637439          1.3237753    NaN -0.6280274
## [366,]  -0.2644313340  0.243179071         -0.2774999    NaN -0.6280274
## [367,]   0.6057975548 -0.668059334         -0.6778187    NaN -0.6280274
## [368,]   0.8481532205 -1.623834059          1.3237753    NaN -0.6280274
## [369,]  -0.0261113893 -1.152479626         -0.2774999    NaN  1.5912040
## [370,]  -0.8169002966 -0.950029034         -1.0781375    NaN  1.5912040
## [371,]  -0.8043683209  1.560723592         -0.6778187    NaN -0.6280274
## [372,]  -0.9137576003  0.541586467          2.5247318    NaN -0.6280274
## [373,]   0.0078736295  0.713831038          2.5247318    NaN -0.6280274
## [374,]  -0.5707213163  0.501264941         -0.6778187    NaN -0.6280274
## [375,]  -0.2654933658  0.904339714         -0.6778187    NaN -0.6280274
## [376,]   0.9477718070 -0.315702578          2.1244130    NaN -0.6280274
## [377,]  -0.3328261844  0.077116198          0.5231377    NaN -0.6280274
## [378,]  -0.8411146225 -0.343520216          0.5231377    NaN -0.6280274
## [379,]  -0.2546606411 -1.357318602          2.1244130    NaN  1.5912040
## [380,]   2.1572136652  1.256696470         -0.2774999    NaN  1.5912040
## [381,]  -0.4764128890 -1.179875786         -0.6778187    NaN  1.5912040
## [382,]  -0.8553458492  0.438464514         -0.6778187    NaN -0.6280274
## [383,]  -0.7223794629 -1.086166872         -1.0781375    NaN -0.6280274
## [384,]  -0.9046241265  1.422759343         -0.6778187    NaN -0.6280274
## [385,]   0.2321747539 -1.475754306         -0.6778187    NaN -0.6280274
## [386,]  -0.8959154654 -1.529422679          2.5247318    NaN  1.5912040
## [387,]  -0.7368230959  1.770339333         -0.6778187    NaN -0.6280274
## [388,]  -0.1673616239  1.157648818          1.7240942    NaN -0.6280274
## [389,]  -0.8341052124  0.867811502          0.1228189    NaN -0.6280274
## [390,]  -0.4897944902  0.956743650         -0.2774999    NaN  1.5912040
## [391,]   1.6637936728 -1.400449991         -0.6778187    NaN -0.6280274
## [392,]  -0.6488868597 -0.123226997          1.3237753    NaN -0.6280274
## [393,]   2.7406939575 -0.815436621          0.5231377    NaN -0.6280274
## [394,]   0.0074488168 -0.221010212          2.5247318    NaN -0.6280274
## [395,]  -0.4666421961 -1.427003192         -0.6778187    NaN -0.6280274
## [396,]  -0.9016504374  0.129941613          1.7240942    NaN -0.6280274
## [397,]  -0.4207624207 -1.698014428          0.5231377    NaN  1.5912040
## [398,]  -0.4281966436 -0.312330743         -0.6778187    NaN  1.5912040
## [399,]  -0.4362680855  1.342116290          0.1228189    NaN  1.5912040
## [400,]  -0.9101466921  0.264112547         -0.6778187    NaN -0.6280274
## [401,]   2.6963010266 -0.857022586         -0.6778187    NaN  1.5912040
## [402,]   1.4250489154  0.553949862          2.5247318    NaN -0.6280274
## [403,]   0.0157326651  0.736871910         -1.0781375    NaN -0.6280274
## [404,]   0.4012502227  0.737995855         -0.6778187    NaN -0.6280274
## [405,]  -0.4131157914 -0.109318178         -0.6778187    NaN -0.6280274
## [406,]  -0.5250539473 -0.690819220          0.9234565    NaN -0.6280274
## [407,]   0.3114023291  0.744037060         -0.2774999    NaN  1.5912040
## [408,]  -0.8175375157 -0.654431501          0.1228189    NaN -0.6280274
```

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## [409,]  2.1351234029 -0.562408504   -0.2774999   NaN -0.6280274
## [410,] -0.4135406042 -0.194035532   -0.2774999   NaN -0.6280274
## [411,] -0.0874968296  1.472353416   -0.2774999   NaN -0.6280274
## [412,]  2.7746789763 -1.469432115    0.9234565   NaN -0.6280274
## [413,] -0.3595893868  1.686043459   -0.2774999   NaN -0.6280274
## [414,] -0.4205500143 -1.394689773   -1.0781375   NaN -0.6280274
## [415,] -0.7011388262  1.076022312   -0.6778187   NaN  1.5912040
## [416,] -0.8818966451 -0.289430363   -1.0781375   NaN -0.6280274
## [417,] -1.0197483778 -0.310082853   -0.6778187   NaN  1.5912040
## [418,]  2.4507592654 -0.181391151   -1.0781375   NaN -0.6280274
## [419,] -0.7682592384 -1.584917463   -0.6778187   NaN -0.6280274
## [420,] -0.9358478626  0.340119327    0.5231377   NaN -0.6280274
## [421,]  1.1538059837  1.013362379   -0.6778187   NaN -0.6280274
## [422,] -0.8404774034  0.560131560    0.9234565   NaN -0.6280274
## [423,] -0.8366540888  0.579379118   -0.6778187   NaN -0.6280274
## [424,]  0.4054983500 -1.604867487   -1.0781375   NaN -0.6280274
## [425,]  1.6174890846  1.094286419    0.1228189   NaN -0.6280274
## [426,]  2.2394149295 -0.702339656   -1.0781375   NaN -0.6280274
## [427,] -0.8366540888 -1.002011490   -1.0781375   NaN -0.6280274
## [428,]  0.7992997559 -1.611189678    0.5231377   NaN -0.6280274
## [429,] -0.3043637311 -0.972788920    0.9234565   NaN -0.6280274
## [430,]  2.4125261192 -1.689444348    1.3237753   NaN -0.6280274
## [431,] -0.4827850801  0.690087700   -1.0781375   NaN -0.6280274
## [432,] -0.5783679456  1.280580302    1.7240942   NaN -0.6280274
## [433,] -0.7933231898 -0.828502482    0.1228189   NaN -0.6280274
## [434,]  0.5454741464 -0.386370619   -0.2774999   NaN  1.5912040
## [435,]  0.8804389884  0.011365416   -0.6778187   NaN -0.6280274
## [436,]  1.5095866498  1.447907613    1.7240942   NaN  1.5912040
## [437,] -0.6573831144 -1.068886217    1.7240942   NaN -0.6280274
## [438,] -0.7476558207  0.573899886   -1.0781375   NaN -0.6280274
## [439,]  0.2398213831 -0.002543403    0.5231377   NaN  1.5912040
## [440,]  0.7054161413  1.207523877    0.1228189   NaN -0.6280274
## [441,]  0.7321793437 -0.390585413    2.5247318   NaN  1.5912040
## [442,] -0.9366974880 -0.709926285    0.5231377   NaN -0.6280274
## [443,]  0.7385515347  0.141181063   -0.6778187   NaN -0.6280274
## [444,] -0.5541536197 -0.728330884    0.9234565   NaN -0.6280274
## [445,] -0.5208058199  0.750921223   -0.2774999   NaN -0.6280274
## [446,]  2.1945971859 -0.623803999    0.1228189   NaN -0.6280274
## [447,] -0.0579723445 -0.124069956    1.7240942   NaN -0.6280274
## [448,] -0.3793431790  0.610568591    2.5247318   NaN -0.6280274
## [449,]  1.4303590746  0.850109368    1.7240942   NaN -0.6280274
## [450,] -0.5836781048  0.500000502   -0.6778187   NaN -0.6280274
## [451,]  0.0167946970 -0.838337000    0.5231377   NaN  1.5912040
## [452,]  0.1918175440 -1.034465402   -0.6778187   NaN  1.5912040
## [453,] -0.3606514186  0.261864657   -1.0781375   NaN -0.6280274
## [454,] -0.7990581617  1.193474564   -1.0781375   NaN  1.5912040
## [455,] -0.4759880763  1.170574185    0.5231377   NaN -0.6280274
## [456,]  2.0563206405  1.161161146    0.5231377   NaN -0.6280274
## [457,]  1.0735163767  1.542318992    2.5247318   NaN -0.6280274
## [458,] -0.9823648571 -0.878658527   -0.6778187   NaN  1.5912040
## [459,]  0.9407623968 -0.413064313    0.1228189   NaN -0.6280274
## [460,]  0.0654357552 -1.714171138   -0.2774999   NaN  1.5912040
## [461,] -0.4666421961 -1.411408455    0.9234565   NaN -0.6280274
## [462,] -0.3491814747 -1.069869669   -0.6778187   NaN -0.6280274
```

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## [463,] -0.2476512309  0.787870914    -0.6778187  NaN -0.6280274
## [464,] -0.8842331152  1.250374280    -0.6778187  NaN  1.5912040
## [465,]  0.2098720853  1.339587414     0.5231377  NaN -0.6280274
## [466,]  0.8547378179 -0.748702387     0.9234565  NaN -0.6280274
## [467,]  2.1436196576 -1.220478299     1.7240942  NaN -0.6280274
## [468,]  0.4951338372  1.454510790    -0.6778187  NaN -0.6280274
## [469,] -0.1966737027  1.092179022     0.1228189  NaN  1.5912040
## [470,] -0.3814672426  1.348859960     2.1244130  NaN -0.6280274
## [471,] -0.8714887331 -1.233965639    -1.0781375  NaN -0.6280274
## [472,]  0.7054161413  1.104401924     0.1228189  NaN -0.6280274
## [473,] -0.0118801627  0.194989929     1.3237753  NaN -0.6280274
## [474,]  2.7610849688 -1.712344727    -0.6778187  NaN  1.5912040
## [475,] -0.8024566636  1.027973664    -0.6778187  NaN  1.5912040
## [476,] -0.0490512771 -0.967309689    -0.6778187  NaN -0.6280274
## [477,] -0.9294756715 -0.732405185    -0.6778187  NaN -0.6280274
## [478,]  2.4845318779 -0.887088115    -0.6778187  NaN -0.6280274
## [479,] -0.9360602689  1.694754032    -0.6778187  NaN -0.6280274
## [480,] -0.7682592384 -0.020386030    -0.6778187  NaN  1.5912040
## [481,] -0.9494418701  0.022042893    -0.6778187  NaN -0.6280274
## [482,] -0.6119281517  1.191507661    -0.6778187  NaN  1.5912040
## [483,] -0.4821478610 -0.393535769    -0.2774999  NaN -0.6280274
## [484,] -0.5993961760 -0.043426903     0.5231377  NaN -0.6280274
## [485,] -0.2215252477 -1.137165876     0.5231377  NaN -0.6280274
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## [487,]  0.6582619277 -1.588008312     0.5231377  NaN  1.5912040
## [488,] -0.7788795568 -0.359114953    -0.6778187  NaN -0.6280274
## [489,] -0.5127343779 -1.207552931    -0.6778187  NaN -0.6280274
## [490,]  2.1504166614 -1.635635481     0.5231377  NaN  1.5912040
## [491,] -0.8249717386  0.034827768     0.1228189  NaN -0.6280274
## [492,] -0.1750082532  0.746565936     0.1228189  NaN  1.5912040
## [493,]  1.8902188609  0.517562143     1.7240942  NaN -0.6280274
## [494,] -0.1100119046  1.767529471     0.5231377  NaN -0.6280274
## [495,] -0.8334679933 -1.601776638    -0.6778187  NaN  1.5912040
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## [497,] -0.6490992661  1.423321316    -0.6778187  NaN -0.6280274
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## [504,] -0.8096784801 -0.934715284    -0.6778187  NaN -0.6280274
## [505,] -0.4708903235 -1.219916326    -0.2774999  NaN -0.6280274
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## [507,]  0.6225776579 -0.661315664    -0.6778187  NaN -0.6280274
## [508,] -0.2000722045 -1.520993092    -0.6778187  NaN -0.6280274
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## [514,] -1.1669459907  1.782281249    -0.6778187  NaN  1.5912040
## [515,] -0.6701274965 -1.566372371    -0.6778187  NaN  1.5912040
## [516,] -1.1091714587  0.363441186    -0.6778187  NaN -0.6280274
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## [517,] -0.7824904650 -0.810519362  -0.2774999  NaN -0.6280274
## [518,] -0.3508807257  0.191758588  -1.0781375  NaN -0.6280274
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## [520,] -0.8035186954  0.652716529  -0.6778187  NaN -0.6280274
## [521,]  0.3434756906  0.601858018   0.1228189  NaN -0.6280274
## [522,] -0.3942116247  0.331549246  -0.6778187  NaN  1.5912040
## [523,] -0.3872022146  0.129098654   0.1228189  NaN -0.6280274
## [524,] -0.6971031052 -1.547686785  -0.6778187  NaN  1.5912040
## [525,]  0.4498912809  0.469373001  -0.6778187  NaN -0.6280274
## [526,] -0.4090800705  1.471229471   2.5247318  NaN -0.6280274
## [527,] -0.4141778233  0.936372147  -0.6778187  NaN -0.6280274
## [528,] -0.2351192552  1.038229662  -0.6778187  NaN -0.6280274
## [529,]  0.0622496597  1.283952137   0.1228189  NaN  1.5912040
## [530,]  0.2383345386  0.712285613  -1.0781375  NaN -0.6280274
## [531,]  0.1930919822 -1.166669432  -0.6778187  NaN -0.6280274
## [532,]  0.9889786423  0.710880682   0.1228189  NaN -0.6280274
## [533,] -0.3277284316 -0.349561421  -0.2774999  NaN -0.6280274
## [534,]  0.8436926868  1.328909936   0.9234565  NaN  1.5912040
## [535,]  1.7653239166 -0.112268534   0.1228189  NaN -0.6280274
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## [541,] -0.9105715048 -1.466903239   1.7240942  NaN  1.5912040
## [542,]  1.1066517701  0.846035068   2.5247318  NaN -0.6280274
## [543,]  0.2884624414  0.152280020   0.5231377  NaN  1.5912040
## [544,] -0.5936612041 -1.715295083  -0.2774999  NaN -0.6280274
## [545,]  1.5435716686 -0.574350420   2.5247318  NaN  1.5912040
## [546,] -0.2546606411  1.540071102   1.7240942  NaN -0.6280274
## [547,] -0.8200863921 -1.623834059  -0.6778187  NaN -0.6280274
## [548,] -0.7952348471  0.850390355   1.3237753  NaN  1.5912040
## [549,]  0.0639489106  1.316406048   0.1228189  NaN -0.6280274
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## [558,] -0.2994783847 -1.342004851  -0.2774999  NaN -0.6280274
## [559,] -0.2535986092  0.959974992  -0.6778187  NaN -0.6280274
## [560,] -0.7319377495  0.865142133   1.3237753  NaN  1.5912040
## [561,] -0.2935310064 -1.422647905   0.1228189  NaN -0.6280274
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## [569,]  2.8369140421  0.967421127   0.9234565  NaN  1.5912040
## [570,]  0.2302630966 -0.011815950  -0.6778187  NaN -0.6280274
```

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## [571,] -0.4768377018  1.724679068   -1.0781375   NaN -0.6280274
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## [576,] -0.2162150885  1.174086513    2.5247318   NaN  1.5912040
## [577,] -0.4589955669  1.362066314   -1.0781375   NaN -0.6280274
## [578,] -0.7903495006  0.785623024   -1.0781375   NaN  1.5912040
## [579,] -0.1110739364  1.653870533    1.3237753   NaN  1.5912040
## [580,] -0.4507117185 -0.952979390   -0.6778187   NaN -0.6280274
## [581,] -0.8349548379  0.843506192   -0.6778187   NaN -0.6280274
## [582,] -0.5671104081  1.413627290    0.1228189   NaN -0.6280274
## [583,] -0.4798113909 -0.615655398   -0.6778187   NaN -0.6280274
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## [586,] -1.0412014210 -1.526893803   -0.6778187   NaN  1.5912040
## [587,] -0.8090412610  1.719340329   -0.6778187   NaN -0.6280274
## [588,] -0.7123963637  1.054807851    2.1244130   NaN -0.6280274
## [589,]  2.3653719056 -1.044159428    0.9234565   NaN -0.6280274
## [590,] -0.8886936489 -1.071134107   -0.6778187   NaN  1.5912040
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## [593,]  2.1769674574 -0.187010876   -0.6778187   NaN  1.5912040
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## [599,] -0.4504993122  0.289541802    1.3237753   NaN -0.6280274
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## [621,] -0.8377161206  0.497190640   -0.6778187   NaN -0.6280274
## [622,] -0.0641321292 -1.614280526   -0.6778187   NaN  1.5912040
## [623,] -0.4460387784 -0.711331216   -0.2774999   NaN -0.6280274
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```

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## [675,]  0.8600479771 -0.710628750  -0.2774999  NaN  1.5912040
## [676,] -0.8865695852 -0.361924816   0.1228189  NaN -0.6280274
## [677,] -0.5286648555  0.682360578  -0.6778187  NaN  1.5912040
## [678,]  0.1911803249  1.146971340   0.5231377  NaN -0.6280274
```

```
## [679,] -0.9014380310 -1.232139228    0.5231377    NaN -0.6280274
## [680,]  0.0911369257  1.417982577   -0.6778187    NaN -0.6280274
## [681,] -0.3876270273  1.261613730   -0.2774999    NaN -0.6280274
## [682,]  1.5036392715  0.278021366   -0.6778187    NaN -0.6280274
## [683,] -0.8859323661 -1.452572940    1.3237753    NaN -0.6280274
## [684,] -0.8687274503  0.630097136   -0.6778187    NaN  1.5912040
## [685,]  0.6801397836  0.890571388   -0.2774999    NaN -0.6280274
## [686,] -0.4691910725 -0.444675266   -0.6778187    NaN -0.6280274
## [687,] -0.3784935535 -1.572694561   -0.2774999    NaN  1.5912040
## [688,] -0.8462123754 -0.284653597    0.5231377    NaN -0.6280274
## [689,] -0.9307501097 -0.613407508   -0.6778187    NaN  1.5912040
## [690,] -0.7497798844 -0.183358054   -0.6778187    NaN -0.6280274
## [691,] -0.1376247324  0.429332461   -1.0781375    NaN  1.5912040
## [692,] -0.6129901835  1.510286560    2.1244130    NaN  1.5912040
## [693,]  0.0471688076 -0.106648809   -0.6778187    NaN -0.6280274
## [694,]  0.8118317316 -1.235651556   -0.6778187    NaN  1.5912040
## [695,]  0.0947478339 -0.284091625   -1.0781375    NaN -0.6280274
## [696,]  0.8721551400  0.085545786    0.9234565    NaN -0.6280274
## [697,] -0.4366928983  1.243349624   -0.6778187    NaN -0.6280274
## [698,] -0.9231034805  0.546503727   -0.6778187    NaN -0.6280274
## [699,] -0.4039823176 -1.142785601   -0.6778187    NaN -0.6280274
## [700,]  2.2506724670 -0.068013199   -0.2774999    NaN -0.6280274
## [701,] -0.8547086301  1.673820557    0.5231377    NaN -0.6280274
## [702,]  1.7733953586 -0.052699449    1.3237753    NaN -0.6280274
## [703,]  0.1616558398 -0.609192714    0.9234565    NaN -0.6280274
## [704,] -0.1777695359  0.784780066   -0.6778187    NaN  1.5912040
## [705,]  0.2803909994 -1.053853453    1.3237753    NaN -0.6280274
## [706,]  0.2924981624 -1.651230218   -1.0781375    NaN -0.6280274
## [707,]  1.4212256008  0.387465510    0.5231377    NaN  1.5912040
## [708,] -0.3050009502 -1.061299589   -0.6778187    NaN  1.5912040
## [709,] -0.3024520738  1.635184947    0.5231377    NaN -0.6280274
## [710,] -0.8882688362 -0.560722587   -1.0781375    NaN  1.5912040
## [711,]  2.3239526639  0.867671009   -0.6778187    NaN -0.6280274
## [712,] -0.8706391077 -0.398172042    1.3237753    NaN  1.5912040
## [713,] -0.6480372342  0.411349341    0.1228189    NaN -0.6280274
## [714,] -0.8991015609 -0.464765783    0.1228189    NaN -0.6280274
## [715,]  2.3143943773 -1.081530599    2.5247318    NaN -0.6280274
## [716,] -0.2155778694  0.821589264   -0.6778187    NaN  1.5912040
## [717,]  2.7434552403 -1.486150797   -0.2774999    NaN -0.6280274
## [718,] -0.7841897160 -0.312892715    2.5247318    NaN -0.6280274
## [719,] -0.6095916816 -0.038509643   -0.6778187    NaN  1.5912040
## [720,] -0.4970163067 -0.806726047   -0.6778187    NaN  1.5912040
## [721,] -0.9284136397 -0.389742454    0.5231377    NaN  1.5912040
## [722,]  1.5866901613 -1.426300726    0.1228189    NaN  1.5912040
## [723,] -0.8111653247 -0.307132497   -1.0781375    NaN -0.6280274
## [724,]  0.9222830428  1.390164939    1.3237753    NaN -0.6280274
## [725,] -0.4515613440  1.377380064   -0.6778187    NaN -0.6280274
## [726,] -0.5862269812 -0.595564881   -0.6778187    NaN  1.5912040
## [727,] -0.5002024022 -0.426832639   -0.6778187    NaN -0.6280274
## [728,] -1.1580249233 -0.115218889   -0.6778187    NaN -0.6280274
## [729,]  0.8997679679 -0.051996983    2.1244130    NaN -0.6280274
## [730,]  0.8252133328 -1.030953074   -0.6778187    NaN  1.5912040
## [731,]  1.0435670788  0.490165984   -1.0781375    NaN  1.5912040
## [732,] -0.8290074596  0.556619232   -0.6778187    NaN  1.5912040
```

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##  [733,] -0.8668157930  1.603293008      -1.0781375    NaN -0.6280274
##  [734,] -0.2189763713 -1.542488540      -0.6778187    NaN -0.6280274
##  [735,] -0.8606560084 -1.044159428      -0.6778187    NaN -0.6280274
##  [736,] -0.4806610164 -0.167763318      -0.2774999    NaN -0.6280274
##  [737,]  0.9549936235  1.114376935       1.7240942    NaN -0.6280274
##  [738,] -0.3185949578  1.272572193       1.3237753    NaN -0.6280274
##  [739,]  1.3252179225 -1.019011158      -0.6778187    NaN -0.6280274
##  [740,] -0.4834222992 -1.356475643      -1.0781375    NaN -0.6280274
##  [741,] -0.5492682732 -0.670447717      -0.6778187    NaN -0.6280274
##  [742,]  2.5064097338 -0.919261040       1.3237753    NaN -0.6280274
##  [743,] -0.8757368605  0.822151237       0.5231377    NaN -0.6280274
##  [744,]  1.5342257884  1.055931796       0.1228189    NaN  1.5912040
##  [745,] -0.3665987969  0.009679498       0.9234565    NaN -0.6280274
##  [746,] -0.0250493575 -0.185605944       0.1228189    NaN  1.5912040
##  [747,]  2.8611283680  0.838869918      -0.6778187    NaN -0.6280274
##  [748,]  0.0760560736 -1.311096364       2.1244130    NaN  1.5912040
##  [749,] -0.3258167743  1.053683906       2.1244130    NaN -0.6280274
##  [750,]  2.8339403529  1.620292676      -0.6778187    NaN -0.6280274
##  [751,]  1.4479888031 -0.361924816       0.1228189    NaN  1.5912040
##  [752,] -0.0331207995  1.490196043      -1.0781375    NaN -0.6280274
##  [753,] -0.7986333490 -0.849154971      -0.6778187    NaN -0.6280274
##  [754,]  0.9297172657 -1.296766065      -0.6778187    NaN  1.5912040
##  [755,] -0.8838083025  1.000858491      -1.0781375    NaN -0.6280274
##  [756,]  2.3677083756 -1.251667772       0.1228189    NaN -0.6280274
##  [757,] -0.5263283855 -0.446501676       2.5247318    NaN -0.6280274
##  [758,]  0.6843879109 -0.285918035      -1.0781375    NaN -0.6280274
##  [759,]  1.1472213863 -0.460129510       0.1228189    NaN  1.5912040
##  [760,] -0.9188553531 -0.842270808      -0.6778187    NaN -0.6280274
##  [761,]  0.2170939018  1.295894052      -0.2774999    NaN -0.6280274
##  [762,] -0.3544916339 -0.906897645       1.7240942    NaN -0.6280274
##  [763,] -0.9475302128  0.145114870       1.3237753    NaN  1.5912040
##  [764,] -0.9097218793  0.575585803      -0.6778187    NaN  1.5912040
##  [765,] -1.1578125169  1.274398604      -0.6778187    NaN -0.6280274
##  [766,] -0.7820656523 -1.589834723       0.1228189    NaN -0.6280274
##  [767,]  2.7047972813 -0.205134489      -0.2774999    NaN  1.5912040
##  [768,] -0.5089110633 -0.065343830       0.1228189    NaN -0.6280274
##  [769,]  0.4020998481  1.110443128      -0.6778187    NaN -0.6280274
##  [770,] -0.9549644357  1.538666171      -0.6778187    NaN -0.6280274
##  [771,]  2.7876357648  1.001982436       2.5247318    NaN -0.6280274
##  [772,]  0.8885104304 -0.831874317       1.3237753    NaN -0.6280274
##  [773,] -0.7563644818 -0.303339183      -0.2774999    NaN -0.6280274
##  [774,]  0.5002315900  0.190494149      -1.0781375    NaN -0.6280274
##  [775,]  2.1778170828  0.422869777       1.7240942    NaN -0.6280274
##  [776,]  0.9122999436 -1.270774837       0.9234565    NaN -0.6280274
##  [777,] -0.8878440234  0.406291589      -0.6778187    NaN  1.5912040
##  [778,] -1.0804965990  0.413737724      -0.6778187    NaN -0.6280274
##  [779,] -0.4010086285  0.943537296       2.1244130    NaN  1.5912040
##  [780,] -0.8585319447 -0.559317655       2.5247318    NaN  1.5912040
##  [781,]  0.4713443240 -0.275100065      -0.6778187    NaN -0.6280274
##  [782,] -0.5411968312 -0.445658718      -0.6778187    NaN -0.6280274
##  [783,]  0.7336661882 -0.732967157      -1.0781375    NaN -0.6280274
##  [784,] -0.6641801182  0.639229189      -0.6778187    NaN -0.6280274
##  [785,]  0.4927973672  1.446362188      -1.0781375    NaN -0.6280274
##  [786,]  0.8111945125  1.718075891       0.5231377    NaN -0.6280274
```

```
## [787,] -0.3997341903 -1.186338469   -0.6778187   NaN -0.6280274
## [788,]  0.9501082770  0.210725159    0.1228189   NaN -0.6280274
## [789,] -0.6038567097 -0.899732496    0.1228189   NaN -0.6280274
## [790,]  0.8451795313 -1.684105609    2.5247318   NaN -0.6280274
## [791,]  0.1308569165  0.969528524    0.5231377   NaN -0.6280274
## [792,]  0.6540138003 -0.559177162   -1.0781375   NaN  1.5912040
## [793,] -0.4237361098 -1.571289630   -0.6778187   NaN -0.6280274
## [794,] -0.9124831621  1.147673806   -0.6778187   NaN -0.6280274
## [795,]  0.2661597727  1.117327291   -1.0781375   NaN -0.6280274
## [796,]  0.0405842102  1.392272335   -0.2774999   NaN  1.5912040
## [797,] -0.5972721123 -1.363921779   -0.6778187   NaN  1.5912040
## [798,] -0.8763740796  0.710880682   -0.6778187   NaN -0.6280274
## [799,] -0.8899680871 -1.590396695    0.5231377   NaN  1.5912040
## [800,]  2.3708944712  0.012067882   -1.0781375   NaN -0.6280274
## [801,] -0.8298570850 -1.004961846   -0.6778187   NaN -0.6280274
## [802,] -0.3770067089  0.412754272    0.1228189   NaN  1.5912040
## [803,] -0.4674918216 -0.128144257   -1.0781375   NaN -0.6280274
## [804,] -0.7485054462  1.147111833    0.1228189   NaN -0.6280274
## [805,]  2.2052175043  0.258633315   -0.2774999   NaN -0.6280274
## [806,] -0.1932752008  0.513768829   -0.6778187   NaN -0.6280274
## [807,]  0.8373204957  0.141743035    1.7240942   NaN -0.6280274
## [808,]  0.4751676386 -1.228486407   -1.0781375   NaN  1.5912040
## [809,] -0.8472744072  1.777925962    0.5231377   NaN -0.6280274
## [810,]  0.2447067296 -0.881468390   -1.0781375   NaN -0.6280274
## [811,]  2.3284131976  0.180238151    0.1228189   NaN -0.6280274
## [812,]  0.1801351938  0.885935115    1.7240942   NaN -0.6280274
## [813,]  0.9169728836 -0.390304427    2.1244130   NaN -0.6280274
## [814,]  1.2035090738 -0.107632260    1.7240942   NaN -0.6280274
## [815,]  2.7874233584  0.453918758   -0.6778187   NaN -0.6280274
## [816,] -0.9415828345  1.547236252   -0.6778187   NaN  1.5912040
## [817,]  0.0592759705 -0.778767916    2.5247318   NaN -0.6280274
## [818,]  0.2710451192  1.253886608   -0.2774999   NaN -0.6280274
## [819,] -0.7884378433  1.077286751   -1.0781375   NaN -0.6280274
## [820,] -0.7013512325  0.786465983   -1.0781375   NaN -0.6280274
## [821,] -0.3260291806  0.588230185   -0.6778187   NaN -0.6280274
## [822,]  1.4055075296 -0.341974792    1.3237753   NaN -0.6280274
## [823,] -0.5246291345  0.213675515   -0.2774999   NaN -0.6280274
## [824,] -0.6822346594  0.509554035   -1.0781375   NaN -0.6280274
## [825,] -0.4738640126 -0.668059334    0.5231377   NaN -0.6280274
## [826,] -0.3073374203  0.474290261   -0.6778187   NaN  1.5912040
## [827,] -0.7771803058 -1.167371898   -0.6778187   NaN -0.6280274
## [828,] -0.8071296037  1.092319515   -0.6778187   NaN  1.5912040
## [829,] -0.9768422915 -0.106367822   -0.6778187   NaN -0.6280274
## [830,]  0.3655659529  0.572073475   -1.0781375   NaN  1.5912040
## [831,] -0.3689352669 -0.739289348    0.1228189   NaN  1.5912040
## [832,] -0.8268833959 -1.135198972   -0.6778187   NaN -0.6280274
## [833,] -0.1639631220  0.401514822    1.7240942   NaN -0.6280274
## [834,] -0.8419642480 -0.893972278   -0.6778187   NaN -0.6280274
## [835,] -0.1675740303 -1.191958194   -0.6778187   NaN -0.6280274
## [836,] -0.4630312879 -1.012267488   -0.6778187   NaN -0.6280274
## [837,]  0.1769490983 -0.442708362   -0.6778187   NaN -0.6280274
## [838,]  1.4860095430 -0.074616376    2.5247318   NaN -0.6280274
## [839,]  1.5410227922 -1.667105941   -1.0781375   NaN  1.5912040
## [840,] -0.2863091899 -1.694361607    1.7240942   NaN -0.6280274
```

```
##  [841,] -0.9016504374  0.284765036     1.3237753    NaN -0.6280274
##  [842,] -0.6172383109 -1.110472182     2.1244130    NaN -0.6280274
##  [843,] -0.8470620008  1.214127054    -0.6778187    NaN  1.5912040
##  [844,] -0.4424278702 -0.125334394    -0.6778187    NaN -0.6280274
##  [845,]  0.0159450715 -1.630718222    -0.6778187    NaN -0.6280274
##  [846,] -0.4420030575  0.967983100     0.1228189    NaN  1.5912040
##  [847,]  0.8009990068  0.741086704    -0.2774999    NaN -0.6280274
##  [848,] -0.2463767927  1.607507802    -1.0781375    NaN -0.6280274
##  [849,] -0.8765864860  1.717373425    -0.6778187    NaN -0.6280274
##  [850,] -0.2457395736 -0.677753359     2.1244130    NaN -0.6280274
##  [851,] -0.7807912141  0.089058114    -0.6778187    NaN -0.6280274
##  [852,]  2.8547561770  0.598767169     0.5231377    NaN -0.6280274
##  [853,] -0.7162196783  1.689977266    -0.6778187    NaN -0.6280274
##  [854,] -0.8392029652 -1.003275928    -0.6778187    NaN -0.6280274
##  [855,] -0.4303207072  0.813019184     0.5231377    NaN  1.5912040
##  [856,] -0.0061451908 -0.611440604    -0.6778187    NaN -0.6280274
##  [857,] -0.7370355023 -0.208646817    -0.6778187    NaN -0.6280274
##  [858,] -0.7576389200 -0.489914052    -0.6778187    NaN  1.5912040
##  [859,]  2.5707688632  0.607899222     0.1228189    NaN -0.6280274
##  [860,] -0.9207670105  1.773008702    -1.0781375    NaN  1.5912040
##  [861,] -0.7752686485 -1.417590152    -1.0781375    NaN  1.5912040
##  [862,]  2.2398397422  1.374570202     2.1244130    NaN -0.6280274
##  [863,] -0.8948534336 -1.409722537    -0.2774999    NaN -0.6280274
##  [864,] -0.6166010918 -0.826676071    -0.6778187    NaN -0.6280274
##  [865,] -0.9337237989  0.840134357     1.3237753    NaN -0.6280274
##  [866,] -0.5072118124 -0.157507320     2.1244130    NaN -0.6280274
##  [867,] -0.4621816624  1.563252468     0.9234565    NaN -0.6280274
##  [868,]  2.4114640874 -0.677612866    -0.2774999    NaN -0.6280274
##  [869,] -0.7024132644 -0.261893711    -0.6778187    NaN -0.6280274
##  [870,]  2.6716618879 -0.486682710     0.9234565    NaN -0.6280274
##  [871,]  0.5231714778  0.943115817     0.1228189    NaN  1.5912040
##  [872,] -0.9118459430 -1.537149801    -0.6778187    NaN -0.6280274
##  [873,] -0.4171515124 -1.321773841    -0.6778187    NaN -0.6280274
##  [874,] -0.7990581617 -1.046407318    -0.6778187    NaN -0.6280274
##  [875,] -0.6397533859 -0.422055873    -0.6778187    NaN -0.6280274
##  [876,] -0.4167266997 -0.922913861    -0.6778187    NaN -0.6280274
##  [877,] -0.8124397629 -1.301402338    -0.6778187    NaN -0.6280274
##  [878,]  0.1860825721  0.438324021    -0.2774999    NaN -0.6280274
##  [879,] -0.0490512771 -0.204432023     1.7240942    NaN -0.6280274
##  [880,] -0.2725027760 -0.480501013    -1.0781375    NaN  1.5912040
##  [881,] -0.7986333490 -0.980937522    -0.6778187    NaN -0.6280274
##  [882,] -0.3196569896 -1.682419692     0.5231377    NaN  1.5912040
##  [883,]  0.7963260667 -1.415904235    -0.2774999    NaN  1.5912040
##  [884,] -0.7905619070 -1.124240508    -1.0781375    NaN -0.6280274
##  [885,]  0.0741444163 -0.382436812     1.7240942    NaN -0.6280274
##  [886,] -0.3298524953  0.886497088    -1.0781375    NaN -0.6280274
##  [887,] -0.6210616255 -0.694612534    -1.0781375    NaN  1.5912040
##  [888,]  1.4205883817  1.259927812     0.1228189    NaN  1.5912040
##  [889,]  0.8228768627 -0.078409691     0.5231377    NaN  1.5912040
##  [890,] -0.9065357838  0.008977033    -0.6778187    NaN  1.5912040
##  [891,]  0.8494276587 -0.653869528     1.7240942    NaN -0.6280274
##  [892,] -0.9541148102  0.796440995    -0.6778187    NaN -0.6280274
##  [893,] -0.9864005781 -1.147140888    -0.6778187    NaN  1.5912040
##  [894,] -0.5826160729 -1.224412106    -0.6778187    NaN -0.6280274
```

```
## [895,]   2.3951087971   1.287042985    0.1228189   NaN -0.6280274
## [896,]   0.0701086953   0.389994386   -0.6778187   NaN  1.5912040
## [897,]   0.0656481616   0.405308137   -0.6778187   NaN -0.6280274
## [898,]  -0.2829106880   0.305839005    0.9234565   NaN -0.6280274
## [899,]   2.8116376843   0.605791825    0.1228189   NaN -0.6280274
## [900,]   2.5930715319  -0.307553976   -0.2774999   NaN -0.6280274
## [901,]  -0.5970597059  -0.710488257   -0.6778187   NaN -0.6280274
## [902,]  -0.8377161206   0.324103111    0.9234565   NaN -0.6280274
## [903,]  -0.8466371881  -1.560190673   -0.6778187   NaN -0.6280274
## [904,]   0.0255033580  -1.420259522   -0.6778187   NaN  1.5912040
## [905,]   2.4983382918  -0.783966161    1.3237753   NaN -0.6280274
## [906,]   2.0435762584  -1.529984652    0.1228189   NaN -0.6280274
## [907,]  -0.8321935551   1.029800075   -1.0781375   NaN -0.6280274
## [908,]   2.4872931607  -0.781437285    1.7240942   NaN -0.6280274
## [909,]   0.3987013462   1.038932128   -1.0781375   NaN  1.5912040
## [910,]  -0.7453193507   0.970511976   -0.6778187   NaN  1.5912040
## [911,]  -1.1214910280   0.363581679   -0.6778187   NaN -0.6280274
## [912,]  -1.1437936966  -0.881327896   -0.6778187   NaN  1.5912040
## [913,]  -0.7705957084  -0.609754687   -0.6778187   NaN  1.5912040
## [914,]   2.6170734514  -1.660643257   -0.2774999   NaN  1.5912040
## [915,]   1.5025772396   1.584607423   -0.6778187   NaN  1.5912040
## [916,]  -0.8236973004   1.544707375   -0.6778187   NaN -0.6280274
## [917,]   2.6096392285  -0.613548001   -0.2774999   NaN -0.6280274
## [918,]  -0.4173639188  -1.162454638   -1.0781375   NaN  1.5912040
## [919,]   2.8343651657   0.686013399    0.5231377   NaN  1.5912040
## [920,]   0.8515517224   0.799250857    1.3237753   NaN -0.6280274
## [921,]  -0.4373301174   1.154979448    0.5231377   NaN -0.6280274
## [922,]  -0.9237406996  -1.049638659   -1.0781375   NaN  1.5912040
## [923,]   2.6948141820   0.444505718   -0.6778187   NaN -0.6280274
## [924,]  -0.4275594245   1.056493768    0.5231377   NaN -0.6280274
## [925,]  -0.6365672904  -1.165124008   -1.0781375   NaN  1.5912040
## [926,]  -0.8774361114  -1.220197312    1.3237753   NaN  1.5912040
## [927,]   0.7918655330   0.850109368    0.1228189   NaN -0.6280274
## [928,]  -0.2321455661  -1.684527088    2.5247318   NaN  1.5912040
## [929,]   0.3133139864  -0.033451891   -0.6778187   NaN -0.6280274
## [930,]  -0.5598885916  -0.012799401   -0.6778187   NaN  1.5912040
## [931,]  -0.7784547440  -1.412813386   -1.0781375   NaN -0.6280274
## [932,]  -0.3840161191  -0.204432023    1.7240942   NaN  1.5912040
## [933,]  -0.6720391538   0.417531038    0.1228189   NaN  1.5912040
## [934,]  -0.9394587708  -1.346079152   -0.2774999   NaN -0.6280274
## [935,]  -0.9360602689   0.634592916   -0.6778187   NaN -0.6280274
## [936,]  -0.0624328782  -0.368106513   -0.6778187   NaN -0.6280274
## [937,]   2.4550073928  -0.179564740    0.1228189   NaN -0.6280274
## [938,]   2.2557702198   0.424415202    1.3237753   NaN  1.5912040
## [939,]  -0.8774361114   1.652606095   -0.6778187   NaN -0.6280274
## [940,]  -0.3440837219   1.198672810   -0.6778187   NaN -0.6280274
## [941,]  -0.5520295560   1.101592061   -1.0781375   NaN -0.6280274
## [942,]  -0.3984597521   1.309100406   -1.0781375   NaN -0.6280274
## [943,]   0.1255467573  -1.203478631    0.1228189   NaN -0.6280274
## [944,]  -0.6541970189   1.214408040    1.3237753   NaN -0.6280274
## [945,]   0.0363360828   0.292070678   -1.0781375   NaN -0.6280274
## [946,]   2.2041554724   1.139244218    0.5231377   NaN  1.5912040
## [947,]   0.5503594928   0.410506382   -0.2774999   NaN  1.5912040
## [948,]   0.4127201665   1.014486324    2.5247318   NaN  1.5912040
```

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##  [949,]  1.1497702627  1.631672619       -0.6778187    NaN  1.5912040
##  [950,] -0.4182135443 -0.135028420       -1.0781375    NaN -0.6280274
##  [951,]  0.7113635196 -0.755586550       -0.6778187    NaN  1.5912040
##  [952,] -0.0747524476  1.090352611       -0.6778187    NaN -0.6280274
##  [953,] -0.8923045572 -0.842130315       -0.6778187    NaN  1.5912040
##  [954,] -0.8795601751  0.050001025        0.5231377    NaN -0.6280274
##  [955,]  2.4125261192  1.723695616       -1.0781375    NaN  1.5912040
##  [956,]  2.6941769629 -1.028564691        0.5231377    NaN -0.6280274
##  [957,]  2.8067523379 -1.445829270        1.3237753    NaN -0.6280274
##  [958,] -0.6284958484 -0.812205279        2.5247318    NaN -0.6280274
##  [959,]  0.4241901104 -1.239023391       -1.0781375    NaN -0.6280274
##  [960,] -0.3912379356  1.143880492       -0.6778187    NaN -0.6280274
##  [961,] -0.5097606888 -1.407193661       -1.0781375    NaN -0.6280274
##  [962,] -0.4787493591 -1.632966112       -0.6778187    NaN  1.5912040
##  [963,]  1.5979476988  0.460100455       -0.6778187    NaN  1.5912040
##  [964,]  0.0828530773  0.723244077        0.1228189    NaN -0.6280274
##  [965,] -0.0802750131  1.298141942       -0.6778187    NaN -0.6280274
##  [966,] -0.6019450524 -0.735917513        0.1228189    NaN -0.6280274
##  [967,]  0.7444989130 -0.321743782        1.7240942    NaN  1.5912040
##  [968,] -0.8742500159 -1.060878109        0.1228189    NaN -0.6280274
##  [969,] -0.3959108756 -1.693237662       -0.2774999    NaN -0.6280274
##  [970,]  0.2963214770  0.617171768       -0.6778187    NaN -0.6280274
##  [971,] -0.8430262798 -1.093893994        2.1244130    NaN -0.6280274
##  [972,]  1.4101804697  1.422618850        0.1228189    NaN -0.6280274
##  [973,] -1.0390773573  0.701327150       -0.6778187    NaN -0.6280274
##  [974,] -0.2421286654 -0.487104189       -1.0781375    NaN -0.6280274
##  [975,] -0.3041513248  0.854043176        0.1228189    NaN -0.6280274
##  [976,]  1.5276411910 -0.707537902        1.3237753    NaN  1.5912040
##  [977,]  1.4654061253  0.550999507        0.5231377    NaN  1.5912040
##  [978,] -0.9502914956  0.221683623       -0.6778187    NaN -0.6280274
##  [979,] -0.0267486084 -0.059724105        0.9234565    NaN -0.6280274
##  [980,] -0.2281098451  0.446472622        0.5231377    NaN -0.6280274
##  [981,] -0.7897122815 -0.341553313        1.7240942    NaN -0.6280274
##  [982,] -0.4012210348  1.260911264       -1.0781375    NaN  1.5912040
##  [983,] -0.8268833959  0.201593106       -0.6778187    NaN -0.6280274
##  [984,]  0.0390973656 -1.145033491       -0.6778187    NaN -0.6280274
##  [985,] -0.3778563344  1.393536774       -0.6778187    NaN -0.6280274
##  [986,] -0.0688050693  0.947471104       -0.6778187    NaN  1.5912040
##  [987,] -0.0813370450 -1.509753642        0.1228189    NaN  1.5912040
##  [988,]  0.8693938573  0.151999033       -0.2774999    NaN -0.6280274
##  [989,] -0.2200384031 -0.050592052        0.1228189    NaN  1.5912040
##  [990,] -0.7448945379 -1.282857246        1.7240942    NaN  1.5912040
##  [991,]  0.7423748493  0.699641232        1.3237753    NaN -0.6280274
##  [992,] -0.5150708480  0.868794954       -1.0781375    NaN  1.5912040
##  [993,]  0.9382135204 -1.526331830        0.1228189    NaN -0.6280274
##  [994,] -0.0575475318 -0.257959904       -0.2774999    NaN -0.6280274
##  [995,]  1.4324831383 -0.643754023       -0.2774999    NaN  1.5912040
##  [996,] -0.5144336289  0.799391351       -0.6778187    NaN  1.5912040
##  [997,] -0.1558916800 -1.013391433       -0.6778187    NaN  1.5912040
##  [998,] -0.8727631713  1.597111311       -0.6778187    NaN  1.5912040
##  [999,] -0.5520295560 -1.441895463       -1.0781375    NaN -0.6280274
## [1000,]  2.1869505567  0.323541138       -1.0781375    NaN -0.6280274
## [1001,] -0.7546652308  0.428489502        2.5247318    NaN -0.6280274
## [1002,] -0.6104413071  0.673369018        0.5231377    NaN -0.6280274
```

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## [1003,]  0.6072843994  0.791102256     -0.2774999   NaN -0.6280274
## [1004,] -0.6954038542 -1.321071376      0.5231377   NaN -0.6280274
## [1005,] -0.6212740319  1.301513777     -1.0781375   NaN -0.6280274
## [1006,]  0.3154380501 -0.638415284     -0.6778187   NaN -0.6280274
## [1007,] -0.4713151362  1.179706238      0.1228189   NaN -0.6280274
## [1008,]  0.2230412801  1.210614726     -1.0781375   NaN  1.5912040
## [1009,]  2.2993135252 -1.216825477      1.3237753   NaN -0.6280274
## [1010,]  2.8033538360  1.144020985      0.1228189   NaN  1.5912040
## [1011,]  1.7479065944 -0.266810970     -0.2774999   NaN -0.6280274
## [1012,]  0.5894422645  0.906166125      0.1228189   NaN  1.5912040
## [1013,] -1.0926037620  0.258633315     -0.6778187   NaN -0.6280274
## [1014,] -0.3661739842 -0.218059856      1.7240942   NaN -0.6280274
## [1015,]  2.1068733560 -0.767949945      0.1228189   NaN -0.6280274
## [1016,] -0.7448945379  0.838869918      0.9234565   NaN -0.6280274
## [1017,] -1.1134195860  1.116765319     -0.6778187   NaN -0.6280274
## [1018,] -0.9354230498 -0.932045914     -1.0781375   NaN -0.6280274
## [1019,] -0.1471830190  1.164813967     -0.6778187   NaN -0.6280274
## [1020,] -0.1818052569 -0.115078396      0.5231377   NaN -0.6280274
## [1021,] -0.6548342380 -0.577160282      1.7240942   NaN -0.6280274
## [1022,] -0.4466759976  0.122073998      0.1228189   NaN -0.6280274
## [1023,] -0.6378417286  1.567467262     -1.0781375   NaN -0.6280274
## [1024,] -0.9424324600 -0.536557769     -0.2774999   NaN -0.6280274
## [1025,]  2.2655409127  1.740695284      0.1228189   NaN -0.6280274
## [1026,] -0.4972287131  0.126148299     -0.6778187   NaN  1.5912040
## [1027,]  0.5737241933  1.268638386      0.5231377   NaN -0.6280274
## [1028,] -0.6815974403 -1.489944111      0.9234565   NaN -0.6280274
## [1029,] -0.9294756715 -1.229610352     -0.2774999   NaN  1.5912040
## [1030,] -0.5369487039  1.234358064      0.1228189   NaN -0.6280274
## [1031,]  0.9112379117 -0.832717275     -0.6778187   NaN -0.6280274
## [1032,]  0.7631906734  0.235030470      0.5231377   NaN -0.6280274
## [1033,] -0.6068303989  0.402919754     -0.2774999   NaN  1.5912040
## [1034,]  0.2003137987 -0.756148523     -0.6778187   NaN -0.6280274
## [1035,]  0.9235574810  0.779722313     -0.2774999   NaN  1.5912040
## [1036,] -0.9332989862  1.446502681      2.5247318   NaN -0.6280274
## [1037,] -0.5906875149  0.950842939      1.3237753   NaN  1.5912040
## [1038,]  0.6111077140  0.057166174      0.5231377   NaN  1.5912040
## [1039,] -0.2160026821  1.472634403      0.5231377   NaN -0.6280274
## [1040,] -0.7988457553 -1.579297738     -0.6778187   NaN -0.6280274
## [1041,]  1.5408103858  1.526443269     -0.2774999   NaN -0.6280274
## [1042,]  0.4163310748  1.289290875     -1.0781375   NaN -0.6280274
## [1043,] -0.7096350809 -0.890740936      0.1228189   NaN -0.6280274
## [1044,]  2.1442568767  0.765813494      0.5231377   NaN -0.6280274
## [1045,]  0.0314507363  1.014486324     -0.2774999   NaN -0.6280274
## [1046,] -0.8831710834 -0.880625431     -0.2774999   NaN -0.6280274
## [1047,] -0.6548342380  0.961660909     -0.6778187   NaN -0.6280274
## [1048,] -0.4524109695  0.441555363     -1.0781375   NaN -0.6280274
## [1049,] -0.3704221115  0.221683623      0.1228189   NaN -0.6280274
## [1050,] -0.2552978602 -1.597983324      2.1244130   NaN -0.6280274
## [1051,] -0.6010954269  0.301343225     -0.6778187   NaN -0.6280274
## [1052,] -0.3685104542 -0.706835436      1.7240942   NaN -0.6280274
## [1053,] -1.1106583033 -1.006085791     -0.6778187   NaN -0.6280274
## [1054,] -0.3404728137 -1.628610825     -1.0781375   NaN -0.6280274
## [1055,]  0.8417810295  0.932157353      0.1228189   NaN -0.6280274
## [1056,]  2.2311310812 -0.334950136      1.7240942   NaN -0.6280274
```

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## [1057,] -0.7633738919  0.201452613      0.1228189  NaN -0.6280274
## [1058,] -0.1567413055  0.445629663      0.9234565  NaN -0.6280274
## [1059,] -0.4044071304 -0.912938849     -1.0781375  NaN  1.5912040
## [1060,] -0.8706391077  0.263972054     -0.6778187  NaN -0.6280274
## [1061,] -0.7075110172  0.377209512     -0.2774999  NaN  1.5912040
## [1062,] -0.9494418701 -1.012969954     -0.6778187  NaN -0.6280274
## [1063,]  0.7871925929  0.759491303      0.9234565  NaN  1.5912040
## [1064,]  0.4496788745  1.326802539     -0.6778187  NaN -0.6280274
## [1065,] -0.9428572727  0.156635307     -1.0781375  NaN -0.6280274
## [1066,] -0.5242043218  0.257087890     -1.0781375  NaN  1.5912040
## [1067,] -0.5660483762 -0.859972942      2.1244130  NaN -0.6280274
## [1068,] -0.4061063813  1.389040994      0.1228189  NaN  1.5912040
## [1069,] -0.8372913079 -1.258551935      1.7240942  NaN -0.6280274
## [1070,] -1.0492728630 -0.250513768     -0.6778187  NaN -0.6280274
## [1071,] -0.3408976264 -0.349280434     -1.0781375  NaN -0.6280274
## [1072,] -0.3640499205  1.230283763      0.5231377  NaN -0.6280274
## [1073,] -0.7058117663 -1.355070712     -1.0781375  NaN -0.6280274
## [1074,]  0.0097852868 -1.565107933     -0.6778187  NaN -0.6280274
## [1075,] -0.0244121384  1.086840283     -0.2774999  NaN  1.5912040
## [1076,]  1.0070331836  0.949578501     -0.2774999  NaN -0.6280274
## [1077,]  2.0240348726  1.425007233      0.1228189  NaN -0.6280274
## [1078,] -0.8795601751 -0.947640651      1.3237753  NaN -0.6280274
## [1079,]  2.0869071574  1.090352611      0.1228189  NaN -0.6280274
## [1080,]  0.3978517208 -0.725380528      0.5231377  NaN -0.6280274
## [1081,]  2.1459561277 -0.412080861      2.1244130  NaN -0.6280274
## [1082,]  0.4467051854  0.966859155     -0.6778187  NaN -0.6280274
## [1083,] -0.8986767482  1.475022786     -1.0781375  NaN -0.6280274
## [1084,] -0.9526279656  1.056212782      0.1228189  NaN -0.6280274
## [1085,]  0.1232102872 -0.284513104     -0.6778187  NaN  1.5912040
## [1086,] -0.5137964098 -1.427003192     -0.6778187  NaN -0.6280274
## [1087,]  1.6797241504  1.424164275     -0.6778187  NaN  1.5912040
## [1088,] -0.8910301190 -1.316294609     -1.0781375  NaN  1.5912040
## [1089,] -0.3530047894  1.368248011      0.5231377  NaN -0.6280274
## [1090,] -0.4711027298 -1.585057956     -0.6778187  NaN -0.6280274
## [1091,]  0.6822638472 -0.986978726      0.1228189  NaN -0.6280274
## [1092,] -0.4636685070  1.382297324     -0.6778187  NaN -0.6280274
## [1093,] -0.9284136397 -1.366731641      0.5231377  NaN -0.6280274
## [1094,]  0.7691380517  0.603824921     -0.2774999  NaN  1.5912040
## [1095,] -0.2187639649  0.706946875     -1.0781375  NaN -0.6280274
## [1096,] -0.2752640587  1.213284095     -0.6778187  NaN  1.5912040
## [1097,]  2.1100594515  0.431018378     -0.6778187  NaN  1.5912040
## [1098,] -0.8935789954 -0.600903620     -1.0781375  NaN -0.6280274
## [1099,] -0.5169825053 -0.768792904      0.1228189  NaN  1.5912040
## [1100,]  0.1992517669  0.930049956     -0.6778187  NaN -0.6280274
## [1101,] -0.8651165421  1.670589215     -1.0781375  NaN -0.6280274
## [1102,] -0.1327393860  0.184171959      0.1228189  NaN -0.6280274
## [1103,] -0.8196615794  0.377630991      0.1228189  NaN  1.5912040
## [1104,] -0.0135794136 -0.087120264      2.1244130  NaN -0.6280274
## [1105,] -0.8606560084  1.132781535      1.3237753  NaN -0.6280274
## [1106,] -0.0235625129 -0.523210922     -0.2774999  NaN -0.6280274
## [1107,]  0.6820514409 -1.263047715     -0.6778187  NaN -0.6280274
## [1108,] -0.0904705188  0.070372528      0.1228189  NaN -0.6280274
## [1109,] -0.8608684147  1.042163469     -0.6778187  NaN -0.6280274
## [1110,]  0.5834948862  0.489744504      0.1228189  NaN -0.6280274
```

```
## [1111,] -0.9407332090  1.728893861     -0.6778187   NaN  1.5912040
## [1112,]  0.7786963382  0.042835876     -1.0781375   NaN -0.6280274
## [1113,] -0.3500311002 -0.935698736      0.5231377   NaN -0.6280274
## [1114,] -0.5131591907  1.525881297      0.5231377   NaN -0.6280274
## [1115,] -0.8784981433  0.311458730      2.1244130   NaN -0.6280274
## [1116,] -0.7499922908  1.088526201     -0.6778187   NaN -0.6280274
## [1117,]  2.7789271037  1.225647490     -0.6778187   NaN -0.6280274
## [1118,] -0.2164274949 -0.183358054      2.5247318   NaN -0.6280274
## [1119,] -0.9434944918 -0.446782663     -0.6778187   NaN -0.6280274
## [1120,]  0.7266567781 -0.275100065     -1.0781375   NaN -0.6280274
## [1121,] -0.4895820838  0.290244268     -0.2774999   NaN -0.6280274
## [1122,]  0.0662853807  1.002263422      1.3237753   NaN -0.6280274
## [1123,] -0.3780687408  0.266922409     -0.6778187   NaN  1.5912040
## [1124,] -0.0766641049 -1.417590152      0.1228189   NaN  1.5912040
## [1125,]  0.3683272357 -1.356475643     -0.2774999   NaN -0.6280274
## [1126,]  0.4991695582  1.428800548     -0.6778187   NaN -0.6280274
## [1127,]  2.7247634799  0.731392678      0.5231377   NaN  1.5912040
## [1128,] -0.9409456154 -0.208927803     -0.2774999   NaN -0.6280274
## [1129,] -0.1998597982  0.758367358      0.1228189   NaN  1.5912040
## [1130,]  2.7846620756  1.692787128      2.1244130   NaN -0.6280274
## [1131,] -0.6575955208  1.550327100     -0.6778187   NaN -0.6280274
## [1132,] -0.3058505757  0.143147967     -0.6778187   NaN -0.6280274
## [1133,] -0.3959108756 -0.428659050     -0.6778187   NaN -0.6280274
## [1134,] -0.3455705665 -1.188305373      0.9234565   NaN -0.6280274
## [1135,] -0.8098908865 -0.927269148     -0.6778187   NaN -0.6280274
## [1136,]  2.3500786471 -1.567496316     -0.6778187   NaN -0.6280274
## [1137,] -0.8697894822 -0.981920973     -0.6778187   NaN  1.5912040
## [1138,] -0.7835524969 -0.564796887     -0.6778187   NaN  1.5912040
## [1139,]  1.0072455900  0.895769634     -0.2774999   NaN  1.5912040
## [1140,] -0.6777741257  0.627989739      0.1228189   NaN -0.6280274
## [1141,]  2.6648648842 -1.512282518     -1.0781375   NaN  1.5912040
## [1142,] -0.9265019824 -1.259535387     -0.6778187   NaN -0.6280274
## [1143,] -0.1558916800  1.283249671     -0.6778187   NaN  1.5912040
## [1144,] -0.4498620931  1.383702255     -0.6778187   NaN -0.6280274
## [1145,] -0.2487132628  1.024039856      1.7240942   NaN -0.6280274
## [1146,] -0.3908131228 -0.265827519      2.5247318   NaN  1.5912040
## [1147,] -0.3778563344  0.377490498     -0.6778187   NaN -0.6280274
## [1148,] -0.6992271689  1.094286419     -0.6778187   NaN -0.6280274
## [1149,] -0.2391549762 -1.472101484     -0.2774999   NaN -0.6280274
## [1150,] -0.5176197244  0.277740380     -0.6778187   NaN -0.6280274
## [1151,] -0.2750516524  1.685762472     -0.6778187   NaN -0.6280274
## [1152,] -0.3453581601  0.863596708     -1.0781375   NaN -0.6280274
## [1153,] -0.7191933674  1.643193056     -0.6778187   NaN -0.6280274
## [1154,] -1.0479984248  0.576990735     -0.6778187   NaN  1.5912040
## [1155,]  2.7942203622 -1.277518507      0.1228189   NaN -0.6280274
## [1156,] -0.7293888731 -0.563532449     -1.0781375   NaN -0.6280274
## [1157,]  0.8351964320  1.613829993     -0.6778187   NaN -0.6280274
## [1158,] -0.5002024022 -0.289851843     -0.6778187   NaN -0.6280274
## [1159,] -0.1561040864  1.711191728      0.1228189   NaN -0.6280274
## [1160,] -0.3103111094 -1.569744206     -1.0781375   NaN -0.6280274
## [1161,] -0.1556792737 -1.253915662     -0.6778187   NaN -0.6280274
## [1162,]  0.2661597727 -0.016030743      0.1228189   NaN  1.5912040
## [1163,]  0.8077960106  1.013924351      2.5247318   NaN -0.6280274
## [1164,] -0.5452325522 -0.612564549     -0.6778187   NaN -0.6280274
```

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## [1165,]  0.3063045763  0.791664229      1.3237753   NaN  1.5912040
## [1166,] -0.1614142456 -0.535293331      0.5231377   NaN  1.5912040
## [1167,]  1.8477375873 -1.223850134     -0.2774999   NaN -0.6280274
## [1168,] -0.2257733751  1.093724446      1.3237753   NaN  1.5912040
## [1169,] -0.5826160729  0.408117999     -0.6778187   NaN  1.5912040
## [1170,] -0.6342308203  1.148797751      1.7240942   NaN -0.6280274
## [1171,] -0.8332555869 -1.126207412     -0.2774999   NaN -0.6280274
## [1172,] -0.9211918232 -1.541786074      0.1228189   NaN  1.5912040
## [1173,] -0.1346510433  1.278472905      2.5247318   NaN -0.6280274
## [1174,]  0.3196861774  1.191226674      0.5231377   NaN -0.6280274
## [1175,] -0.2754764651 -1.312220309     -0.6778187   NaN -0.6280274
## [1176,] -0.2565722984 -0.930079011      0.5231377   NaN -0.6280274
## [1177,]  2.1049616987 -1.519447667      0.1228189   NaN -0.6280274
## [1178,]  1.4371560784  1.077286751      0.9234565   NaN -0.6280274
## [1179,] -0.7901370943 -0.149218225     -0.6778187   NaN -0.6280274
## [1180,] -0.2272602196  0.705120464     -0.6778187   NaN -0.6280274
## [1181,] -0.9536899975 -0.472492904     -0.2774999   NaN -0.6280274
## [1182,]  1.5852033167 -0.373866731     -0.2774999   NaN  1.5912040
## [1183,] -0.4521985631  0.154246923     -1.0781375   NaN -0.6280274
## [1184,]  0.0720203526  1.685200500      1.3237753   NaN -0.6280274
## [1185,]  2.3201293493  0.614221413      0.1228189   NaN -0.6280274
## [1186,]  2.3577252764 -1.515654353     -0.6778187   NaN -0.6280274
## [1187,] -0.4082304450 -0.547797219      0.1228189   NaN  1.5912040
## [1188,] -0.3755198643 -0.624646958      1.7240942   NaN -0.6280274
## [1189,] -0.4919185539 -1.539397691     -0.6778187   NaN  1.5912040
## [1190,] -0.2119669611 -1.460019076     -0.6778187   NaN -0.6280274
## [1191,] -0.2194011840  1.574210932     -1.0781375   NaN -0.6280274
## [1192,] -0.2181267458  1.162706570     -0.6778187   NaN -0.6280274
## [1193,] -0.8317687424  1.493146399      0.5231377   NaN  1.5912040
## [1194,] -0.8629924784  1.336496565     -0.6778187   NaN -0.6280274
## [1195,]  2.0112904905  0.951545404      1.3237753   NaN -0.6280274
## [1196,]  1.8853335144  1.133905480      0.5231377   NaN -0.6280274
## [1197,]  0.1229978809 -0.382436812      0.1228189   NaN  1.5912040
## [1198,] -0.8018194445  0.950983432     -0.6778187   NaN -0.6280274
## [1199,] -0.2410666335  0.255261480     -0.6778187   NaN  1.5912040
## [1200,] -0.2455271673 -0.968574127      1.3237753   NaN -0.6280274
## [1201,] -0.7026256707 -1.425457767      0.5231377   NaN  1.5912040
## [1202,] -0.5339750147  0.881298842     -0.6778187   NaN  1.5912040
## [1203,] -0.6790485639  1.666655407      1.7240942   NaN -0.6280274
## [1204,]  0.1066425905 -1.525067392      0.1228189   NaN -0.6280274
## [1205,] -0.8173251093 -0.361503336     -0.2774999   NaN  1.5912040
## [1206,] -1.0853819455  1.480642511     -0.6778187   NaN -0.6280274
## [1207,] -0.8353796506 -0.335512108     -0.6778187   NaN -0.6280274
## [1208,] -0.6299826930  1.323992677      0.9234565   NaN -0.6280274
## [1209,] -0.5346122338 -0.337338519     -0.6778187   NaN -0.6280274
## [1210,]  0.9303544848  0.864580160      0.1228189   NaN -0.6280274
## [1211,] -0.9505039019 -0.094987879     -0.6778187   NaN -0.6280274
## [1212,]  0.6419066374 -0.932326901     -0.6778187   NaN -0.6280274
## [1213,] -0.7591257646  0.846456547     -0.6778187   NaN -0.6280274
## [1214,] -0.8980395291  1.515906285     -0.6778187   NaN  1.5912040
## [1215,]  0.2922857560  0.069810556     -0.6778187   NaN  1.5912040
## [1216,] -0.3341006226 -0.048203669     -1.0781375   NaN  1.5912040
## [1217,]  0.2854887522 -1.158239845     -0.6778187   NaN  1.5912040
## [1218,] -0.4464635912  0.464034263     -0.6778187   NaN -0.6280274
```

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## [1219,]  0.5815832289  0.218592774    -0.6778187   NaN -0.6280274
## [1220,] -0.7495674780  1.559318660     2.5247318   NaN -0.6280274
## [1221,] -0.4250105480 -0.965764264     0.1228189   NaN -0.6280274
## [1222,]  0.9016796252 -1.533918459     0.1228189   NaN -0.6280274
## [1223,] -1.0509721139 -0.383279770    -0.6778187   NaN -0.6280274
## [1224,]  1.3664247579  1.383983241     1.7240942   NaN -0.6280274
## [1225,] -0.8916673381 -1.137446862    -0.6778187   NaN -0.6280274
## [1226,]  2.1667719517  0.394209180    -0.6778187   NaN -0.6280274
## [1227,] -0.6520729552  0.428068023     1.3237753   NaN -0.6280274
## [1228,] -0.6427270750  0.532454414    -0.6778187   NaN -0.6280274
## [1229,] -0.0154910709  0.910521412     1.3237753   NaN -0.6280274
## [1230,]  0.0027758767 -1.302666776    -0.2774999   NaN  1.5912040
## [1231,] -0.5513923369 -1.502026520    -0.6778187   NaN -0.6280274
## [1232,] -0.1998597982 -0.648530789     1.3237753   NaN -0.6280274
## [1233,]  0.0807290137 -1.287212533    -0.2774999   NaN -0.6280274
## [1234,] -0.7733569912 -1.475473319    -0.6778187   NaN -0.6280274
## [1235,] -0.3239051170 -1.514108929     1.7240942   NaN -0.6280274
## [1236,]  0.8209652054 -1.224693092     0.5231377   NaN  1.5912040
## [1237,] -0.0783633558 -0.794503146     0.9234565   NaN  1.5912040
## [1238,]  0.0492928712 -0.304322635     1.3237753   NaN -0.6280274
## [1239,] -0.6813850340 -0.203870051    -0.6778187   NaN -0.6280274
## [1240,] -0.2686794613 -1.073803477    -0.2774999   NaN -0.6280274
## [1241,] -0.0065700035 -0.747999921    -0.6778187   NaN  1.5912040
## [1242,]  0.6599611786 -1.471399019     0.1228189   NaN -0.6280274
## [1243,]  2.8313914765 -1.399888019    -0.6778187   NaN -0.6280274
## [1244,]  0.6909725083 -1.084340461     0.5231377   NaN -0.6280274
## [1245,] -0.3260291806  1.701919182    -1.0781375   NaN -0.6280274
## [1246,] -0.9256523569 -1.716278535    -1.0781375   NaN -0.6280274
## [1247,] -0.9182181340 -0.643613530     1.3237753   NaN -0.6280274
## [1248,]  0.3914795297  0.931454887    -0.6778187   NaN -0.6280274
## [1249,] -0.6495240788 -1.146578915    -0.6778187   NaN -0.6280274
## [1250,] -0.7950224407  0.044521793    -0.6778187   NaN -0.6280274
## [1251,] -0.0443783370  1.228878832     2.1244130   NaN  1.5912040
## [1252,]  0.1353174502 -1.577049848    -0.2774999   NaN -0.6280274
## [1253,] -0.7584885455 -1.226098024    -1.0781375   NaN  1.5912040
## [1254,] -0.2880084408 -0.508037665     2.1244130   NaN -0.6280274
## [1255,] -0.4239485162 -0.860113435     0.1228189   NaN -0.6280274
## [1256,]  0.4377841179 -0.593036005    -0.2774999   NaN  1.5912040
## [1257,] -0.8570451001  0.231799128     0.5231377   NaN -0.6280274
## [1258,]  0.3521843517  0.658757733    -0.2774999   NaN -0.6280274
## [1259,] -0.9332989862 -0.604977921    -0.6778187   NaN -0.6280274
## [1260,] -0.2567847047 -0.728471377     0.1228189   NaN -0.6280274
## [1261,] -0.8039435082  0.472182864    -0.2774999   NaN -0.6280274
## [1262,] -0.1469706126  1.436668163     0.1228189   NaN  1.5912040
## [1263,] -0.8636296975  0.178973713     2.5247318   NaN  1.5912040
## [1264,] -0.7937480025 -0.753198167     2.1244130   NaN -0.6280274
## [1265,]  2.6625284141  0.771573712     2.1244130   NaN -0.6280274
## [1266,] -0.7323625622 -1.140678204     0.9234565   NaN -0.6280274
## [1267,] -0.8950658400  0.872026296    -0.6778187   NaN -0.6280274
## [1268,] -0.5314261383 -0.281000776    -0.6778187   NaN  1.5912040
## [1269,]  1.3725845426  1.123228002     0.5231377   NaN  1.5912040
## [1270,] -0.6295578802 -1.303790721    -1.0781375   NaN -0.6280274
## [1271,] -0.1006660244  1.551029566     0.9234565   NaN -0.6280274
## [1272,] -0.8122273565 -1.369260517    -0.6778187   NaN -0.6280274
```

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## [1273,] -0.5949356423  0.289822788   -0.6778187   NaN -0.6280274
## [1274,] -0.8719135459  0.236856881   -0.6778187   NaN  1.5912040
## [1275,] -0.2198259968 -0.128003763   -0.6778187   NaN -0.6280274
## [1276,]  1.4046579041  1.218201354   -0.2774999   NaN -0.6280274
## [1277,] -0.4914937412 -0.774553122   -0.6778187   NaN -0.6280274
## [1278,]  2.7241262608 -0.013361374    1.7240942   NaN  1.5912040
## [1279,]  0.3861693705  1.634763468    1.7240942   NaN  1.5912040
## [1280,] -0.8838083025 -0.452542881   -0.6778187   NaN  1.5912040
## [1281,] -0.5165576926 -0.208084844   -0.2774999   NaN -0.6280274
## [1282,] -0.1465457999 -0.115359382   -0.6778187   NaN  1.5912040
## [1283,] -0.7136708019 -1.157256393    1.3237753   NaN -0.6280274
## [1284,] -0.9471054001 -1.233825145   -0.6778187   NaN -0.6280274
## [1285,]  1.4785753201 -0.899030030    1.7240942   NaN -0.6280274
## [1286,]  0.3160752692  1.524757352    2.1244130   NaN -0.6280274
## [1287,] -0.6639677118  1.586433833    0.5231377   NaN -0.6280274
## [1288,] -0.2049575510 -1.210643780    0.9234565   NaN -0.6280274
## [1289,] -0.1573785246  1.423040330   -0.2774999   NaN -0.6280274
## [1290,] -0.8307067105 -1.009317133    0.9234565   NaN -0.6280274
## [1291,] -0.2457395736 -1.138711300    0.5231377   NaN -0.6280274
## [1292,] -0.4863959883 -1.309550940   -0.6778187   NaN -0.6280274
## [1293,] -0.5046629360  0.684889454   -0.2774999   NaN -0.6280274
## [1294,] -0.8634172912  1.498344644    0.5231377   NaN -0.6280274
## [1295,]  0.0779677309  0.170965605    0.1228189   NaN -0.6280274
## [1296,]  0.8377453085  1.706274468   -1.0781375   NaN  1.5912040
## [1297,]  0.6720683416 -1.626081949    2.5247318   NaN -0.6280274
## [1298,] -0.9250151378 -1.043035483   -1.0781375   NaN  1.5912040
## [1299,]  0.5146752231 -0.487666162    0.5231377   NaN -0.6280274
## [1300,]  0.0021386576 -0.738024910    0.5231377   NaN -0.6280274
## [1301,]  0.0628868788  1.097939240   -0.6778187   NaN -0.6280274
## [1302,]  2.0790481218  1.161020653    0.5231377   NaN -0.6280274
## [1303,] -0.8067047910 -0.648671282   -1.0781375   NaN -0.6280274
## [1304,]  0.8135309825  0.696550383    2.1244130   NaN  1.5912040
## [1305,] -0.4364804919 -0.500872516   -0.2774999   NaN -0.6280274
## [1306,]  0.0745692290  0.194287464    0.5231377   NaN -0.6280274
## [1307,]  0.6656961506 -0.848031026   -0.2774999   NaN -0.6280274
## [1308,] -0.6185127491 -0.223960567   -0.6778187   NaN -0.6280274
## [1309,] -0.2332075979 -1.414639797   -0.2774999   NaN  1.5912040
## [1310,] -0.3863525891 -0.728892856   -0.6778187   NaN -0.6280274
## [1311,]  1.9719953124  1.027130705   -0.2774999   NaN  1.5912040
## [1312,] -1.0596807750 -0.884418745   -0.6778187   NaN -0.6280274
## [1313,] -0.7533907926  1.009007092   -1.0781375   NaN -0.6280274
## [1314,] -0.8852951470 -1.567355823    0.5231377   NaN  1.5912040
## [1315,] -0.2865215962  0.751904675    0.5231377   NaN -0.6280274
## [1316,]  0.0975091167  0.738979307    0.5231377   NaN  1.5912040
## [1317,] -0.1758578786  0.693038055   -0.6778187   NaN -0.6280274
## [1318,] -0.8759492669  0.774524068   -1.0781375   NaN  1.5912040
## [1319,] -0.5715709418 -1.027019266   -0.6778187   NaN -0.6280274
## [1320,] -0.3939992183  1.652465602    2.1244130   NaN -0.6280274
## [1321,] -0.7576389200 -1.145314477    0.1228189   NaN -0.6280274
## [1322,] -0.9341486116 -1.250684320    0.5231377   NaN -0.6280274
## [1323,]  0.4407578071  0.797424447    0.1228189   NaN -0.6280274
## [1324,] -0.8064923846 -0.536557769   -0.6778187   NaN -0.6280274
## [1325,] -0.0252617639  0.959553512    2.1244130   NaN -0.6280274
## [1326,] -0.5384355484 -0.096814290    0.5231377   NaN -0.6280274
```

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## [1327,]  0.7230458699  1.668060339    1.7240942   NaN  1.5912040
## [1328,]  1.4278101982 -0.923616327   -0.2774999   NaN -0.6280274
## [1329,] -0.6293454738 -1.024911870   -0.6778187   NaN -0.6280274
## [1330,] -0.7856765605  0.157478265   -0.6778187   NaN -0.6280274
## [1331,]  2.7377202683  1.155681914    1.7240942   NaN -0.6280274
## [1332,]  2.7957072067 -0.102574508    0.5231377   NaN -0.6280274
## [1333,] -0.8632048848  0.061802448   -0.6778187   NaN  1.5912040
## [1334,]  0.1722761582 -0.042443451    0.9234565   NaN -0.6280274
## [1335,] -0.3672360160  1.339025441   -1.0781375   NaN -0.6280274
## [1336,] -0.5524543687 -1.288617464    2.1244130   NaN -0.6280274
## [1337,] -0.8158382648 -0.890459950    2.1244130   NaN -0.6280274
## [1338,] -0.7746314294 -1.492192001   -0.6778187   NaN -0.6280274
## [1339,] -1.1516527322  0.239666743   -0.6778187   NaN -0.6280274
## [1340,] -0.8561954746  1.654853985   -0.6778187   NaN  1.5912040
## [1341,] -0.1762826914 -1.159504283   -0.6778187   NaN  1.5912040
## [1342,] -0.4897944902  0.605651332   -0.6778187   NaN -0.6280274
## [1343,]  0.6818390345  1.423321316   -0.2774999   NaN  1.5912040
## [1344,] -0.9432820854  0.712426107    0.1228189   NaN -0.6280274
## [1345,] -0.4713151362 -0.101872042    0.9234565   NaN  1.5912040
## [1346,] -0.3642623268  1.555946825   -1.0781375   NaN  1.5912040
## [1347,] -0.1267920077  1.345207139   -1.0781375   NaN -0.6280274
## [1348,] -0.5558528706 -1.417590152   -0.6778187   NaN -0.6280274
## [1349,]  2.1920483095  0.657212309   -0.2774999   NaN -0.6280274
## [1350,] -0.7582761391  0.083578882   -0.6778187   NaN  1.5912040
## [1351,] -0.0006226252  1.782000262   -1.0781375   NaN -0.6280274
## [1352,]  2.2666029446 -1.668510872    0.1228189   NaN -0.6280274
## [1353,] -0.3122227667 -0.695315000   -0.2774999   NaN -0.6280274
## [1354,] -0.8912425253  0.020637962   -0.6778187   NaN  1.5912040
## [1355,] -0.8317687424 -0.569292667   -0.6778187   NaN -0.6280274
## [1356,] -0.2115421484  0.352482722   -0.2774999   NaN -0.6280274
## [1357,] -0.4481628421  1.760083335    0.9234565   NaN -0.6280274
## [1358,]  1.4539361814  0.074306336    2.5247318   NaN -0.6280274
## [1359,]  0.0170071033  0.815126580   -0.2774999   NaN  1.5912040
## [1360,]  0.3398647824  0.306541470    0.1228189   NaN  1.5912040
## [1361,] -0.5363114848  0.241352661    2.1244130   NaN -0.6280274
## [1362,] -0.8409022162 -1.013110447   -1.0781375   NaN -0.6280274
## [1363,] -0.2344820361  0.027803111    0.5231377   NaN -0.6280274
## [1364,] -0.2157902758 -0.548359192   -0.6778187   NaN -0.6280274
## [1365,]  0.0703211016  0.694302494   -0.6778187   NaN  1.5912040
## [1366,] -1.1495286686 -0.515764787   -0.6778187   NaN -0.6280274
## [1367,] -0.1629010902 -1.450746530    1.3237753   NaN -0.6280274
## [1368,] -0.9084474411 -1.157677872   -0.6778187   NaN -0.6280274
## [1369,] -0.1605646201  1.711613207   -0.6778187   NaN  1.5912040
## [1370,]  0.7117883324  1.269902824    0.1228189   NaN  1.5912040
## [1371,] -0.2200384031 -1.712344727    2.1244130   NaN -0.6280274
## [1372,] -0.2385177571  0.845051616    0.5231377   NaN -0.6280274
## [1373,] -0.2871588153 -0.280719790   -0.6778187   NaN -0.6280274
## [1374,] -0.9282012333  0.534140332   -0.6778187   NaN  1.5912040
## [1375,]  2.4154998084 -0.358552981    0.5231377   NaN  1.5912040
## [1376,] -0.8646917294  0.141181063    0.1228189   NaN  1.5912040
## [1377,] -0.3678732351 -0.002824390   -0.2774999   NaN -0.6280274
## [1378,]  2.6886543974 -0.080798074    0.1228189   NaN -0.6280274
## [1379,] -0.3007528229 -1.603462556    0.1228189   NaN  1.5912040
## [1380,] -0.7731445848  0.736450431   -0.6778187   NaN -0.6280274
```

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## [1381,] -0.2000722045  0.233485046   -1.0781375  NaN -0.6280274
## [1382,] -0.9258647633 -1.712766206   -0.6778187  NaN -0.6280274
## [1383,] -0.7302384985 -1.449622585   -0.6778187  NaN  1.5912040
## [1384,] -0.7844021223 -0.713017133   -0.6778187  NaN -0.6280274
## [1385,]  0.7190101489 -1.059754164   -0.6778187  NaN -0.6280274
## [1386,]  0.4513781255  1.208366836   -0.6778187  NaN -0.6280274
## [1387,] -0.7722949594  0.799812830   -1.0781375  NaN -0.6280274
## [1388,] -0.2400046017 -1.136322917   -1.0781375  NaN -0.6280274
## [1389,]  0.0348492382  0.313144647    0.9234565  NaN -0.6280274
## [1390,] -0.3185949578 -1.200106796   -0.6778187  NaN -0.6280274
## [1391,] -0.8784981433  0.627427766    0.9234565  NaN -0.6280274
## [1392,] -0.7742066167 -0.399015000    0.5231377  NaN -0.6280274
## [1393,] -0.2759012778 -0.102153029   -0.6778187  NaN  1.5912040
## [1394,] -0.5093358760 -1.294518175   -0.6778187  NaN -0.6280274
## [1395,]  0.6746172180 -0.586573321    2.1244130  NaN -0.6280274
## [1396,] -0.1881774480  0.949999980   -0.6778187  NaN  1.5912040
## [1397,]  0.8379577148 -1.189991291    1.3237753  NaN  1.5912040
## [1398,] -0.7659227683  1.146549861    0.1228189  NaN -0.6280274
## [1399,] -0.1136228129  0.529082579   -0.6778187  NaN -0.6280274
## [1400,]  0.2139078063  0.359647871   -0.6778187  NaN -0.6280274
## [1401,] -0.7459565698 -1.276956535   -1.0781375  NaN  1.5912040
## [1402,]  2.7895474221  1.615375417    0.5231377  NaN  1.5912040
## [1403,] -1.1414572266  0.452794813   -0.6778187  NaN  1.5912040
## [1404,]  1.4524493368  1.515203819   -1.0781375  NaN -0.6280274
## [1405,] -0.4611196306  0.069951049   -0.6778187  NaN -0.6280274
## [1406,]  0.9617906273  1.763033691    0.5231377  NaN -0.6280274
## [1407,] -0.4381797428  1.529253132    1.3237753  NaN  1.5912040
## [1408,] -0.4005838157 -0.027129700   -0.6778187  NaN -0.6280274
## [1409,] -0.8190243603 -0.090070620   -0.6778187  NaN -0.6280274
## [1410,] -0.0382185523  1.761207280   -0.6778187  NaN -0.6280274
## [1411,] -0.1754330659 -1.412672893    0.1228189  NaN -0.6280274
## [1412,] -0.9167312895  0.750499743    0.5231377  NaN -0.6280274
## [1413,] -0.5851649493 -1.438102148   -0.6778187  NaN -0.6280274
## [1414,] -0.5365238911 -0.985573795    1.3237753  NaN  1.5912040
## [1415,]  0.4524401573 -0.172680577   -0.2774999  NaN -0.6280274
## [1416,] -0.9547520293  0.860646353   -0.6778187  NaN -0.6280274
## [1417,] -0.4381797428 -0.938087119   -1.0781375  NaN -0.6280274
## [1418,] -0.7298136858 -1.112720072   -1.0781375  NaN -0.6280274
## [1419,] -0.2510497328 -0.004088828   -0.2774999  NaN -0.6280274
## [1420,] -0.2321455661 -0.438915048    1.3237753  NaN  1.5912040
## [1421,] -0.7903495006  0.997346163    0.1228189  NaN -0.6280274
## [1422,]  1.1584789238  0.409944410   -1.0781375  NaN -0.6280274
## [1423,] -0.8162630775  0.831564276    1.7240942  NaN  1.5912040
## [1424,] -0.6643925245  0.465158208   -1.0781375  NaN -0.6280274
## [1425,] -0.2984163528  0.616047823   -0.6778187  NaN -0.6280274
## [1426,] -0.3451457537  1.031205006   -1.0781375  NaN  1.5912040
## [1427,] -0.7786671504  0.225617431   -0.6778187  NaN -0.6280274
## [1428,] -0.8702142949 -1.440490531    2.1244130  NaN -0.6280274
## [1429,] -0.8993139673  0.521355457   -1.0781375  NaN -0.6280274
## [1430,] -0.5086986569 -1.260659332    1.7240942  NaN -0.6280274
## [1431,]  1.4237744772 -1.536587829    0.1228189  NaN -0.6280274
## [1432,]  0.8324351493  1.365438149   -0.6778187  NaN -0.6280274
## [1433,]  1.5380491031  0.162676511   -0.6778187  NaN  1.5912040
## [1434,] -0.3389859691 -0.088384702   -1.0781375  NaN  1.5912040
```

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## [1435,] -0.6416650432  0.769185329      -0.2774999    NaN -0.6280274
## [1436,] -0.8638421039 -0.125193901       1.3237753    NaN  1.5912040
## [1437,] -0.8757368605  1.568731700      -0.6778187    NaN  1.5912040
## [1438,]  2.7460041167  0.138933173      -0.2774999    NaN -0.6280274
## [1439,] -1.0010566175  1.776240044      -0.6778187    NaN -0.6280274
## [1440,]  0.2423702596 -0.227332402      -1.0781375    NaN -0.6280274
## [1441,] -0.2914069427 -0.719479817       1.7240942    NaN -0.6280274
## [1442,] -0.0418294605  1.675084995      -0.6778187    NaN -0.6280274
## [1443,] -0.3644747332  1.659349765       2.5247318    NaN  1.5912040
## [1444,]  2.6289682080  0.421324353       0.9234565    NaN -0.6280274
## [1445,] -0.8844455216 -1.495844822       2.1244130    NaN -0.6280274
## [1446,]  1.5010903951 -1.218511395      -1.0781375    NaN -0.6280274
## [1447,]  0.0444075248 -0.749545346      -0.6778187    NaN -0.6280274
## [1448,] -0.2329951916 -0.544706370      -0.6778187    NaN -0.6280274
## [1449,]  0.5172240995 -0.293083185      -0.2774999    NaN -0.6280274
## [1450,] -0.8632048848 -0.425006228      -0.6778187    NaN -0.6280274
## [1451,]  0.4957710563  0.327193960      -0.6778187    NaN  1.5912040
## [1452,] -0.2463767927 -1.170462746      -0.6778187    NaN -0.6280274
## [1453,]  0.0478060267 -0.008163128       1.7240942    NaN -0.6280274
## [1454,]  0.0316631427  0.007853088       0.5231377    NaN -0.6280274
## [1455,] -0.3510931320  1.267233455       2.1244130    NaN -0.6280274
## [1456,] -0.7846145287 -1.628048852      -0.2774999    NaN -0.6280274
## [1457,] -0.1728841895  1.444395285      -0.6778187    NaN  1.5912040
## [1458,] -0.9562388739 -0.247844399      -0.2774999    NaN -0.6280274
## [1459,] -0.7489302589 -0.753198167      -0.6778187    NaN -0.6280274
## [1460,] -0.5263283855  1.315844076       0.5231377    NaN  1.5912040
## [1461,] -0.5773059137 -0.818246484      -0.6778187    NaN -0.6280274
## [1462,]  0.9241947002  0.319326345       0.5231377    NaN  1.5912040
## [1463,]  1.1741969950 -0.770619314      -1.0781375    NaN -0.6280274
## [1464,]  0.7292056545 -1.478845154      -1.0781375    NaN -0.6280274
## [1465,] -0.7512667290  0.992569397      -1.0781375    NaN -0.6280274
## [1466,] -0.8351672442 -0.284232118       0.5231377    NaN -0.6280274
## [1467,]  0.7408880048  1.003668353       0.5231377    NaN -0.6280274
## [1468,] -0.0766641049 -1.283981191      -0.6778187    NaN  1.5912040
## [1469,] -0.2363936934 -0.150342170      -0.2774999    NaN -0.6280274
## [1470,] -0.4458263721 -0.573928940      -0.2774999    NaN -0.6280274
##          PercentSalaryHike PerformanceRating RelationshipSatisfaction
##    [1,]       -1.15016269         -0.426085               -1.5836393
##    [2,]        2.12858163          2.345353                1.1910327
##    [3,]       -0.05724792         -0.426085               -0.6587487
##    [4,]       -1.15016269         -0.426085                0.2661420
##    [5,]       -0.87693400         -0.426085                1.1910327
##    [6,]       -0.60370530         -0.426085                0.2661420
##    [7,]        1.30889555          2.345353               -1.5836393
##    [8,]        1.85535294          2.345353               -0.6587487
##    [9,]        1.58212424          2.345353               -0.6587487
##   [10,]       -0.60370530         -0.426085               -0.6587487
##   [11,]       -0.60370530         -0.426085                0.2661420
##   [12,]       -0.87693400         -0.426085                1.1910327
##   [13,]        0.48920947         -0.426085                1.1910327
##   [14,]       -1.15016269         -0.426085                0.2661420
##   [15,]       -0.33047661         -0.426085               -0.6587487
##   [16,]       -1.15016269         -0.426085                0.2661420
##   [17,]       -0.87693400         -0.426085                1.1910327
```

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##  [18,]      -0.60370530      -0.426085       -0.6587487
##  [19,]       0.21598078      -0.426085        0.2661420
##  [20,]      -1.15016269      -0.426085        0.2661420
##  [21,]       0.76243816      -0.426085        1.1910327
##  [22,]       2.12858163       2.345353       -0.6587487
##  [23,]      -1.15016269      -0.426085        0.2661420
##  [24,]      -0.33047661      -0.426085        1.1910327
##  [25,]      -1.15016269      -0.426085        0.2661420
##  [26,]      -1.15016269      -0.426085        1.1910327
##  [27,]       1.85535294       2.345353       -0.6587487
##  [28,]      -1.15016269      -0.426085        1.1910327
##  [29,]      -0.33047661      -0.426085        1.1910327
##  [30,]      -0.87693400      -0.426085        1.1910327
##  [31,]      -1.15016269      -0.426085        1.1910327
##  [32,]      -0.60370530      -0.426085        1.1910327
##  [33,]      -0.60370530      -0.426085       -1.5836393
##  [34,]      -0.33047661      -0.426085        0.2661420
##  [35,]       0.21598078      -0.426085       -1.5836393
##  [36,]      -0.87693400      -0.426085        1.1910327
##  [37,]      -0.33047661      -0.426085        0.2661420
##  [38,]      -0.60370530      -0.426085       -1.5836393
##  [39,]      -0.33047661      -0.426085        1.1910327
##  [40,]       1.03566686      -0.426085       -1.5836393
##  [41,]      -0.87693400      -0.426085        0.2661420
##  [42,]      -0.60370530      -0.426085        1.1910327
##  [43,]      -0.87693400      -0.426085        0.2661420
##  [44,]      -0.05724792      -0.426085        1.1910327
##  [45,]       2.12858163       2.345353        1.1910327
##  [46,]      -0.87693400      -0.426085        1.1910327
##  [47,]       1.30889555       2.345353        0.2661420
##  [48,]       1.58212424       2.345353       -1.5836393
##  [49,]       1.58212424       2.345353        0.2661420
##  [50,]       1.03566686      -0.426085        1.1910327
##  [51,]      -0.60370530      -0.426085        1.1910327
##  [52,]      -0.60370530      -0.426085        0.2661420
##  [53,]       1.58212424       2.345353        0.2661420
##  [54,]      -0.60370530      -0.426085        0.2661420
##  [55,]       1.03566686      -0.426085        0.2661420
##  [56,]      -0.87693400      -0.426085        0.2661420
##  [57,]       1.85535294       2.345353        1.1910327
##  [58,]      -0.05724792      -0.426085        0.2661420
##  [59,]       1.85535294       2.345353        1.1910327
##  [60,]       0.76243816      -0.426085        0.2661420
##  [61,]       1.85535294       2.345353       -0.6587487
##  [62,]      -1.15016269      -0.426085        1.1910327
##  [63,]      -0.87693400      -0.426085        1.1910327
##  [64,]      -1.15016269      -0.426085        1.1910327
##  [65,]      -0.60370530      -0.426085       -0.6587487
##  [66,]      -0.33047661      -0.426085        0.2661420
##  [67,]      -0.60370530      -0.426085        0.2661420
##  [68,]       0.48920947      -0.426085        0.2661420
##  [69,]      -0.60370530      -0.426085        1.1910327
##  [70,]       0.48920947      -0.426085       -1.5836393
##  [71,]      -1.15016269      -0.426085        1.1910327
```

```
##   [72,]     2.12858163       2.345353       1.1910327
##   [73,]     0.48920947      -0.426085      -0.6587487
##   [74,]     0.48920947      -0.426085      -0.6587487
##   [75,]    -0.87693400      -0.426085      -0.6587487
##   [76,]     2.12858163       2.345353       1.1910327
##   [77,]    -0.33047661      -0.426085      -0.6587487
##   [78,]    -0.33047661      -0.426085      -0.6587487
##   [79,]    -0.60370530      -0.426085      -1.5836393
##   [80,]     1.85535294       2.345353       1.1910327
##   [81,]    -0.87693400      -0.426085       0.2661420
##   [82,]     0.76243816      -0.426085      -1.5836393
##   [83,]    -0.33047661      -0.426085       1.1910327
##   [84,]    -0.87693400      -0.426085       1.1910327
##   [85,]    -0.05724792      -0.426085       0.2661420
##   [86,]    -1.15016269      -0.426085      -1.5836393
##   [87,]    -0.60370530      -0.426085       0.2661420
##   [88,]     2.12858163       2.345353      -0.6587487
##   [89,]     1.03566686      -0.426085      -1.5836393
##   [90,]     0.21598078      -0.426085       1.1910327
##   [91,]     1.85535294       2.345353       1.1910327
##   [92,]     1.85535294       2.345353       1.1910327
##   [93,]    -0.87693400      -0.426085      -0.6587487
##   [94,]    -0.60370530      -0.426085       0.2661420
##   [95,]     0.21598078      -0.426085      -1.5836393
##   [96,]    -0.87693400      -0.426085      -1.5836393
##   [97,]     1.58212424       2.345353      -1.5836393
##   [98,]    -0.05724792      -0.426085      -0.6587487
##   [99,]    -0.60370530      -0.426085       0.2661420
##  [100,]    -0.87693400      -0.426085       0.2661420
##  [101,]     1.85535294       2.345353       1.1910327
##  [102,]    -0.60370530      -0.426085       1.1910327
##  [103,]     0.76243816      -0.426085      -0.6587487
##  [104,]    -0.33047661      -0.426085       0.2661420
##  [105,]    -0.33047661      -0.426085       1.1910327
##  [106,]     1.58212424       2.345353       1.1910327
##  [107,]     1.03566686      -0.426085      -1.5836393
##  [108,]    -1.15016269      -0.426085       1.1910327
##  [109,]    -1.15016269      -0.426085       0.2661420
##  [110,]    -0.05724792      -0.426085       0.2661420
##  [111,]     1.30889555       2.345353       0.2661420
##  [112,]     2.40181032       2.345353       1.1910327
##  [113,]    -0.87693400      -0.426085       0.2661420
##  [114,]    -0.87693400      -0.426085       0.2661420
##  [115,]    -0.05724792      -0.426085       0.2661420
##  [116,]    -0.87693400      -0.426085      -1.5836393
##  [117,]    -0.87693400      -0.426085       1.1910327
##  [118,]    -0.33047661      -0.426085       0.2661420
##  [119,]     1.85535294       2.345353      -1.5836393
##  [120,]    -0.87693400      -0.426085       1.1910327
##  [121,]     2.67503902       2.345353       0.2661420
##  [122,]    -0.60370530      -0.426085      -1.5836393
##  [123,]     0.76243816      -0.426085      -1.5836393
##  [124,]    -0.60370530      -0.426085       0.2661420
##  [125,]     0.76243816      -0.426085      -0.6587487
```

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## [126,]      1.03566686      -0.426085       0.2661420
## [127,]     -0.87693400      -0.426085       1.1910327
## [128,]      1.03566686      -0.426085       1.1910327
## [129,]     -0.33047661      -0.426085       0.2661420
## [130,]     -0.33047661      -0.426085       0.2661420
## [131,]     -0.87693400      -0.426085       1.1910327
## [132,]     -1.15016269      -0.426085       1.1910327
## [133,]     -1.15016269      -0.426085       0.2661420
## [134,]     -0.60370530      -0.426085       0.2661420
## [135,]      2.12858163       2.345353       1.1910327
## [136,]      1.30889555       2.345353       1.1910327
## [137,]     -0.05724792      -0.426085       1.1910327
## [138,]     -0.33047661      -0.426085       0.2661420
## [139,]      0.76243816      -0.426085       1.1910327
## [140,]      1.03566686      -0.426085       1.1910327
## [141,]      1.85535294       2.345353      -1.5836393
## [142,]     -0.60370530      -0.426085      -0.6587487
## [143,]      1.30889555       2.345353      -0.6587487
## [144,]     -0.33047661      -0.426085       0.2661420
## [145,]      0.48920947      -0.426085       1.1910327
## [146,]     -0.33047661      -0.426085       1.1910327
## [147,]     -0.60370530      -0.426085       1.1910327
## [148,]     -0.60370530      -0.426085      -0.6587487
## [149,]      1.58212424       2.345353       1.1910327
## [150,]     -0.33047661      -0.426085       1.1910327
## [151,]     -1.15016269      -0.426085      -1.5836393
## [152,]     -0.60370530      -0.426085      -1.5836393
## [153,]      1.30889555       2.345353       1.1910327
## [154,]      0.76243816      -0.426085       0.2661420
## [155,]     -0.33047661      -0.426085       1.1910327
## [156,]     -0.60370530      -0.426085      -1.5836393
## [157,]      0.48920947      -0.426085       0.2661420
## [158,]      1.30889555       2.345353      -0.6587487
## [159,]     -1.15016269      -0.426085      -1.5836393
## [160,]      0.76243816      -0.426085       1.1910327
## [161,]      2.40181032       2.345353      -1.5836393
## [162,]      0.76243816      -0.426085       1.1910327
## [163,]     -1.15016269      -0.426085       0.2661420
## [164,]      0.21598078      -0.426085      -0.6587487
## [165,]     -0.05724792      -0.426085       1.1910327
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## [167,]     -0.87693400      -0.426085      -1.5836393
## [168,]     -0.87693400      -0.426085       0.2661420
## [169,]      1.85535294       2.345353       0.2661420
## [170,]      1.30889555       2.345353      -1.5836393
## [171,]      0.21598078      -0.426085       1.1910327
## [172,]      1.58212424       2.345353      -1.5836393
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## [174,]     -1.15016269      -0.426085       0.2661420
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## [176,]      0.76243816      -0.426085       0.2661420
## [177,]     -0.33047661      -0.426085      -1.5836393
## [178,]      1.85535294       2.345353       0.2661420
## [179,]      2.67503902       2.345353       0.2661420
```

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## [180,]      -0.87693400      -0.426085       0.2661420
## [181,]       2.12858163       2.345353       0.2661420
## [182,]      -0.05724792      -0.426085       1.1910327
## [183,]       1.85535294       2.345353       1.1910327
## [184,]      -0.05724792      -0.426085       1.1910327
## [185,]      -1.15016269      -0.426085       0.2661420
## [186,]      -0.60370530      -0.426085       1.1910327
## [187,]      -0.33047661      -0.426085      -0.6587487
## [188,]      -1.15016269      -0.426085       1.1910327
## [189,]       0.48920947      -0.426085       0.2661420
## [190,]       0.76243816      -0.426085       0.2661420
## [191,]      -0.33047661      -0.426085      -1.5836393
## [192,]       0.21598078      -0.426085       1.1910327
## [193,]      -0.60370530      -0.426085      -1.5836393
## [194,]      -0.33047661      -0.426085       1.1910327
## [195,]       2.12858163       2.345353       1.1910327
## [196,]      -0.87693400      -0.426085      -1.5836393
## [197,]      -1.15016269      -0.426085       1.1910327
## [198,]       0.21598078      -0.426085      -0.6587487
## [199,]      -0.33047661      -0.426085      -0.6587487
## [200,]       0.76243816      -0.426085      -1.5836393
## [201,]       1.03566686      -0.426085       0.2661420
## [202,]      -0.05724792      -0.426085      -1.5836393
## [203,]       0.48920947      -0.426085       1.1910327
## [204,]      -0.05724792      -0.426085       0.2661420
## [205,]       1.03566686      -0.426085      -0.6587487
## [206,]       1.85535294       2.345353       1.1910327
## [207,]       0.21598078      -0.426085      -1.5836393
## [208,]      -0.60370530      -0.426085      -1.5836393
## [209,]      -0.33047661      -0.426085       1.1910327
## [210,]       0.21598078      -0.426085       0.2661420
## [211,]      -1.15016269      -0.426085       0.2661420
## [212,]       1.85535294       2.345353       0.2661420
## [213,]      -0.33047661      -0.426085       1.1910327
## [214,]       0.21598078      -0.426085       1.1910327
## [215,]      -1.15016269      -0.426085       0.2661420
## [216,]       0.76243816      -0.426085       0.2661420
## [217,]      -0.05724792      -0.426085       0.2661420
## [218,]      -0.33047661      -0.426085       1.1910327
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## [222,]       1.58212424       2.345353       1.1910327
## [223,]      -0.33047661      -0.426085       0.2661420
## [224,]      -0.87693400      -0.426085       0.2661420
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## [226,]       0.48920947      -0.426085      -1.5836393
## [227,]       0.48920947      -0.426085       0.2661420
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## [229,]      -0.33047661      -0.426085      -1.5836393
## [230,]      -0.60370530      -0.426085       0.2661420
## [231,]      -0.05724792      -0.426085      -0.6587487
## [232,]      -1.15016269      -0.426085       1.1910327
## [233,]       0.48920947      -0.426085       1.1910327
```

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## [234,]    -1.15016269    -0.426085     0.2661420
## [235,]    -0.60370530    -0.426085     0.2661420
## [236,]     1.85535294     2.345353     0.2661420
## [237,]     1.30889555     2.345353    -1.5836393
## [238,]     0.76243816    -0.426085     1.1910327
## [239,]    -1.15016269    -0.426085    -1.5836393
## [240,]    -0.33047661    -0.426085     1.1910327
## [241,]    -0.33047661    -0.426085     0.2661420
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## [244,]     0.48920947    -0.426085    -1.5836393
## [245,]    -1.15016269    -0.426085     0.2661420
## [246,]    -0.87693400    -0.426085    -1.5836393
## [247,]    -0.60370530    -0.426085     0.2661420
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## [249,]    -0.33047661    -0.426085    -1.5836393
## [250,]     0.48920947    -0.426085     1.1910327
## [251,]    -1.15016269    -0.426085    -0.6587487
## [252,]     2.67503902     2.345353     1.1910327
## [253,]     1.03566686    -0.426085    -1.5836393
## [254,]    -0.60370530    -0.426085     0.2661420
## [255,]    -0.33047661    -0.426085     1.1910327
## [256,]    -0.87693400    -0.426085     1.1910327
## [257,]    -1.15016269    -0.426085     0.2661420
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## [259,]    -1.15016269    -0.426085    -0.6587487
## [260,]    -1.15016269    -0.426085    -0.6587487
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## [262,]     0.76243816    -0.426085     1.1910327
## [263,]    -0.60370530    -0.426085     1.1910327
## [264,]    -0.87693400    -0.426085    -0.6587487
## [265,]    -1.15016269    -0.426085     0.2661420
## [266,]     1.03566686    -0.426085    -0.6587487
## [267,]     1.58212424     2.345353    -0.6587487
## [268,]    -0.87693400    -0.426085     1.1910327
## [269,]    -0.33047661    -0.426085    -0.6587487
## [270,]    -1.15016269    -0.426085     0.2661420
## [271,]    -0.33047661    -0.426085     0.2661420
## [272,]    -0.87693400    -0.426085     1.1910327
## [273,]     2.12858163     2.345353     1.1910327
## [274,]    -0.33047661    -0.426085    -0.6587487
## [275,]     0.48920947    -0.426085    -1.5836393
## [276,]     0.76243816    -0.426085    -1.5836393
## [277,]     0.76243816    -0.426085    -0.6587487
## [278,]     2.40181032     2.345353     0.2661420
## [279,]     1.30889555     2.345353    -1.5836393
## [280,]    -0.33047661    -0.426085    -1.5836393
## [281,]     0.21598078    -0.426085     1.1910327
## [282,]     2.67503902     2.345353     0.2661420
## [283,]     0.76243816    -0.426085    -1.5836393
## [284,]     1.03566686    -0.426085     1.1910327
## [285,]    -0.60370530    -0.426085     0.2661420
## [286,]    -0.87693400    -0.426085    -0.6587487
## [287,]     1.85535294     2.345353     1.1910327
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##   [288,]        -0.33047661        -0.426085        -0.6587487
##   [289,]        -0.60370530        -0.426085         1.1910327
##   [290,]         1.58212424         2.345353         1.1910327
##   [291,]        -1.15016269        -0.426085         1.1910327
##   [292,]        -0.87693400        -0.426085         1.1910327
##   [293,]        -1.15016269        -0.426085         0.2661420
##   [294,]        -0.87693400        -0.426085        -0.6587487
##   [295,]        -0.87693400        -0.426085         0.2661420
##   [296,]        -0.33047661        -0.426085         1.1910327
##   [297,]        -0.60370530        -0.426085         0.2661420
##   [298,]        -0.05724792        -0.426085         0.2661420
##   [299,]         0.76243816        -0.426085         1.1910327
##   [300,]         0.76243816        -0.426085         1.1910327
##   [301,]         1.03566686        -0.426085        -0.6587487
##   [302,]        -0.87693400        -0.426085        -1.5836393
##   [303,]         1.03566686        -0.426085         0.2661420
##   [304,]        -1.15016269        -0.426085        -0.6587487
##   [305,]         0.48920947        -0.426085        -1.5836393
##   [306,]        -0.05724792        -0.426085         0.2661420
##   [307,]        -0.33047661        -0.426085         0.2661420
##   [308,]         0.48920947        -0.426085         0.2661420
##   [309,]        -0.60370530        -0.426085         1.1910327
##   [310,]        -0.87693400        -0.426085         0.2661420
##   [311,]        -0.87693400        -0.426085         1.1910327
##   [312,]         0.76243816        -0.426085        -1.5836393
##   [313,]         0.76243816        -0.426085        -0.6587487
##   [314,]        -1.15016269        -0.426085        -0.6587487
##   [315,]        -0.33047661        -0.426085         1.1910327
##   [316,]         1.03566686        -0.426085        -1.5836393
##   [317,]        -0.87693400        -0.426085         1.1910327
##   [318,]        -0.05724792        -0.426085        -1.5836393
##   [319,]        -0.87693400        -0.426085        -0.6587487
##   [320,]        -1.15016269        -0.426085         1.1910327
##   [321,]        -1.15016269        -0.426085        -1.5836393
##   [322,]        -0.87693400        -0.426085         1.1910327
##   [323,]         0.21598078        -0.426085         0.2661420
##   [324,]        -0.60370530        -0.426085         1.1910327
##   [325,]        -0.60370530        -0.426085         1.1910327
##   [326,]         2.40181032         2.345353        -1.5836393
##   [327,]        -0.05724792        -0.426085        -1.5836393
##   [328,]         0.76243816        -0.426085        -1.5836393
##   [329,]        -0.33047661        -0.426085         0.2661420
##   [330,]        -1.15016269        -0.426085        -0.6587487
##   [331,]        -1.15016269        -0.426085        -0.6587487
##   [332,]        -0.60370530        -0.426085         1.1910327
##   [333,]        -0.87693400        -0.426085         1.1910327
##   [334,]         0.21598078        -0.426085        -1.5836393
##   [335,]        -0.33047661        -0.426085        -1.5836393
##   [336,]         1.85535294         2.345353         0.2661420
##   [337,]        -1.15016269        -0.426085         1.1910327
##   [338,]         0.48920947        -0.426085         0.2661420
##   [339,]        -0.60370530        -0.426085         0.2661420
##   [340,]         0.76243816        -0.426085        -1.5836393
##   [341,]         0.21598078        -0.426085         0.2661420
```

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## [342,]       -0.33047661       -0.426085       -0.6587487
## [343,]       -0.33047661       -0.426085        0.2661420
## [344,]       -0.33047661       -0.426085       -1.5836393
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## [348,]        1.03566686       -0.426085       -1.5836393
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## [350,]       -0.33047661       -0.426085       -1.5836393
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## [354,]       -0.60370530       -0.426085       -1.5836393
## [355,]       -0.87693400       -0.426085       -0.6587487
## [356,]        0.48920947       -0.426085       -0.6587487
## [357,]        2.12858163        2.345353       -0.6587487
## [358,]       -1.15016269       -0.426085        0.2661420
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## [360,]       -1.15016269       -0.426085       -1.5836393
## [361,]       -1.15016269       -0.426085        0.2661420
## [362,]       -0.60370530       -0.426085        0.2661420
## [363,]        2.40181032        2.345353        0.2661420
## [364,]       -0.60370530       -0.426085       -0.6587487
## [365,]        1.30889555        2.345353       -0.6587487
## [366,]       -0.33047661       -0.426085        0.2661420
## [367,]        0.76243816       -0.426085        0.2661420
## [368,]       -0.05724792       -0.426085        1.1910327
## [369,]       -0.87693400       -0.426085       -1.5836393
## [370,]        0.21598078       -0.426085        1.1910327
## [371,]       -0.05724792       -0.426085        1.1910327
## [372,]        0.21598078       -0.426085        1.1910327
## [373,]        1.03566686       -0.426085        0.2661420
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## [375,]        0.21598078       -0.426085        1.1910327
## [376,]        2.40181032        2.345353        0.2661420
## [377,]       -1.15016269       -0.426085        0.2661420
## [378,]       -0.60370530       -0.426085       -0.6587487
## [379,]       -0.60370530       -0.426085       -0.6587487
## [380,]       -0.60370530       -0.426085        0.2661420
## [381,]       -0.87693400       -0.426085        1.1910327
## [382,]        0.76243816       -0.426085       -1.5836393
## [383,]        1.85535294        2.345353        0.2661420
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## [390,]       -0.87693400       -0.426085        1.1910327
## [391,]       -1.15016269       -0.426085        0.2661420
## [392,]        1.85535294        2.345353       -0.6587487
## [393,]       -1.15016269       -0.426085        0.2661420
## [394,]       -0.05724792       -0.426085       -1.5836393
## [395,]       -0.87693400       -0.426085       -0.6587487
```

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## [396,]      1.30889555      2.345353     -1.5836393
## [397,]     -0.33047661     -0.426085      1.1910327
## [398,]     -1.15016269     -0.426085     -0.6587487
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## [404,]      0.21598078     -0.426085      0.2661420
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## [406,]     -0.60370530     -0.426085      0.2661420
## [407,]     -0.33047661     -0.426085      0.2661420
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## [454,]    -1.15016269    -0.426085    -0.6587487
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## [703,]    -1.15016269    -0.426085    -1.5836393
## [704,]    -0.60370530    -0.426085    -0.6587487
## [705,]    -0.60370530    -0.426085    -0.6587487
## [706,]     0.76243816    -0.426085     1.1910327
## [707,]     0.21598078    -0.426085     1.1910327
## [708,]     1.03566686    -0.426085     0.2661420
## [709,]    -0.60370530    -0.426085     1.1910327
## [710,]     1.85535294     2.345353    -1.5836393
## [711,]    -1.15016269    -0.426085     1.1910327
## [712,]     1.30889555     2.345353     0.2661420
## [713,]     0.76243816    -0.426085    -1.5836393
## [714,]    -0.33047661    -0.426085     1.1910327
## [715,]     1.85535294     2.345353     0.2661420
## [716,]    -0.60370530    -0.426085    -1.5836393
## [717,]     0.48920947    -0.426085    -0.6587487
## [718,]    -0.33047661    -0.426085    -0.6587487
## [719,]    -0.05724792    -0.426085     0.2661420
```

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## [720,]      0.48920947     -0.426085      0.2661420
## [721,]     -1.15016269     -0.426085     -0.6587487
## [722,]      0.76243816     -0.426085      1.1910327
## [723,]      0.48920947     -0.426085     -0.6587487
## [724,]     -0.60370530     -0.426085     -0.6587487
## [725,]     -0.05724792     -0.426085     -0.6587487
## [726,]      2.40181032      2.345353      1.1910327
## [727,]     -0.87693400     -0.426085      0.2661420
## [728,]     -0.05724792     -0.426085      1.1910327
## [729,]     -1.15016269     -0.426085      0.2661420
## [730,]     -1.15016269     -0.426085      0.2661420
## [731,]     -0.87693400     -0.426085      0.2661420
## [732,]     -0.05724792     -0.426085     -1.5836393
## [733,]      0.48920947     -0.426085     -1.5836393
## [734,]     -0.87693400     -0.426085     -0.6587487
## [735,]     -0.05724792     -0.426085     -1.5836393
## [736,]     -0.60370530     -0.426085      1.1910327
## [737,]     -0.33047661     -0.426085     -0.6587487
## [738,]     -0.33047661     -0.426085     -0.6587487
## [739,]      0.21598078     -0.426085      0.2661420
## [740,]      0.76243816     -0.426085     -0.6587487
## [741,]      1.30889555      2.345353     -1.5836393
## [742,]     -0.60370530     -0.426085     -0.6587487
## [743,]      0.76243816     -0.426085     -0.6587487
## [744,]     -0.60370530     -0.426085     -1.5836393
## [745,]     -0.05724792     -0.426085     -1.5836393
## [746,]     -0.33047661     -0.426085      1.1910327
## [747,]      1.85535294      2.345353     -0.6587487
## [748,]     -0.87693400     -0.426085      0.2661420
## [749,]      0.76243816     -0.426085      1.1910327
## [750,]     -0.05724792     -0.426085      1.1910327
## [751,]      0.76243816     -0.426085      0.2661420
## [752,]     -0.87693400     -0.426085     -1.5836393
## [753,]      0.21598078     -0.426085      0.2661420
## [754,]     -0.60370530     -0.426085      0.2661420
## [755,]      1.03566686     -0.426085      1.1910327
## [756,]     -0.60370530     -0.426085     -0.6587487
## [757,]     -0.87693400     -0.426085     -0.6587487
## [758,]     -1.15016269     -0.426085      1.1910327
## [759,]     -0.33047661     -0.426085      0.2661420
## [760,]      0.21598078     -0.426085     -1.5836393
## [761,]     -0.87693400     -0.426085     -1.5836393
## [762,]     -0.33047661     -0.426085     -0.6587487
## [763,]     -0.33047661     -0.426085     -0.6587487
## [764,]      1.03566686     -0.426085      1.1910327
## [765,]      1.85535294      2.345353     -0.6587487
## [766,]      0.21598078     -0.426085     -1.5836393
## [767,]     -1.15016269     -0.426085      1.1910327
## [768,]     -0.05724792     -0.426085     -1.5836393
## [769,]     -0.33047661     -0.426085     -0.6587487
## [770,]     -0.60370530     -0.426085      0.2661420
## [771,]      0.48920947     -0.426085      1.1910327
## [772,]     -1.15016269     -0.426085     -0.6587487
## [773,]      1.03566686     -0.426085     -0.6587487
```

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## [774,]    -1.15016269    -0.426085    -0.6587487
## [775,]    -0.05724792    -0.426085    -0.6587487
## [776,]    -0.60370530    -0.426085     0.2661420
## [777,]    -0.33047661    -0.426085    -0.6587487
## [778,]    -0.60370530    -0.426085    -1.5836393
## [779,]     2.12858163     2.345353    -1.5836393
## [780,]    -0.87693400    -0.426085     0.2661420
## [781,]    -0.87693400    -0.426085    -1.5836393
## [782,]     0.21598078    -0.426085    -1.5836393
## [783,]    -0.05724792    -0.426085     0.2661420
## [784,]    -0.60370530    -0.426085     0.2661420
## [785,]     0.76243816    -0.426085    -1.5836393
## [786,]     1.30889555     2.345353     1.1910327
## [787,]     1.03566686    -0.426085     1.1910327
## [788,]     0.76243816    -0.426085    -0.6587487
## [789,]    -0.60370530    -0.426085     1.1910327
## [790,]    -0.33047661    -0.426085     1.1910327
## [791,]    -0.05724792    -0.426085     0.2661420
## [792,]     1.85535294     2.345353    -1.5836393
## [793,]     1.85535294     2.345353    -0.6587487
## [794,]     0.21598078    -0.426085     1.1910327
## [795,]     0.48920947    -0.426085     0.2661420
## [796,]    -0.33047661    -0.426085     0.2661420
## [797,]    -0.05724792    -0.426085    -0.6587487
## [798,]     1.30889555     2.345353     0.2661420
## [799,]     1.30889555     2.345353    -0.6587487
## [800,]     0.48920947    -0.426085     1.1910327
## [801,]    -0.05724792    -0.426085    -1.5836393
## [802,]    -0.33047661    -0.426085     1.1910327
## [803,]     0.48920947    -0.426085     0.2661420
## [804,]     0.48920947    -0.426085     1.1910327
## [805,]     1.85535294     2.345353     0.2661420
## [806,]    -0.60370530    -0.426085     1.1910327
## [807,]     1.03566686    -0.426085     1.1910327
## [808,]    -0.33047661    -0.426085    -0.6587487
## [809,]     1.85535294     2.345353    -1.5836393
## [810,]     0.48920947    -0.426085    -0.6587487
## [811,]    -0.87693400    -0.426085     1.1910327
## [812,]     0.21598078    -0.426085     0.2661420
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## [826,]    -0.05724792    -0.426085     0.2661420
## [827,]    -0.60370530    -0.426085     1.1910327
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## [828,]    -0.33047661    -0.426085     1.1910327
## [829,]    -0.87693400    -0.426085     1.1910327
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## [831,]    -1.15016269    -0.426085    -1.5836393
## [832,]    -0.87693400    -0.426085     0.2661420
## [833,]    -0.60370530    -0.426085     0.2661420
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## [835,]     1.30889555     2.345353    -1.5836393
## [836,]     0.48920947    -0.426085    -0.6587487
## [837,]    -0.60370530    -0.426085    -1.5836393
## [838,]     0.48920947    -0.426085     0.2661420
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## [840,]    -0.60370530    -0.426085     1.1910327
## [841,]    -0.87693400    -0.426085    -0.6587487
## [842,]     1.85535294     2.345353     1.1910327
## [843,]    -1.15016269    -0.426085     1.1910327
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## [845,]     0.76243816    -0.426085    -1.5836393
## [846,]    -0.60370530    -0.426085     1.1910327
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## [849,]    -0.60370530    -0.426085    -0.6587487
## [850,]    -0.60370530    -0.426085    -0.6587487
## [851,]    -0.87693400    -0.426085     0.2661420
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## [853,]    -0.60370530    -0.426085    -1.5836393
## [854,]     2.67503902     2.345353     0.2661420
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## [856,]    -0.60370530    -0.426085    -0.6587487
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## [858,]    -1.15016269    -0.426085     0.2661420
## [859,]     0.76243816    -0.426085    -0.6587487
## [860,]     0.76243816    -0.426085    -1.5836393
## [861,]    -1.15016269    -0.426085    -0.6587487
## [862,]     2.12858163     2.345353    -1.5836393
## [863,]    -0.60370530    -0.426085     1.1910327
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## [866,]     1.03566686    -0.426085     0.2661420
## [867,]    -0.87693400    -0.426085     1.1910327
## [868,]     1.85535294     2.345353     0.2661420
## [869,]    -0.87693400    -0.426085     0.2661420
## [870,]    -1.15016269    -0.426085    -1.5836393
## [871,]    -0.05724792    -0.426085     1.1910327
## [872,]    -0.60370530    -0.426085    -1.5836393
## [873,]    -0.87693400    -0.426085    -1.5836393
## [874,]    -0.33047661    -0.426085     0.2661420
## [875,]    -0.60370530    -0.426085    -1.5836393
## [876,]     2.67503902     2.345353    -0.6587487
## [877,]     0.48920947    -0.426085     1.1910327
## [878,]    -1.15016269    -0.426085     0.2661420
## [879,]     0.21598078    -0.426085    -1.5836393
## [880,]     0.76243816    -0.426085    -0.6587487
## [881,]     1.30889555     2.345353     0.2661420
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## [882,]    -0.33047661    -0.426085     1.1910327
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## [884,]    -0.60370530    -0.426085    -0.6587487
## [885,]    -0.87693400    -0.426085    -0.6587487
## [886,]    -0.33047661    -0.426085    -0.6587487
## [887,]     1.58212424     2.345353    -1.5836393
## [888,]     0.48920947    -0.426085     0.2661420
## [889,]    -1.15016269    -0.426085    -0.6587487
## [890,]    -0.33047661    -0.426085     1.1910327
## [891,]     0.48920947    -0.426085    -1.5836393
## [892,]    -0.60370530    -0.426085     1.1910327
## [893,]     2.67503902     2.345353    -0.6587487
## [894,]    -0.05724792    -0.426085    -1.5836393
## [895,]    -0.33047661    -0.426085    -1.5836393
## [896,]    -0.87693400    -0.426085     1.1910327
## [897,]     1.03566686    -0.426085    -0.6587487
## [898,]     0.48920947    -0.426085     1.1910327
## [899,]    -0.33047661    -0.426085    -0.6587487
## [900,]    -0.60370530    -0.426085     0.2661420
## [901,]    -0.87693400    -0.426085     0.2661420
## [902,]    -1.15016269    -0.426085     0.2661420
## [903,]    -1.15016269    -0.426085    -0.6587487
## [904,]    -1.15016269    -0.426085    -0.6587487
## [905,]    -0.87693400    -0.426085     0.2661420
## [906,]    -0.33047661    -0.426085    -0.6587487
## [907,]     0.48920947    -0.426085     1.1910327
## [908,]    -1.15016269    -0.426085     0.2661420
## [909,]    -0.33047661    -0.426085     1.1910327
## [910,]    -0.87693400    -0.426085     1.1910327
## [911,]     1.85535294     2.345353     1.1910327
## [912,]    -0.33047661    -0.426085     1.1910327
## [913,]     1.30889555     2.345353    -0.6587487
## [914,]     0.21598078    -0.426085    -1.5836393
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## [916,]     1.30889555     2.345353     0.2661420
## [917,]    -0.33047661    -0.426085     0.2661420
## [918,]    -0.87693400    -0.426085     1.1910327
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## [920,]    -0.87693400    -0.426085     1.1910327
## [921,]    -0.60370530    -0.426085     0.2661420
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## [932,]     0.76243816    -0.426085     0.2661420
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## [934,]    -1.15016269    -0.426085    -0.6587487
## [935,]     0.76243816    -0.426085     1.1910327
```

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## [936,]     -0.05724792     -0.426085      0.2661420
## [937,]      1.85535294      2.345353      0.2661420
## [938,]     -0.60370530     -0.426085      1.1910327
## [939,]     -0.87693400     -0.426085      1.1910327
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## [945,]     -1.15016269     -0.426085     -1.5836393
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## [947,]     -0.87693400     -0.426085      0.2661420
## [948,]      1.03566686     -0.426085      0.2661420
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## [961,]      0.48920947     -0.426085      1.1910327
## [962,]     -1.15016269     -0.426085     -0.6587487
## [963,]     -1.15016269     -0.426085     -0.6587487
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## [965,]     -0.87693400     -0.426085      1.1910327
## [966,]     -1.15016269     -0.426085      0.2661420
## [967,]     -0.33047661     -0.426085      1.1910327
## [968,]      1.85535294      2.345353      0.2661420
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## [974,]     -0.87693400     -0.426085     -0.6587487
## [975,]      1.30889555      2.345353     -0.6587487
## [976,]      0.48920947     -0.426085      0.2661420
## [977,]     -0.87693400     -0.426085     -1.5836393
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## [984,]     -1.15016269     -0.426085      1.1910327
## [985,]     -1.15016269     -0.426085      0.2661420
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## [989,]     -0.33047661     -0.426085     -1.5836393
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## [995,]    -1.15016269    -0.426085    -0.6587487
## [996,]    -0.33047661    -0.426085    -1.5836393
## [997,]    -1.15016269    -0.426085     1.1910327
## [998,]    -0.60370530    -0.426085     1.1910327
## [999,]    -0.87693400    -0.426085     1.1910327
## [1000,]   -0.33047661    -0.426085     0.2661420
## [1001,]   -0.60370530    -0.426085     0.2661420
## [1002,]    0.76243816    -0.426085    -1.5836393
## [1003,]   -1.15016269    -0.426085     0.2661420
## [1004,]   -1.15016269    -0.426085    -0.6587487
## [1005,]   -0.87693400    -0.426085     1.1910327
## [1006,]   -0.60370530    -0.426085    -1.5836393
## [1007,]    1.30889555     2.345353    -1.5836393
## [1008,]   -0.87693400    -0.426085    -1.5836393
## [1009,]    1.03566686    -0.426085     1.1910327
## [1010,]    1.58212424     2.345353     0.2661420
## [1011,]   -0.60370530    -0.426085     1.1910327
## [1012,]    0.21598078    -0.426085     1.1910327
## [1013,]   -0.87693400    -0.426085    -0.6587487
## [1014,]   -0.33047661    -0.426085    -0.6587487
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## [1029,]   -0.87693400    -0.426085    -1.5836393
## [1030,]   -1.15016269    -0.426085     0.2661420
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## [1033,]    2.12858163     2.345353    -0.6587487
## [1034,]   -1.15016269    -0.426085    -1.5836393
## [1035,]    0.76243816    -0.426085    -0.6587487
## [1036,]    0.76243816    -0.426085     1.1910327
## [1037,]   -0.60370530    -0.426085     0.2661420
## [1038,]    0.76243816    -0.426085     1.1910327
## [1039,]   -1.15016269    -0.426085    -1.5836393
## [1040,]   -0.05724792    -0.426085     1.1910327
## [1041,]   -1.15016269    -0.426085     0.2661420
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```

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## [1058,]     -1.15016269      -0.426085      -1.5836393
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## [1060,]     -0.60370530      -0.426085      -1.5836393
## [1061,]     -1.15016269      -0.426085       0.2661420
## [1062,]     -0.60370530      -0.426085       0.2661420
## [1063,]      0.76243816      -0.426085      -0.6587487
## [1064,]     -0.33047661      -0.426085       0.2661420
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## [1066,]      0.21598078      -0.426085      -0.6587487
## [1067,]     -1.15016269      -0.426085       1.1910327
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## [1071,]     -0.33047661      -0.426085       1.1910327
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## [1073,]     -0.60370530      -0.426085       0.2661420
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## [1079,]     -0.60370530      -0.426085       0.2661420
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## [1089,]     -0.33047661      -0.426085      -0.6587487
## [1090,]      0.48920947      -0.426085      -1.5836393
## [1091,]     -0.60370530      -0.426085       0.2661420
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## [1095,]     -0.87693400      -0.426085       1.1910327
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## [1097,]      1.58212424       2.345353       1.1910327
```

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## [1098,]        -0.33047661        -0.426085        -0.6587487
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## [1100,]        -0.87693400        -0.426085        -1.5836393
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## [1109,]         1.03566686        -0.426085        -0.6587487
## [1110,]        -0.87693400        -0.426085        -0.6587487
## [1111,]        -0.87693400        -0.426085         1.1910327
## [1112,]         0.21598078        -0.426085        -0.6587487
## [1113,]        -1.15016269        -0.426085        -1.5836393
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## [1115,]        -0.87693400        -0.426085         1.1910327
## [1116,]        -0.60370530        -0.426085         0.2661420
## [1117,]         1.58212424         2.345353         0.2661420
## [1118,]         0.48920947        -0.426085        -0.6587487
## [1119,]         1.58212424         2.345353        -1.5836393
## [1120,]        -1.15016269        -0.426085         1.1910327
## [1121,]        -0.87693400        -0.426085        -0.6587487
## [1122,]        -0.60370530        -0.426085        -1.5836393
## [1123,]         0.76243816        -0.426085         1.1910327
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## [1131,]         0.48920947        -0.426085         1.1910327
## [1132,]        -0.33047661        -0.426085        -0.6587487
## [1133,]        -0.05724792        -0.426085         0.2661420
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## [1137,]         0.48920947        -0.426085         0.2661420
## [1138,]        -0.33047661        -0.426085        -0.6587487
## [1139,]        -0.05724792        -0.426085         0.2661420
## [1140,]         0.48920947        -0.426085         1.1910327
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## [1143,]        -0.33047661        -0.426085        -1.5836393
## [1144,]        -0.05724792        -0.426085        -1.5836393
## [1145,]        -0.60370530        -0.426085         1.1910327
## [1146,]        -0.87693400        -0.426085        -0.6587487
## [1147,]        -0.60370530        -0.426085        -1.5836393
## [1148,]        -0.33047661        -0.426085         1.1910327
## [1149,]        -0.60370530        -0.426085         1.1910327
## [1150,]        -1.15016269        -0.426085        -1.5836393
## [1151,]        -1.15016269        -0.426085         1.1910327
```

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## [1155,]         -1.15016269         -0.426085           0.2661420
## [1156,]         -0.05724792         -0.426085           1.1910327
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## [1159,]          0.48920947         -0.426085          -1.5836393
## [1160,]         -0.60370530         -0.426085           1.1910327
## [1161,]          1.03566686         -0.426085          -1.5836393
## [1162,]          1.03566686         -0.426085           1.1910327
## [1163,]          0.48920947         -0.426085           0.2661420
## [1164,]         -1.15016269         -0.426085          -1.5836393
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## [1171,]         -0.60370530         -0.426085           0.2661420
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## [1173,]         -1.15016269         -0.426085           0.2661420
## [1174,]         -0.87693400         -0.426085           0.2661420
## [1175,]          0.48920947         -0.426085           0.2661420
## [1176,]          1.58212424          2.345353           0.2661420
## [1177,]          0.21598078         -0.426085          -0.6587487
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## [1181,]         -1.15016269         -0.426085           0.2661420
## [1182,]          1.03566686         -0.426085          -0.6587487
## [1183,]         -0.05724792         -0.426085           0.2661420
## [1184,]          1.30889555          2.345353          -1.5836393
## [1185,]          2.67503902          2.345353           0.2661420
## [1186,]          2.40181032          2.345353          -1.5836393
## [1187,]          2.40181032          2.345353          -1.5836393
## [1188,]         -0.05724792         -0.426085           1.1910327
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## [1190,]         -0.33047661         -0.426085           0.2661420
## [1191,]         -0.60370530         -0.426085           0.2661420
## [1192,]         -1.15016269         -0.426085          -1.5836393
## [1193,]          0.21598078         -0.426085          -0.6587487
## [1194,]          1.85535294          2.345353          -0.6587487
## [1195,]         -0.33047661         -0.426085           0.2661420
## [1196,]         -0.33047661         -0.426085          -1.5836393
## [1197,]          0.21598078         -0.426085           1.1910327
## [1198,]         -1.15016269         -0.426085          -1.5836393
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## [1201,]          0.76243816         -0.426085          -1.5836393
## [1202,]         -1.15016269         -0.426085          -1.5836393
## [1203,]          1.03566686         -0.426085           1.1910327
## [1204,]         -0.05724792         -0.426085           0.2661420
## [1205,]         -1.15016269         -0.426085           0.2661420
```

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## [1206,]      -0.87693400      -0.426085      -1.5836393
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## [1209,]      -0.33047661      -0.426085       0.2661420
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## [1216,]      -0.33047661      -0.426085       0.2661420
## [1217,]       0.48920947      -0.426085      -1.5836393
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## [1228,]      -0.33047661      -0.426085       1.1910327
## [1229,]       1.03566686      -0.426085      -0.6587487
## [1230,]       0.21598078      -0.426085      -0.6587487
## [1231,]      -0.60370530      -0.426085      -0.6587487
## [1232,]      -0.33047661      -0.426085       1.1910327
## [1233,]       0.21598078      -0.426085      -0.6587487
## [1234,]      -0.87693400      -0.426085      -0.6587487
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## [1236,]      -0.87693400      -0.426085      -0.6587487
## [1237,]      -0.60370530      -0.426085      -0.6587487
## [1238,]      -0.05724792      -0.426085      -0.6587487
## [1239,]      -0.60370530      -0.426085       0.2661420
## [1240,]       1.30889555       2.345353       1.1910327
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## [1242,]      -0.60370530      -0.426085       0.2661420
## [1243,]      -0.33047661      -0.426085      -0.6587487
## [1244,]       1.58212424       2.345353       0.2661420
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## [1249,]      -1.15016269      -0.426085       0.2661420
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## [1251,]      -0.87693400      -0.426085       1.1910327
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## [1255,]      -0.87693400      -0.426085       0.2661420
## [1256,]       1.30889555       2.345353       0.2661420
## [1257,]      -0.33047661      -0.426085      -0.6587487
## [1258,]      -0.60370530      -0.426085      -1.5836393
## [1259,]      -0.60370530      -0.426085       0.2661420
```

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## [1260,]      0.21598078      -0.426085       0.2661420
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## [1262,]      0.21598078      -0.426085       0.2661420
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## [1267,]      1.30889555       2.345353      -0.6587487
## [1268,]     -0.33047661      -0.426085       0.2661420
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## [1271,]     -0.87693400      -0.426085      -1.5836393
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## [1280,]     -0.87693400      -0.426085       0.2661420
## [1281,]     -0.60370530      -0.426085       0.2661420
## [1282,]      0.76243816      -0.426085       1.1910327
## [1283,]      1.03566686      -0.426085      -0.6587487
## [1284,]     -1.15016269      -0.426085       0.2661420
## [1285,]      1.58212424       2.345353       0.2661420
## [1286,]     -0.05724792      -0.426085       0.2661420
## [1287,]      0.48920947      -0.426085       1.1910327
## [1288,]      0.76243816      -0.426085       0.2661420
## [1289,]     -0.33047661      -0.426085       0.2661420
## [1290,]     -0.60370530      -0.426085       1.1910327
## [1291,]      0.48920947      -0.426085       0.2661420
## [1292,]     -0.05724792      -0.426085      -0.6587487
## [1293,]      0.76243816      -0.426085       1.1910327
## [1294,]     -0.60370530      -0.426085       0.2661420
## [1295,]     -0.87693400      -0.426085      -1.5836393
## [1296,]     -0.60370530      -0.426085       1.1910327
## [1297,]     -0.33047661      -0.426085      -0.6587487
## [1298,]     -1.15016269      -0.426085       0.2661420
## [1299,]      1.85535294       2.345353       1.1910327
## [1300,]      0.48920947      -0.426085       1.1910327
## [1301,]      1.58212424       2.345353       0.2661420
## [1302,]      1.85535294       2.345353       1.1910327
## [1303,]      0.21598078      -0.426085      -0.6587487
## [1304,]     -0.87693400      -0.426085       0.2661420
## [1305,]     -0.87693400      -0.426085      -0.6587487
## [1306,]     -0.05724792      -0.426085      -0.6587487
## [1307,]     -0.33047661      -0.426085       1.1910327
## [1308,]      2.67503902       2.345353       0.2661420
## [1309,]      1.30889555       2.345353      -1.5836393
## [1310,]     -0.60370530      -0.426085      -1.5836393
## [1311,]     -0.33047661      -0.426085      -0.6587487
## [1312,]      0.21598078      -0.426085       0.2661420
## [1313,]      0.48920947      -0.426085       0.2661420
```

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## [1314,]     -0.05724792        -0.426085        1.1910327
## [1315,]      1.85535294         2.345353       -0.6587487
## [1316,]      1.85535294         2.345353        1.1910327
## [1317,]      1.30889555         2.345353        0.2661420
## [1318,]     -0.33047661        -0.426085        0.2661420
## [1319,]     -0.60370530        -0.426085       -0.6587487
## [1320,]     -0.60370530        -0.426085        0.2661420
## [1321,]      1.85535294         2.345353       -0.6587487
## [1322,]     -0.87693400        -0.426085        0.2661420
## [1323,]     -0.33047661        -0.426085        0.2661420
## [1324,]     -0.05724792        -0.426085       -0.6587487
## [1325,]      0.48920947        -0.426085        1.1910327
## [1326,]     -0.60370530        -0.426085        1.1910327
## [1327,]     -0.87693400        -0.426085        0.2661420
## [1328,]     -0.87693400        -0.426085        1.1910327
## [1329,]      1.58212424         2.345353        1.1910327
## [1330,]     -1.15016269        -0.426085        1.1910327
## [1331,]     -0.60370530        -0.426085        1.1910327
## [1332,]     -0.87693400        -0.426085        1.1910327
## [1333,]      2.40181032         2.345353       -0.6587487
## [1334,]      1.58212424         2.345353        0.2661420
## [1335,]      1.03566686        -0.426085        1.1910327
## [1336,]     -0.33047661        -0.426085       -0.6587487
## [1337,]      1.30889555         2.345353       -0.6587487
## [1338,]      1.03566686        -0.426085        1.1910327
## [1339,]     -0.60370530        -0.426085        0.2661420
## [1340,]      2.12858163         2.345353       -1.5836393
## [1341,]     -0.60370530        -0.426085       -1.5836393
## [1342,]     -1.15016269        -0.426085       -1.5836393
## [1343,]     -0.60370530        -0.426085        1.1910327
## [1344,]     -0.33047661        -0.426085       -0.6587487
## [1345,]      1.85535294         2.345353        0.2661420
## [1346,]     -1.15016269        -0.426085        1.1910327
## [1347,]     -0.60370530        -0.426085        1.1910327
## [1348,]      1.58212424         2.345353        1.1910327
## [1349,]     -1.15016269        -0.426085       -1.5836393
## [1350,]     -0.60370530        -0.426085        0.2661420
## [1351,]     -0.33047661        -0.426085       -0.6587487
## [1352,]     -1.15016269        -0.426085       -0.6587487
## [1353,]     -0.05724792        -0.426085        1.1910327
## [1354,]      2.12858163         2.345353       -0.6587487
## [1355,]      0.21598078        -0.426085        1.1910327
## [1356,]      0.21598078        -0.426085        0.2661420
## [1357,]      1.58212424         2.345353        0.2661420
## [1358,]     -0.60370530        -0.426085       -0.6587487
## [1359,]     -1.15016269        -0.426085        1.1910327
## [1360,]     -0.87693400        -0.426085        0.2661420
## [1361,]     -0.87693400        -0.426085       -0.6587487
## [1362,]      0.76243816        -0.426085       -1.5836393
## [1363,]     -0.87693400        -0.426085        0.2661420
## [1364,]     -0.33047661        -0.426085       -0.6587487
## [1365,]     -0.87693400        -0.426085        0.2661420
## [1366,]      0.48920947        -0.426085        1.1910327
## [1367,]      1.03566686        -0.426085        0.2661420
```

```
## [1368,]     -1.15016269     -0.426085      0.2661420
## [1369,]     -0.05724792     -0.426085     -0.6587487
## [1370,]     -1.15016269     -0.426085      1.1910327
## [1371,]      0.76243816     -0.426085      0.2661420
## [1372,]      0.21598078     -0.426085      0.2661420
## [1373,]      2.67503902      2.345353      1.1910327
## [1374,]      0.21598078     -0.426085      0.2661420
## [1375,]     -0.60370530     -0.426085      0.2661420
## [1376,]     -0.33047661     -0.426085     -1.5836393
## [1377,]      1.03566686     -0.426085      1.1910327
## [1378,]     -0.05724792     -0.426085      1.1910327
## [1379,]     -0.87693400     -0.426085      0.2661420
## [1380,]     -0.87693400     -0.426085     -1.5836393
## [1381,]      0.21598078     -0.426085      1.1910327
## [1382,]     -0.33047661     -0.426085      0.2661420
## [1383,]     -0.60370530     -0.426085      1.1910327
## [1384,]      1.85535294      2.345353     -0.6587487
## [1385,]      1.58212424      2.345353     -1.5836393
## [1386,]      0.76243816     -0.426085      0.2661420
## [1387,]     -0.60370530     -0.426085      1.1910327
## [1388,]     -0.87693400     -0.426085     -1.5836393
## [1389,]      0.76243816     -0.426085     -0.6587487
## [1390,]      1.58212424      2.345353     -0.6587487
## [1391,]     -0.87693400     -0.426085     -1.5836393
## [1392,]     -0.33047661     -0.426085     -1.5836393
## [1393,]     -1.15016269     -0.426085      1.1910327
## [1394,]     -0.33047661     -0.426085     -1.5836393
## [1395,]      2.40181032      2.345353     -0.6587487
## [1396,]     -1.15016269     -0.426085      0.2661420
## [1397,]     -0.60370530     -0.426085     -0.6587487
## [1398,]     -1.15016269     -0.426085      0.2661420
## [1399,]      1.30889555      2.345353      0.2661420
## [1400,]      0.48920947     -0.426085     -0.6587487
## [1401,]     -1.15016269     -0.426085     -0.6587487
## [1402,]      0.76243816     -0.426085     -1.5836393
## [1403,]     -1.15016269     -0.426085      0.2661420
## [1404,]     -0.87693400     -0.426085     -1.5836393
## [1405,]     -0.87693400     -0.426085      1.1910327
## [1406,]      1.30889555      2.345353      0.2661420
## [1407,]      1.03566686     -0.426085      1.1910327
## [1408,]     -0.87693400     -0.426085     -0.6587487
## [1409,]     -0.60370530     -0.426085      0.2661420
## [1410,]     -1.15016269     -0.426085     -1.5836393
## [1411,]     -0.33047661     -0.426085      0.2661420
## [1412,]     -0.33047661     -0.426085      0.2661420
## [1413,]     -0.60370530     -0.426085      0.2661420
## [1414,]      1.03566686     -0.426085      0.2661420
## [1415,]      2.12858163      2.345353     -0.6587487
## [1416,]     -0.87693400     -0.426085      0.2661420
## [1417,]     -0.05724792     -0.426085     -1.5836393
## [1418,]      1.03566686     -0.426085      0.2661420
## [1419,]     -1.15016269     -0.426085      1.1910327
## [1420,]      0.48920947     -0.426085      0.2661420
## [1421,]      1.85535294      2.345353     -1.5836393
```

```
## [1422,]      0.76243816        -0.426085          -1.5836393
## [1423,]     -1.15016269        -0.426085           0.2661420
## [1424,]     -0.87693400        -0.426085           1.1910327
## [1425,]      1.03566686        -0.426085          -0.6587487
## [1426,]     -0.60370530        -0.426085          -1.5836393
## [1427,]     -0.60370530        -0.426085           0.2661420
## [1428,]      1.03566686        -0.426085           0.2661420
## [1429,]     -0.33047661        -0.426085          -0.6587487
## [1430,]     -0.60370530        -0.426085          -1.5836393
## [1431,]     -0.87693400        -0.426085          -1.5836393
## [1432,]      1.03566686        -0.426085           0.2661420
## [1433,]      2.67503902         2.345353          -1.5836393
## [1434,]      1.85535294         2.345353          -0.6587487
## [1435,]     -0.05724792        -0.426085          -0.6587487
## [1436,]     -0.87693400        -0.426085           0.2661420
## [1437,]     -1.15016269        -0.426085           1.1910327
## [1438,]     -0.60370530        -0.426085           0.2661420
## [1439,]      1.03566686        -0.426085          -1.5836393
## [1440,]      1.03566686        -0.426085           0.2661420
## [1441,]     -0.60370530        -0.426085          -0.6587487
## [1442,]      1.58212424         2.345353          -1.5836393
## [1443,]     -0.33047661        -0.426085          -0.6587487
## [1444,]     -1.15016269        -0.426085          -1.5836393
## [1445,]     -1.15016269        -0.426085           1.1910327
## [1446,]      2.12858163         2.345353           0.2661420
## [1447,]      1.58212424         2.345353           1.1910327
## [1448,]      2.40181032         2.345353          -1.5836393
## [1449,]     -1.15016269        -0.426085           0.2661420
## [1450,]     -0.33047661        -0.426085           1.1910327
## [1451,]      0.21598078        -0.426085           0.2661420
## [1452,]     -1.15016269        -0.426085           0.2661420
## [1453,]     -0.87693400        -0.426085           1.1910327
## [1454,]     -0.60370530        -0.426085          -1.5836393
## [1455,]     -0.05724792        -0.426085           0.2661420
## [1456,]     -0.33047661        -0.426085           1.1910327
## [1457,]     -0.33047661        -0.426085           1.1910327
## [1458,]     -0.33047661        -0.426085          -0.6587487
## [1459,]     -0.87693400        -0.426085           1.1910327
## [1460,]     -0.60370530        -0.426085          -1.5836393
## [1461,]     -0.33047661        -0.426085          -0.6587487
## [1462,]     -0.60370530        -0.426085          -0.6587487
## [1463,]     -1.15016269        -0.426085          -1.5836393
## [1464,]      1.03566686        -0.426085          -0.6587487
## [1465,]      0.76243816        -0.426085           1.1910327
## [1466,]      0.48920947        -0.426085           0.2661420
## [1467,]     -0.05724792        -0.426085          -1.5836393
## [1468,]      1.30889555         2.345353          -0.6587487
## [1469,]     -0.33047661        -0.426085           1.1910327
## [1470,]     -0.87693400        -0.426085          -1.5836393
##          StandardHours StockOptionLevel TotalWorkingYears TrainingTimesLastYear
##    [1,]           NaN       -0.9316973       -0.42149902            -2.1712429
##    [2,]           NaN        0.2419060       -0.16445544             0.1556541
##    [3,]           NaN       -0.9316973       -0.55002081             0.1556541
##    [4,]           NaN       -0.9316973       -0.42149902             0.1556541
```

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```
##  [5,]      NaN    0.2419060   -0.67854260    0.1556541
##  [6,]      NaN   -0.9316973   -0.42149902   -0.6199782
##  [7,]      NaN    2.5891126    0.09258815    0.1556541
##  [8,]      NaN    0.2419060   -1.32115156   -0.6199782
##  [9,]      NaN   -0.9316973   -0.16445544   -0.6199782
## [10,]      NaN    1.4155093    0.73519711    0.1556541
## [11,]      NaN    0.2419060   -0.67854260    1.7069188
## [12,]      NaN   -0.9316973   -0.16445544    0.1556541
## [13,]      NaN    0.2419060   -0.80706439   -1.3956106
## [14,]      NaN    0.2419060   -1.06410798   -0.6199782
## [15,]      NaN   -0.9316973   -0.67854260    0.9312865
## [16,]      NaN    0.2419060   -0.16445544   -1.3956106
## [17,]      NaN    1.4155093   -0.55002081    1.7069188
## [18,]      NaN    1.4155093   -1.32115156   -0.6199782
## [19,]      NaN   -0.9316973    2.53450219    0.1556541
## [20,]      NaN   -0.9316973   -0.67854260    0.1556541
## [21,]      NaN    0.2419060   -0.80706439    1.7069188
## [22,]      NaN   -0.9316973   -0.16445544    0.9312865
## [23,]      NaN   -0.9316973    0.22110994    0.9312865
## [24,]      NaN   -0.9316973   -1.44967335    2.4825512
## [25,]      NaN   -0.9316973   -0.42149902   -0.6199782
## [26,]      NaN    0.2419060    1.89189323    0.1556541
## [27,]      NaN   -0.9316973   -0.16445544    1.7069188
## [28,]      NaN    0.2419060   -0.16445544   -0.6199782
## [29,]      NaN    0.2419060    1.63484965    0.9312865
## [30,]      NaN   -0.9316973    1.37780606   -0.6199782
## [31,]      NaN   -0.9316973   -0.55002081    0.1556541
## [32,]      NaN   -0.9316973   -0.29297723    1.7069188
## [33,]      NaN   -0.9316973   -0.16445544    1.7069188
## [34,]      NaN    0.2419060    0.99224069    2.4825512
## [35,]      NaN    0.2419060   -0.67854260   -0.6199782
## [36,]      NaN    1.4155093   -0.67854260    0.1556541
## [37,]      NaN   -0.9316973   -1.06410798   -0.6199782
## [38,]      NaN   -0.9316973   -1.19262977    0.1556541
## [39,]      NaN    0.2419060   -0.67854260    0.1556541
## [40,]      NaN    1.4155093   -0.16445544    0.1556541
## [41,]      NaN    0.2419060   -1.32115156    0.1556541
## [42,]      NaN    0.2419060   -1.32115156    2.4825512
## [43,]      NaN   -0.9316973   -1.32115156   -0.6199782
## [44,]      NaN   -0.9316973   -0.29297723   -2.1712429
## [45,]      NaN   -0.9316973    0.09258815   -0.6199782
## [46,]      NaN   -0.9316973    1.50632785   -2.1712429
## [47,]      NaN   -0.9316973   -0.16445544   -0.6199782
## [48,]      NaN   -0.9316973   -0.42149902   -1.3956106
## [49,]      NaN   -0.9316973    0.34963173    0.9312865
## [50,]      NaN   -0.9316973   -1.32115156   -0.6199782
## [51,]      NaN   -0.9316973    1.50632785   -0.6199782
## [52,]      NaN   -0.9316973   -1.19262977    0.1556541
## [53,]      NaN    0.2419060   -0.29297723   -0.6199782
## [54,]      NaN    0.2419060   -0.16445544    0.1556541
## [55,]      NaN    0.2419060   -0.80706439   -0.6199782
## [56,]      NaN   -0.9316973    0.47815352   -1.3956106
## [57,]      NaN    0.2419060   -0.29297723    0.1556541
## [58,]      NaN    0.2419060   -0.93558618    0.1556541
```

```
##   [59,]      NaN      0.2419060     -0.16445544      0.1556541
##   [60,]      NaN      0.2419060     -0.55002081     -0.6199782
##   [61,]      NaN      0.2419060     -0.29297723      0.1556541
##   [62,]      NaN     -0.9316973     -0.16445544     -0.6199782
##   [63,]      NaN      0.2419060      2.27745860     -0.6199782
##   [64,]      NaN     -0.9316973      2.14893681      0.1556541
##   [65,]      NaN      2.5891126      0.73519711     -0.6199782
##   [66,]      NaN      2.5891126      1.24928427     -0.6199782
##   [67,]      NaN     -0.9316973     -0.67854260      0.1556541
##   [68,]      NaN      0.2419060      1.76337144     -0.6199782
##   [69,]      NaN      0.2419060     -0.80706439     -0.6199782
##   [70,]      NaN      0.2419060     -1.19262977     -2.1712429
##   [71,]      NaN     -0.9316973      1.12076248     -0.6199782
##   [72,]      NaN      0.2419060     -0.67854260      0.1556541
##   [73,]      NaN     -0.9316973     -1.32115156      0.9312865
##   [74,]      NaN      1.4155093     -0.16445544      0.1556541
##   [75,]      NaN     -0.9316973     -0.80706439      0.1556541
##   [76,]      NaN     -0.9316973     -0.03593364     -0.6199782
##   [77,]      NaN     -0.9316973      0.60667531     -0.6199782
##   [78,]      NaN     -0.9316973      0.73519711      0.1556541
##   [79,]      NaN     -0.9316973      0.60667531      0.1556541
##   [80,]      NaN      0.2419060      0.60667531     -0.6199782
##   [81,]      NaN      1.4155093     -0.16445544     -1.3956106
##   [82,]      NaN     -0.9316973     -0.67854260      0.1556541
##   [83,]      NaN      0.2419060      1.63484965      0.9312865
##   [84,]      NaN      2.5891126      0.73519711      0.1556541
##   [85,]      NaN     -0.9316973     -0.80706439     -0.6199782
##   [86,]      NaN     -0.9316973      3.30563293      0.1556541
##   [87,]      NaN      0.2419060     -1.06410798      0.1556541
##   [88,]      NaN      1.4155093     -0.16445544      0.9312865
##   [89,]      NaN      2.5891126     -0.03593364      0.1556541
##   [90,]      NaN     -0.9316973     -0.29297723      0.1556541
##   [91,]      NaN      0.2419060      1.37780606      0.1556541
##   [92,]      NaN     -0.9316973     -0.03593364     -0.6199782
##   [93,]      NaN      2.5891126     -0.03593364      0.9312865
##   [94,]      NaN      0.2419060      1.24928427      1.7069188
##   [95,]      NaN     -0.9316973      0.09258815     -2.1712429
##   [96,]      NaN      0.2419060      0.60667531      1.7069188
##   [97,]      NaN      0.2419060     -0.93558618     -0.6199782
##   [98,]      NaN     -0.9316973     -0.80706439      0.1556541
##   [99,]      NaN     -0.9316973      3.43415473     -1.3956106
##  [100,]      NaN      0.2419060      0.73519711      0.1556541
##  [101,]      NaN     -0.9316973     -0.55002081      0.1556541
##  [102,]      NaN     -0.9316973     -1.32115156     -0.6199782
##  [103,]      NaN     -0.9316973     -1.32115156      1.7069188
##  [104,]      NaN     -0.9316973      0.60667531      0.1556541
##  [105,]      NaN      0.2419060      0.73519711     -0.6199782
##  [106,]      NaN      0.2419060      2.40598039      0.1556541
##  [107,]      NaN     -0.9316973      2.14893681     -1.3956106
##  [108,]      NaN     -0.9316973     -0.67854260     -1.3956106
##  [109,]      NaN      1.4155093     -1.19262977     -0.6199782
##  [110,]      NaN     -0.9316973     -1.32115156      1.7069188
##  [111,]      NaN     -0.9316973      1.50632785     -1.3956106
##  [112,]      NaN     -0.9316973     -0.29297723      0.1556541
```

```
## [113,]       NaN    -0.9316973     1.50632785      0.1556541
## [114,]       NaN     0.2419060    -0.67854260     -0.6199782
## [115,]       NaN     0.2419060     0.09258815      0.1556541
## [116,]       NaN    -0.9316973     0.09258815      0.1556541
## [117,]       NaN    -0.9316973     0.34963173      2.4825512
## [118,]       NaN     0.2419060    -0.16445544      2.4825512
## [119,]       NaN     0.2419060    -0.55002081     -0.6199782
## [120,]       NaN     1.4155093     1.76337144      0.1556541
## [121,]       NaN     2.5891126    -0.16445544     -0.6199782
## [122,]       NaN     0.2419060    -0.42149902     -0.6199782
## [123,]       NaN     2.5891126    -0.55002081     -0.6199782
## [124,]       NaN    -0.9316973     1.50632785      1.7069188
## [125,]       NaN    -0.9316973     0.09258815      0.1556541
## [126,]       NaN    -0.9316973    -0.80706439      0.1556541
## [127,]       NaN     0.2419060     3.69119831      0.1556541
## [128,]       NaN    -0.9316973    -1.44967335     -0.6199782
## [129,]       NaN     0.2419060    -1.06410798     -0.6199782
## [130,]       NaN    -0.9316973     0.60667531     -0.6199782
## [131,]       NaN    -0.9316973     0.86371890     -0.6199782
## [132,]       NaN    -0.9316973     0.60667531      0.1556541
## [133,]       NaN     0.2419060    -0.93558618     -0.6199782
## [134,]       NaN     0.2419060     0.09258815     -0.6199782
## [135,]       NaN     0.2419060    -0.42149902      0.1556541
## [136,]       NaN     1.4155093    -0.55002081     -2.1712429
## [137,]       NaN    -0.9316973     0.86371890     -0.6199782
## [138,]       NaN     0.2419060     0.73519711     -1.3956106
## [139,]       NaN    -0.9316973    -0.67854260      0.1556541
## [140,]       NaN    -0.9316973     0.09258815     -0.6199782
## [141,]       NaN    -0.9316973    -0.16445544     -0.6199782
## [142,]       NaN    -0.9316973    -0.29297723     -0.6199782
## [143,]       NaN    -0.9316973     0.99224069     -0.6199782
## [144,]       NaN    -0.9316973    -0.80706439      0.9312865
## [145,]       NaN     2.5891126    -0.29297723     -0.6199782
## [146,]       NaN     0.2419060    -0.42149902      0.1556541
## [147,]       NaN    -0.9316973    -0.67854260      0.1556541
## [148,]       NaN     0.2419060     1.24928427     -0.6199782
## [149,]       NaN     0.2419060    -0.55002081     -0.6199782
## [150,]       NaN    -0.9316973    -1.32115156      0.1556541
## [151,]       NaN     0.2419060     1.12076248     -0.6199782
## [152,]       NaN     1.4155093    -0.16445544      0.1556541
## [153,]       NaN     0.2419060     0.22110994      0.1556541
## [154,]       NaN     0.2419060     1.12076248     -0.6199782
## [155,]       NaN    -0.9316973    -0.29297723     -0.6199782
## [156,]       NaN     0.2419060    -0.16445544     -1.3956106
## [157,]       NaN    -0.9316973    -0.16445544     -0.6199782
## [158,]       NaN     0.2419060    -0.29297723      0.1556541
## [159,]       NaN     0.2419060     0.47815352     -0.6199782
## [160,]       NaN     0.2419060    -0.67854260      0.1556541
## [161,]       NaN     1.4155093    -1.19262977      2.4825512
## [162,]       NaN     0.2419060    -0.67854260     -1.3956106
## [163,]       NaN     0.2419060    -0.80706439     -0.6199782
## [164,]       NaN     0.2419060     0.09258815     -0.6199782
## [165,]       NaN     0.2419060    -1.32115156     -0.6199782
## [166,]       NaN    -0.9316973     1.24928427      1.7069188
```

```
## [167,]          NaN      0.2419060       0.22110994      -0.6199782
## [168,]          NaN      0.2419060       0.09258815      -0.6199782
## [169,]          NaN     -0.9316973       0.09258815      -0.6199782
## [170,]          NaN     -0.9316973      -0.42149902      -0.6199782
## [171,]          NaN      0.2419060      -0.67854260       0.1556541
## [172,]          NaN     -0.9316973      -1.32115156       1.7069188
## [173,]          NaN     -0.9316973       0.22110994       0.1556541
## [174,]          NaN      1.4155093       0.09258815       0.9312865
## [175,]          NaN      0.2419060      -0.29297723       0.1556541
## [176,]          NaN      0.2419060       0.99224069       0.1556541
## [177,]          NaN     -0.9316973      -0.93558618      -0.6199782
## [178,]          NaN     -0.9316973      -1.32115156       0.1556541
## [179,]          NaN      2.5891126       1.63484965      -0.6199782
## [180,]          NaN     -0.9316973      -1.19262977       0.1556541
## [181,]          NaN      0.2419060      -0.55002081      -2.1712429
## [182,]          NaN     -0.9316973      -0.29297723       0.1556541
## [183,]          NaN     -0.9316973      -0.93558618       1.7069188
## [184,]          NaN      0.2419060      -0.80706439      -0.6199782
## [185,]          NaN      1.4155093      -0.80706439       0.1556541
## [186,]          NaN      0.2419060      -0.42149902       1.7069188
## [187,]          NaN      0.2419060       1.24928427      -0.6199782
## [188,]          NaN     -0.9316973       3.17711114       0.1556541
## [189,]          NaN     -0.9316973      -0.16445544      -0.6199782
## [190,]          NaN     -0.9316973       1.24928427       2.4825512
## [191,]          NaN      0.2419060       2.92006756       1.7069188
## [192,]          NaN     -0.9316973      -0.55002081      -0.6199782
## [193,]          NaN     -0.9316973      -0.42149902      -1.3956106
## [194,]          NaN      2.5891126      -0.55002081       0.1556541
## [195,]          NaN      0.2419060       1.37780606      -1.3956106
## [196,]          NaN      0.2419060      -0.42149902       0.1556541
## [197,]          NaN     -0.9316973      -0.16445544       1.7069188
## [198,]          NaN      0.2419060      -0.03593364       1.7069188
## [199,]          NaN     -0.9316973       0.34963173       0.1556541
## [200,]          NaN      0.2419060      -0.29297723       0.1556541
## [201,]          NaN      0.2419060      -0.67854260      -1.3956106
## [202,]          NaN      1.4155093      -0.55002081      -2.1712429
## [203,]          NaN      0.2419060      -0.80706439       0.9312865
## [204,]          NaN      0.2419060       0.47815352      -0.6199782
## [205,]          NaN     -0.9316973       0.73519711      -0.6199782
## [206,]          NaN      2.5891126      -0.16445544       0.1556541
## [207,]          NaN      0.2419060      -0.93558618      -0.6199782
## [208,]          NaN     -0.9316973      -0.42149902      -0.6199782
## [209,]          NaN      0.2419060      -0.80706439       1.7069188
## [210,]          NaN      0.2419060       0.73519711       0.1556541
## [211,]          NaN     -0.9316973       0.34963173      -0.6199782
## [212,]          NaN     -0.9316973       0.09258815      -0.6199782
## [213,]          NaN     -0.9316973      -0.55002081      -0.6199782
## [214,]          NaN      1.4155093       0.60667531       1.7069188
## [215,]          NaN     -0.9316973      -0.42149902       1.7069188
## [216,]          NaN     -0.9316973       0.60667531       0.1556541
## [217,]          NaN     -0.9316973      -0.29297723       1.7069188
## [218,]          NaN     -0.9316973      -0.55002081      -1.3956106
## [219,]          NaN     -0.9316973       1.50632785      -0.6199782
## [220,]          NaN      0.2419060       0.60667531       0.9312865
```

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## [221,]       NaN      -0.9316973       0.60667531        0.1556541
## [222,]       NaN      -0.9316973      -0.55002081        0.1556541
## [223,]       NaN       2.5891126      -0.16445544       -1.3956106
## [224,]       NaN       1.4155093       0.73519711        2.4825512
## [225,]       NaN       0.2419060      -0.67854260       -0.6199782
## [226,]       NaN       0.2419060      -0.55002081        2.4825512
## [227,]       NaN       0.2419060       0.22110994       -0.6199782
## [228,]       NaN       0.2419060      -0.03593364        1.7069188
## [229,]       NaN      -0.9316973      -0.16445544        0.1556541
## [230,]       NaN      -0.9316973      -0.93558618        0.1556541
## [231,]       NaN      -0.9316973      -0.67854260        0.1556541
## [232,]       NaN      -0.9316973       1.37780606        0.1556541
## [233,]       NaN      -0.9316973      -0.55002081       -0.6199782
## [234,]       NaN       0.2419060       2.66302398        0.1556541
## [235,]       NaN       0.2419060      -0.42149902       -0.6199782
## [236,]       NaN       0.2419060       1.37780606        0.1556541
## [237,]       NaN      -0.9316973       0.22110994        0.1556541
## [238,]       NaN      -0.9316973       2.79154577       -0.6199782
## [239,]       NaN       0.2419060      -0.67854260        1.7069188
## [240,]       NaN      -0.9316973      -0.93558618       -0.6199782
## [241,]       NaN       2.5891126      -0.55002081       -1.3956106
## [242,]       NaN      -0.9316973      -0.93558618       -0.6199782
## [243,]       NaN       1.4155093       0.73519711       -0.6199782
## [244,]       NaN       1.4155093      -0.29297723        0.1556541
## [245,]       NaN       0.2419060       1.76337144       -0.6199782
## [246,]       NaN       0.2419060      -0.29297723        0.1556541
## [247,]       NaN       0.2419060      -1.19262977       -0.6199782
## [248,]       NaN       0.2419060       0.22110994        0.1556541
## [249,]       NaN       0.2419060       0.73519711       -0.6199782
## [250,]       NaN       0.2419060      -0.29297723       -1.3956106
## [251,]       NaN       1.4155093       0.73519711        1.7069188
## [252,]       NaN      -0.9316973       1.12076248       -1.3956106
## [253,]       NaN      -0.9316973      -0.67854260       -1.3956106
## [254,]       NaN      -0.9316973      -0.16445544       -1.3956106
## [255,]       NaN       0.2419060      -0.16445544       -0.6199782
## [256,]       NaN       1.4155093      -0.80706439        0.1556541
## [257,]       NaN       0.2419060      -0.16445544        0.9312865
## [258,]       NaN       0.2419060       1.37780606        1.7069188
## [259,]       NaN      -0.9316973      -1.32115156       -2.1712429
## [260,]       NaN      -0.9316973      -0.67854260       -0.6199782
## [261,]       NaN      -0.9316973      -0.80706439        0.1556541
## [262,]       NaN       0.2419060       0.22110994       -2.1712429
## [263,]       NaN      -0.9316973      -0.29297723        1.7069188
## [264,]       NaN       0.2419060       2.14893681       -0.6199782
## [265,]       NaN      -0.9316973      -0.80706439        1.7069188
## [266,]       NaN       1.4155093      -0.16445544       -0.6199782
## [267,]       NaN       0.2419060      -0.16445544       -0.6199782
## [268,]       NaN       1.4155093      -0.67854260       -0.6199782
## [269,]       NaN      -0.9316973       1.24928427       -0.6199782
## [270,]       NaN       0.2419060       0.60667531        0.9312865
## [271,]       NaN      -0.9316973       3.30563293       -0.6199782
## [272,]       NaN       0.2419060      -0.16445544       -0.6199782
## [273,]       NaN       0.2419060      -0.80706439        0.1556541
## [274,]       NaN       0.2419060      -0.55002081        1.7069188
```

```
## [275,]       NaN   -0.9316973   -1.06410798    0.9312865
## [276,]       NaN    1.4155093    0.47815352   -0.6199782
## [277,]       NaN    0.2419060   -0.16445544    2.4825512
## [278,]       NaN    0.2419060   -0.42149902    0.1556541
## [279,]       NaN    0.2419060   -0.67854260    2.4825512
## [280,]       NaN    1.4155093    2.14893681    0.9312865
## [281,]       NaN    2.5891126    1.24928427    1.7069188
## [282,]       NaN   -0.9316973    1.12076248    0.1556541
## [283,]       NaN   -0.9316973   -0.16445544    0.1556541
## [284,]       NaN    0.2419060    0.09258815    0.9312865
## [285,]       NaN    0.2419060   -0.80706439    0.1556541
## [286,]       NaN   -0.9316973    0.73519711    0.1556541
## [287,]       NaN    0.2419060    0.99224069   -2.1712429
## [288,]       NaN    0.2419060   -0.16445544   -0.6199782
## [289,]       NaN    0.2419060   -0.80706439   -0.6199782
## [290,]       NaN   -0.9316973   -0.80706439    0.1556541
## [291,]       NaN   -0.9316973    1.37780606    0.9312865
## [292,]       NaN   -0.9316973   -0.16445544   -0.6199782
## [293,]       NaN    0.2419060   -1.19262977    1.7069188
## [294,]       NaN   -0.9316973   -0.42149902   -2.1712429
## [295,]       NaN    2.5891126   -0.93558618    0.1556541
## [296,]       NaN    0.2419060    1.50632785   -0.6199782
## [297,]       NaN   -0.9316973   -1.44967335   -0.6199782
## [298,]       NaN    1.4155093    0.09258815    0.1556541
## [299,]       NaN    1.4155093   -0.93558618   -0.6199782
## [300,]       NaN    0.2419060    0.22110994    0.1556541
## [301,]       NaN   -0.9316973    1.37780606   -0.6199782
## [302,]       NaN   -0.9316973   -1.44967335   -0.6199782
## [303,]       NaN   -0.9316973   -0.29297723   -0.6199782
## [304,]       NaN    0.2419060   -0.16445544    0.1556541
## [305,]       NaN    2.5891126    0.99224069    1.7069188
## [306,]       NaN    0.2419060   -0.03593364    0.1556541
## [307,]       NaN    0.2419060    0.22110994    0.1556541
## [308,]       NaN    0.2419060    0.99224069   -0.6199782
## [309,]       NaN    0.2419060    0.09258815   -0.6199782
## [310,]       NaN    0.2419060   -0.67854260    0.9312865
## [311,]       NaN   -0.9316973   -0.29297723   -1.3956106
## [312,]       NaN    0.2419060    1.63484965   -0.6199782
## [313,]       NaN    0.2419060   -1.06410798   -0.6199782
## [314,]       NaN    1.4155093    0.09258815   -0.6199782
## [315,]       NaN   -0.9316973    1.24928427    0.1556541
## [316,]       NaN   -0.9316973   -0.29297723    1.7069188
## [317,]       NaN   -0.9316973    1.76337144   -0.6199782
## [318,]       NaN   -0.9316973   -0.03593364    0.1556541
## [319,]       NaN   -0.9316973   -0.93558618   -0.6199782
## [320,]       NaN   -0.9316973    0.22110994   -0.6199782
## [321,]       NaN   -0.9316973   -0.80706439    0.1556541
## [322,]       NaN    2.5891126    0.22110994    0.1556541
## [323,]       NaN   -0.9316973   -0.16445544   -2.1712429
## [324,]       NaN   -0.9316973   -0.80706439    0.9312865
## [325,]       NaN    1.4155093   -0.03593364   -0.6199782
## [326,]       NaN    0.2419060   -0.16445544   -0.6199782
## [327,]       NaN    0.2419060    1.24928427   -0.6199782
## [328,]       NaN   -0.9316973    0.09258815    0.1556541
```

```
## [329,]          NaN      -0.9316973      -0.29297723        2.4825512
## [330,]          NaN       0.2419060       1.24928427       -0.6199782
## [331,]          NaN       0.2419060      -0.29297723        0.1556541
## [332,]          NaN       0.2419060      -0.67854260       -2.1712429
## [333,]          NaN      -0.9316973       1.12076248        0.9312865
## [334,]          NaN       0.2419060      -0.16445544       -1.3956106
## [335,]          NaN       1.4155093       0.09258815        0.1556541
## [336,]          NaN       2.5891126      -0.67854260       -0.6199782
## [337,]          NaN      -0.9316973      -0.55002081        0.9312865
## [338,]          NaN      -0.9316973      -0.93558618       -0.6199782
## [339,]          NaN       2.5891126      -0.16445544       -0.6199782
## [340,]          NaN       0.2419060      -0.42149902        0.1556541
## [341,]          NaN       1.4155093      -0.42149902       -0.6199782
## [342,]          NaN       0.2419060       0.09258815        0.1556541
## [343,]          NaN      -0.9316973      -0.03593364       -0.6199782
## [344,]          NaN       1.4155093      -0.55002081       -0.6199782
## [345,]          NaN      -0.9316973       0.73519711        1.7069188
## [346,]          NaN       1.4155093      -0.93558618       -0.6199782
## [347,]          NaN      -0.9316973      -0.42149902        0.1556541
## [348,]          NaN      -0.9316973      -0.80706439        0.1556541
## [349,]          NaN      -0.9316973       0.60667531       -0.6199782
## [350,]          NaN       0.2419060      -0.93558618        0.1556541
## [351,]          NaN       0.2419060      -0.93558618        1.7069188
## [352,]          NaN       0.2419060      -0.42149902        0.9312865
## [353,]          NaN       0.2419060       0.47815352        0.1556541
## [354,]          NaN       1.4155093       0.22110994       -0.6199782
## [355,]          NaN       0.2419060      -0.93558618       -0.6199782
## [356,]          NaN       0.2419060      -0.42149902        0.1556541
## [357,]          NaN      -0.9316973       0.34963173        2.4825512
## [358,]          NaN      -0.9316973      -1.06410798        0.1556541
## [359,]          NaN      -0.9316973      -0.55002081        2.4825512
## [360,]          NaN       0.2419060       0.60667531       -0.6199782
## [361,]          NaN      -0.9316973       0.47815352       -0.6199782
## [362,]          NaN       0.2419060      -0.16445544        0.1556541
## [363,]          NaN      -0.9316973      -1.06410798        0.1556541
## [364,]          NaN      -0.9316973      -1.32115156       -0.6199782
## [365,]          NaN       0.2419060       0.73519711        0.1556541
## [366,]          NaN      -0.9316973      -0.55002081       -0.6199782
## [367,]          NaN      -0.9316973      -0.42149902        1.7069188
## [368,]          NaN      -0.9316973       1.12076248       -0.6199782
## [369,]          NaN       1.4155093      -0.42149902        2.4825512
## [370,]          NaN      -0.9316973      -1.06410798        1.7069188
## [371,]          NaN      -0.9316973      -1.32115156       -2.1712429
## [372,]          NaN      -0.9316973      -0.67854260        0.9312865
## [373,]          NaN      -0.9316973      -0.16445544        1.7069188
## [374,]          NaN       0.2419060      -0.80706439       -0.6199782
## [375,]          NaN      -0.9316973      -0.55002081       -1.3956106
## [376,]          NaN      -0.9316973       1.89189323       -0.6199782
## [377,]          NaN       0.2419060       0.86371890       -0.6199782
## [378,]          NaN       0.2419060      -0.67854260        0.1556541
## [379,]          NaN      -0.9316973      -0.29297723        0.1556541
## [380,]          NaN      -0.9316973       2.40598039       -0.6199782
## [381,]          NaN       0.2419060      -0.80706439       -0.6199782
## [382,]          NaN       0.2419060      -1.32115156        0.1556541
```

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## [383,]         NaN       -0.9316973      -0.55002081      -0.6199782
## [384,]         NaN        0.2419060      -1.19262977      -1.3956106
## [385,]         NaN        1.4155093      -0.16445544      -0.6199782
## [386,]         NaN       -0.9316973      -1.06410798       0.9312865
## [387,]         NaN        0.2419060       0.86371890      -0.6199782
## [388,]         NaN        1.4155093      -0.42149902       1.7069188
## [389,]         NaN        0.2419060      -0.42149902       1.7069188
## [390,]         NaN       -0.9316973       0.86371890      -0.6199782
## [391,]         NaN        0.2419060       1.76337144       0.1556541
## [392,]         NaN        0.2419060       1.12076248       0.1556541
## [393,]         NaN        0.2419060       1.63484965       0.9312865
## [394,]         NaN        0.2419060      -0.67854260       0.1556541
## [395,]         NaN        0.2419060       0.22110994       1.7069188
## [396,]         NaN        0.2419060      -0.42149902      -1.3956106
## [397,]         NaN       -0.9316973      -0.42149902       0.1556541
## [398,]         NaN       -0.9316973      -0.80706439       0.1556541
## [399,]         NaN        1.4155093       0.47815352      -0.6199782
## [400,]         NaN        0.2419060      -0.93558618       0.1556541
## [401,]         NaN        0.2419060       1.24928427       0.1556541
## [402,]         NaN        2.5891126       3.17711114      -2.1712429
## [403,]         NaN       -0.9316973      -0.67854260       2.4825512
## [404,]         NaN        0.2419060      -0.16445544      -0.6199782
## [405,]         NaN        0.2419060      -0.16445544      -0.6199782
## [406,]         NaN        0.2419060      -0.67854260       1.7069188
## [407,]         NaN       -0.9316973       2.14893681       0.9312865
## [408,]         NaN        1.4155093      -0.42149902       0.1556541
## [409,]         NaN       -0.9316973       2.53450219      -0.6199782
## [410,]         NaN        0.2419060       0.99224069       0.1556541
## [411,]         NaN       -0.9316973      -0.03593364      -0.6199782
## [412,]         NaN       -0.9316973       2.79154577       1.7069188
## [413,]         NaN        0.2419060       0.99224069       1.7069188
## [414,]         NaN        2.5891126      -0.55002081       0.9312865
## [415,]         NaN       -0.9316973      -0.67854260       0.9312865
## [416,]         NaN        0.2419060      -1.06410798       0.1556541
## [417,]         NaN        0.2419060      -1.32115156       0.1556541
## [418,]         NaN       -0.9316973       1.24928427      -0.6199782
## [419,]         NaN        1.4155093      -1.06410798       0.1556541
## [420,]         NaN        0.2419060      -0.29297723       0.1556541
## [421,]         NaN       -0.9316973      -0.16445544      -0.6199782
## [422,]         NaN       -0.9316973      -0.67854260      -0.6199782
## [423,]         NaN       -0.9316973      -1.32115156       0.1556541
## [424,]         NaN       -0.9316973      -0.16445544       0.1556541
## [425,]         NaN        0.2419060       2.66302398       0.1556541
## [426,]         NaN        0.2419060       2.14893681      -0.6199782
## [427,]         NaN       -0.9316973       0.09258815      -0.6199782
## [428,]         NaN       -0.9316973       1.37780606       1.7069188
## [429,]         NaN        2.5891126       1.12076248      -0.6199782
## [430,]         NaN       -0.9316973       1.89189323      -0.6199782
## [431,]         NaN       -0.9316973      -0.67854260      -0.6199782
## [432,]         NaN       -0.9316973       0.99224069       0.1556541
## [433,]         NaN        0.2419060       0.34963173       0.1556541
## [434,]         NaN        0.2419060       0.47815352       0.1556541
## [435,]         NaN        0.2419060       0.22110994       2.4825512
## [436,]         NaN       -0.9316973       0.47815352      -0.6199782
```

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## [437,]        NaN      2.5891126    -0.42149902    -0.6199782
## [438,]        NaN     -0.9316973    -0.93558618     0.1556541
## [439,]        NaN     -0.9316973    -0.16445544    -0.6199782
## [440,]        NaN     -0.9316973     0.09258815    -0.6199782
## [441,]        NaN      2.5891126    -0.03593364    -0.6199782
## [442,]        NaN      0.2419060    -0.42149902     0.9312865
## [443,]        NaN     -0.9316973    -0.16445544     0.1556541
## [444,]        NaN     -0.9316973    -0.93558618     0.1556541
## [445,]        NaN      0.2419060     0.34963173    -0.6199782
## [446,]        NaN     -0.9316973     3.30563293    -0.6199782
## [447,]        NaN     -0.9316973     0.60667531     0.1556541
## [448,]        NaN     -0.9316973     0.47815352    -0.6199782
## [449,]        NaN     -0.9316973     1.37780606     0.1556541
## [450,]        NaN      0.2419060    -0.42149902     0.1556541
## [451,]        NaN     -0.9316973    -0.16445544    -0.6199782
## [452,]        NaN      0.2419060    -0.16445544     1.7069188
## [453,]        NaN      0.2419060    -0.29297723     0.1556541
## [454,]        NaN      0.2419060    -0.42149902    -0.6199782
## [455,]        NaN      1.4155093    -0.42149902    -0.6199782
## [456,]        NaN      0.2419060    -0.16445544    -0.6199782
## [457,]        NaN      0.2419060    -0.16445544     0.1556541
## [458,]        NaN     -0.9316973    -1.44967335     0.1556541
## [459,]        NaN      0.2419060     1.12076248    -0.6199782
## [460,]        NaN     -0.9316973    -0.16445544     0.1556541
## [461,]        NaN      1.4155093    -0.42149902     1.7069188
## [462,]        NaN     -0.9316973    -0.80706439     0.1556541
## [463,]        NaN     -0.9316973    -0.16445544     0.1556541
## [464,]        NaN     -0.9316973    -1.32115156     0.1556541
## [465,]        NaN     -0.9316973     0.09258815     0.1556541
## [466,]        NaN     -0.9316973     2.14893681     0.1556541
## [467,]        NaN      0.2419060     1.37780606    -0.6199782
## [468,]        NaN      0.2419060    -0.29297723     2.4825512
## [469,]        NaN      1.4155093     0.86371890     0.1556541
## [470,]        NaN     -0.9316973    -0.67854260    -0.6199782
## [471,]        NaN      1.4155093    -1.06410798     0.1556541
## [472,]        NaN      0.2419060     0.86371890     0.9312865
## [473,]        NaN      0.2419060    -0.42149902    -0.6199782
## [474,]        NaN      0.2419060     2.53450219     1.7069188
## [475,]        NaN      1.4155093    -0.67854260     0.1556541
## [476,]        NaN      1.4155093    -0.67854260     1.7069188
## [477,]        NaN      0.2419060    -1.32115156    -0.6199782
## [478,]        NaN      0.2419060     2.66302398    -0.6199782
## [479,]        NaN     -0.9316973    -0.55002081    -1.3956106
## [480,]        NaN      0.2419060    -0.67854260     0.9312865
## [481,]        NaN      0.2419060    -1.32115156    -0.6199782
## [482,]        NaN      0.2419060    -0.67854260     0.1556541
## [483,]        NaN     -0.9316973    -0.29297723    -0.6199782
## [484,]        NaN     -0.9316973    -0.29297723     0.1556541
## [485,]        NaN      1.4155093     0.22110994     0.9312865
## [486,]        NaN      1.4155093    -0.67854260     1.7069188
## [487,]        NaN      0.2419060     0.73519711     0.1556541
## [488,]        NaN     -0.9316973    -1.32115156    -2.1712429
## [489,]        NaN      1.4155093    -0.16445544     0.9312865
## [490,]        NaN      0.2419060     1.24928427     0.1556541
```

```
## [491,]      NaN    -0.9316973    -0.42149902     0.1556541
## [492,]      NaN     0.2419060    -0.16445544     0.1556541
## [493,]      NaN     0.2419060     1.24928427     0.1556541
## [494,]      NaN    -0.9316973    -0.16445544    -1.3956106
## [495,]      NaN     1.4155093    -0.42149902     0.1556541
## [496,]      NaN     0.2419060    -0.80706439     0.1556541
## [497,]      NaN    -0.9316973    -1.06410798    -0.6199782
## [498,]      NaN     0.2419060     1.89189323    -0.6199782
## [499,]      NaN    -0.9316973    -1.06410798     0.1556541
## [500,]      NaN    -0.9316973    -0.67854260     0.1556541
## [501,]      NaN     0.2419060    -0.67854260    -0.6199782
## [502,]      NaN     0.2419060    -1.32115156    -0.6199782
## [503,]      NaN    -0.9316973     0.86371890    -0.6199782
## [504,]      NaN     0.2419060    -0.16445544     0.9312865
## [505,]      NaN     1.4155093    -0.80706439     0.9312865
## [506,]      NaN     0.2419060    -1.06410798    -0.6199782
## [507,]      NaN     0.2419060    -0.16445544    -0.6199782
## [508,]      NaN     0.2419060    -0.67854260     1.7069188
## [509,]      NaN    -0.9316973     0.73519711     0.1556541
## [510,]      NaN     0.2419060     0.47815352    -0.6199782
## [511,]      NaN     0.2419060     0.60667531    -1.3956106
## [512,]      NaN     0.2419060     0.22110994    -0.6199782
## [513,]      NaN    -0.9316973    -0.80706439    -2.1712429
## [514,]      NaN    -0.9316973    -1.32115156     1.7069188
## [515,]      NaN    -0.9316973    -0.16445544     0.1556541
## [516,]      NaN     1.4155093    -1.32115156     0.1556541
## [517,]      NaN     0.2419060    -0.80706439     0.1556541
## [518,]      NaN     0.2419060    -0.93558618     0.9312865
## [519,]      NaN    -0.9316973    -0.42149902    -0.6199782
## [520,]      NaN     0.2419060    -0.16445544     1.7069188
## [521,]      NaN    -0.9316973     0.09258815     0.1556541
## [522,]      NaN     1.4155093    -0.67854260     0.1556541
## [523,]      NaN    -0.9316973    -0.93558618    -0.6199782
## [524,]      NaN     2.5891126     1.12076248     0.1556541
## [525,]      NaN    -0.9316973    -0.29297723     0.1556541
## [526,]      NaN    -0.9316973    -0.93558618     0.1556541
## [527,]      NaN    -0.9316973     1.12076248     0.9312865
## [528,]      NaN    -0.9316973    -0.16445544    -0.6199782
## [529,]      NaN     0.2419060     0.86371890     0.9312865
## [530,]      NaN    -0.9316973    -0.16445544     0.9312865
## [531,]      NaN    -0.9316973    -0.29297723     0.1556541
## [532,]      NaN    -0.9316973    -0.16445544     2.4825512
## [533,]      NaN    -0.9316973     1.12076248    -0.6199782
## [534,]      NaN     0.2419060     1.12076248    -0.6199782
## [535,]      NaN    -0.9316973     2.66302398     0.1556541
## [536,]      NaN     2.5891126     1.50632785    -0.6199782
## [537,]      NaN    -0.9316973    -0.16445544    -1.3956106
## [538,]      NaN     1.4155093    -0.29297723     0.9312865
## [539,]      NaN     0.2419060     1.37780606     0.1556541
## [540,]      NaN     0.2419060    -0.93558618    -0.6199782
## [541,]      NaN    -0.9316973    -0.16445544     0.9312865
## [542,]      NaN     0.2419060    -0.16445544    -0.6199782
## [543,]      NaN    -0.9316973    -0.16445544     0.9312865
## [544,]      NaN    -0.9316973    -0.29297723     1.7069188
```

447

```
## [545,]        NaN      1.4155093      2.14893681     -0.6199782
## [546,]        NaN      0.2419060     -0.16445544     -0.6199782
## [547,]        NaN     -0.9316973     -1.32115156      2.4825512
## [548,]        NaN     -0.9316973     -0.55002081     -0.6199782
## [549,]        NaN      0.2419060     -0.55002081      1.7069188
## [550,]        NaN     -0.9316973     -0.16445544     -0.6199782
## [551,]        NaN      0.2419060     -0.80706439     -0.6199782
## [552,]        NaN      0.2419060      0.09258815      0.1556541
## [553,]        NaN     -0.9316973      2.40598039     -1.3956106
## [554,]        NaN     -0.9316973     -0.80706439     -0.6199782
## [555,]        NaN     -0.9316973     -0.29297723     -0.6199782
## [556,]        NaN      1.4155093     -1.19262977     -0.6199782
## [557,]        NaN     -0.9316973      0.99224069      0.9312865
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## [559,]        NaN      1.4155093     -0.16445544     -0.6199782
## [560,]        NaN      0.2419060     -0.67854260     -2.1712429
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## [563,]        NaN     -0.9316973     -0.16445544     -0.6199782
## [564,]        NaN     -0.9316973     -0.67854260      1.7069188
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## [566,]        NaN     -0.9316973     -1.19262977      0.1556541
## [567,]        NaN     -0.9316973     -0.42149902     -0.6199782
## [568,]        NaN     -0.9316973     -0.67854260      1.7069188
## [569,]        NaN      0.2419060      1.63484965     -0.6199782
## [570,]        NaN     -0.9316973     -0.16445544     -1.3956106
## [571,]        NaN      0.2419060     -0.80706439      0.1556541
## [572,]        NaN      0.2419060     -0.80706439     -0.6199782
## [573,]        NaN      0.2419060     -0.03593364      0.1556541
## [574,]        NaN     -0.9316973     -0.67854260     -0.6199782
## [575,]        NaN     -0.9316973     -0.16445544     -0.6199782
## [576,]        NaN      1.4155093     -0.29297723      0.9312865
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## [578,]        NaN      1.4155093     -0.67854260      0.1556541
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## [581,]        NaN      0.2419060     -1.06410798     -1.3956106
## [582,]        NaN      1.4155093     -0.55002081     -0.6199782
## [583,]        NaN      0.2419060     -0.42149902     -0.6199782
## [584,]        NaN      0.2419060     -0.67854260     -1.3956106
## [585,]        NaN      0.2419060      1.63484965      0.9312865
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## [587,]        NaN      2.5891126     -1.32115156      0.9312865
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## [589,]        NaN     -0.9316973      2.40598039      0.1556541
## [590,]        NaN      0.2419060     -1.32115156     -1.3956106
## [591,]        NaN     -0.9316973      0.34963173      0.1556541
## [592,]        NaN     -0.9316973     -0.67854260      0.1556541
## [593,]        NaN      0.2419060      1.89189323      0.1556541
## [594,]        NaN      0.2419060     -0.16445544     -0.6199782
## [595,]        NaN      0.2419060     -0.16445544      0.1556541
## [596,]        NaN     -0.9316973      3.69119831     -0.6199782
## [597,]        NaN     -0.9316973     -0.55002081     -2.1712429
## [598,]        NaN      0.2419060     -0.42149902      0.9312865
```

```
## [599,]       NaN    -0.9316973    -0.80706439     0.1556541
## [600,]       NaN     0.2419060    -0.42149902    -0.6199782
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## [602,]       NaN    -0.9316973    -0.16445544     2.4825512
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## [605,]       NaN     0.2419060    -0.16445544     0.1556541
## [606,]       NaN     0.2419060     0.22110994     0.1556541
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## [613,]       NaN    -0.9316973    -0.42149902    -0.6199782
## [614,]       NaN     0.2419060    -0.93558618    -1.3956106
## [615,]       NaN     0.2419060    -0.42149902    -0.6199782
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## [617,]       NaN     0.2419060     2.27745860    -0.6199782
## [618,]       NaN    -0.9316973    -0.16445544    -0.6199782
## [619,]       NaN    -0.9316973    -0.67854260     0.1556541
## [620,]       NaN     0.2419060    -0.29297723     1.7069188
## [621,]       NaN    -0.9316973    -0.67854260     0.1556541
## [622,]       NaN     0.2419060     0.86371890    -1.3956106
## [623,]       NaN     0.2419060    -0.42149902     0.1556541
## [624,]       NaN     0.2419060    -0.16445544     0.1556541
## [625,]       NaN     0.2419060     3.04858935     0.1556541
## [626,]       NaN     0.2419060     0.86371890    -0.6199782
## [627,]       NaN     0.2419060    -0.29297723     0.1556541
## [628,]       NaN    -0.9316973     2.53450219     0.1556541
## [629,]       NaN     1.4155093    -0.29297723    -0.6199782
## [630,]       NaN     0.2419060    -0.67854260     2.4825512
## [631,]       NaN     1.4155093    -0.93558618    -0.6199782
## [632,]       NaN     0.2419060    -0.16445544    -0.6199782
## [633,]       NaN    -0.9316973    -0.42149902    -0.6199782
## [634,]       NaN    -0.9316973    -0.67854260     0.1556541
## [635,]       NaN    -0.9316973    -0.80706439     0.1556541
## [636,]       NaN     0.2419060     0.73519711    -0.6199782
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## [638,]       NaN     0.2419060    -0.93558618    -0.6199782
## [639,]       NaN    -0.9316973    -0.80706439    -1.3956106
## [640,]       NaN     0.2419060    -0.55002081    -0.6199782
## [641,]       NaN    -0.9316973    -0.67854260    -0.6199782
## [642,]       NaN     0.2419060    -0.16445544     0.1556541
## [643,]       NaN     0.2419060    -1.06410798     0.1556541
## [644,]       NaN     0.2419060     0.73519711    -1.3956106
## [645,]       NaN     0.2419060    -0.42149902    -0.6199782
## [646,]       NaN     2.5891126    -0.80706439     0.1556541
## [647,]       NaN     0.2419060     2.14893681     0.1556541
## [648,]       NaN    -0.9316973     0.60667531    -0.6199782
## [649,]       NaN     0.2419060    -0.16445544     0.1556541
## [650,]       NaN    -0.9316973     2.79154577    -2.1712429
## [651,]       NaN     0.2419060     0.09258815    -0.6199782
## [652,]       NaN     0.2419060    -0.42149902    -0.6199782
```

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## [653,]        NaN      -0.9316973    -0.16445544     -0.6199782
## [654,]        NaN       0.2419060     2.53450219      0.1556541
## [655,]        NaN       1.4155093     0.22110994     -0.6199782
## [656,]        NaN       0.2419060    -0.55002081      0.9312865
## [657,]        NaN      -0.9316973    -1.32115156     -0.6199782
## [658,]        NaN       2.5891126    -0.42149902      1.7069188
## [659,]        NaN      -0.9316973    -0.42149902     -2.1712429
## [660,]        NaN      -0.9316973    -0.93558618      0.1556541
## [661,]        NaN       0.2419060    -1.06410798      0.1556541
## [662,]        NaN       0.2419060    -0.93558618     -0.6199782
## [663,]        NaN      -0.9316973    -1.19262977      0.1556541
## [664,]        NaN      -0.9316973    -1.32115156      0.1556541
## [665,]        NaN       0.2419060     0.73519711     -0.6199782
## [666,]        NaN      -0.9316973    -1.06410798      0.1556541
## [667,]        NaN       0.2419060    -0.93558618      0.1556541
## [668,]        NaN       0.2419060    -0.16445544     -1.3956106
## [669,]        NaN       0.2419060    -0.67854260     -0.6199782
## [670,]        NaN      -0.9316973    -0.42149902     -0.6199782
## [671,]        NaN      -0.9316973    -1.32115156     -0.6199782
## [672,]        NaN       1.4155093    -1.32115156      0.1556541
## [673,]        NaN      -0.9316973    -0.16445544      2.4825512
## [674,]        NaN      -0.9316973    -0.67854260     -1.3956106
## [675,]        NaN       0.2419060     1.63484965      0.1556541
## [676,]        NaN      -0.9316973     0.22110994     -0.6199782
## [677,]        NaN       0.2419060    -0.16445544     -0.6199782
## [678,]        NaN       0.2419060     2.27745860      0.1556541
## [679,]        NaN       1.4155093     0.22110994     -0.6199782
## [680,]        NaN       0.2419060    -0.29297723     -0.6199782
## [681,]        NaN      -0.9316973    -0.42149902      2.4825512
## [682,]        NaN       0.2419060     0.47815352      0.1556541
## [683,]        NaN      -0.9316973    -0.80706439      0.1556541
## [684,]        NaN       2.5891126    -1.32115156     -0.6199782
## [685,]        NaN       0.2419060    -0.03593364     -0.6199782
## [686,]        NaN      -0.9316973    -0.55002081     -0.6199782
## [687,]        NaN      -0.9316973     1.12076248      0.1556541
## [688,]        NaN      -0.9316973     0.60667531      2.4825512
## [689,]        NaN      -0.9316973    -1.32115156      0.1556541
## [690,]        NaN      -0.9316973    -1.32115156     -0.6199782
## [691,]        NaN       1.4155093    -0.16445544     -0.6199782
## [692,]        NaN       0.2419060    -1.06410798     -0.6199782
## [693,]        NaN       0.2419060    -0.42149902     -0.6199782
## [694,]        NaN       0.2419060     0.60667531      2.4825512
## [695,]        NaN      -0.9316973    -0.67854260      0.1556541
## [696,]        NaN      -0.9316973     0.73519711     -0.6199782
## [697,]        NaN      -0.9316973    -0.29297723      1.7069188
## [698,]        NaN       0.2419060    -1.06410798      1.7069188
## [699,]        NaN      -0.9316973    -0.80706439      0.1556541
## [700,]        NaN       0.2419060     1.89189323     -0.6199782
## [701,]        NaN      -0.9316973    -0.55002081      0.9312865
## [702,]        NaN       0.2419060     1.37780606      0.1556541
## [703,]        NaN       0.2419060    -0.16445544     -0.6199782
## [704,]        NaN      -0.9316973    -0.67854260     -1.3956106
## [705,]        NaN       0.2419060     0.09258815     -0.6199782
## [706,]        NaN      -0.9316973    -0.29297723      0.1556541
```

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## [707,]          NaN      -0.9316973      1.37780606      -0.6199782
## [708,]          NaN      -0.9316973      1.12076248       0.1556541
## [709,]          NaN       1.4155093      0.09258815       0.1556541
## [710,]          NaN      -0.9316973     -0.93558618      -2.1712429
## [711,]          NaN      -0.9316973     -0.16445544      -0.6199782
## [712,]          NaN      -0.9316973     -1.06410798       1.7069188
## [713,]          NaN      -0.9316973     -0.80706439       0.9312865
## [714,]          NaN       1.4155093     -0.42149902      -0.6199782
## [715,]          NaN       0.2419060      2.66302398      -1.3956106
## [716,]          NaN       0.2419060     -0.67854260      -0.6199782
## [717,]          NaN       0.2419060      1.24928427      -0.6199782
## [718,]          NaN       0.2419060     -0.93558618      -0.6199782
## [719,]          NaN       0.2419060     -0.29297723      -0.6199782
## [720,]          NaN      -0.9316973     -0.29297723      -2.1712429
## [721,]          NaN      -0.9316973     -0.55002081      -0.6199782
## [722,]          NaN       0.2419060      1.37780606      -0.6199782
## [723,]          NaN       0.2419060     -1.06410798      -2.1712429
## [724,]          NaN       0.2419060      0.22110994       0.1556541
## [725,]          NaN       1.4155093     -0.80706439       2.4825512
## [726,]          NaN       0.2419060     -0.80706439      -0.6199782
## [727,]          NaN       0.2419060     -0.93558618      -1.3956106
## [728,]          NaN      -0.9316973     -1.44967335      -0.6199782
## [729,]          NaN       0.2419060      1.37780606      -0.6199782
## [730,]          NaN       0.2419060      0.60667531       0.1556541
## [731,]          NaN       2.5891126     -0.29297723       0.9312865
## [732,]          NaN      -0.9316973     -1.32115156      -0.6199782
## [733,]          NaN      -0.9316973     -0.93558618       0.1556541
## [734,]          NaN      -0.9316973     -0.42149902      -0.6199782
## [735,]          NaN       0.2419060     -0.93558618       0.1556541
## [736,]          NaN      -0.9316973      0.99224069      -2.1712429
## [737,]          NaN      -0.9316973      2.02041502       0.1556541
## [738,]          NaN      -0.9316973     -0.42149902       2.4825512
## [739,]          NaN       0.2419060      1.24928427       0.1556541
## [740,]          NaN       0.2419060     -0.93558618      -0.6199782
## [741,]          NaN       0.2419060     -1.06410798       0.9312865
## [742,]          NaN      -0.9316973      1.24928427       0.1556541
## [743,]          NaN      -0.9316973     -0.42149902       1.7069188
## [744,]          NaN      -0.9316973      2.40598039       0.9312865
## [745,]          NaN      -0.9316973      0.47815352      -0.6199782
## [746,]          NaN       1.4155093      0.73519711       0.1556541
## [747,]          NaN       1.4155093      1.24928427       0.1556541
## [748,]          NaN      -0.9316973      0.99224069      -1.3956106
## [749,]          NaN      -0.9316973     -0.55002081       2.4825512
## [750,]          NaN       0.2419060      2.79154577       0.1556541
## [751,]          NaN       0.2419060      1.50632785      -0.6199782
## [752,]          NaN       0.2419060      0.99224069       0.1556541
## [753,]          NaN      -0.9316973      0.86371890      -1.3956106
## [754,]          NaN      -0.9316973      1.24928427      -0.6199782
## [755,]          NaN      -0.9316973     -1.06410798      -0.6199782
## [756,]          NaN       0.2419060      1.89189323       0.9312865
## [757,]          NaN      -0.9316973     -0.16445544      -0.6199782
## [758,]          NaN       0.2419060      0.60667531      -0.6199782
## [759,]          NaN       0.2419060      0.34963173      -1.3956106
## [760,]          NaN      -0.9316973     -0.67854260       0.1556541
```

```
## [761,]        NaN      0.2419060     2.40598039    -0.6199782
## [762,]        NaN      0.2419060    -0.29297723     0.1556541
## [763,]        NaN      0.2419060    -0.67854260    -0.6199782
## [764,]        NaN      0.2419060    -1.32115156    -0.6199782
## [765,]        NaN     -0.9316973    -1.32115156     1.7069188
## [766,]        NaN      0.2419060    -0.42149902    -0.6199782
## [767,]        NaN      0.2419060     2.27745860    -0.6199782
## [768,]        NaN     -0.9316973    -0.42149902     0.1556541
## [769,]        NaN      0.2419060    -0.42149902     0.1556541
## [770,]        NaN      1.4155093    -0.80706439     1.7069188
## [771,]        NaN      1.4155093     1.50632785    -2.1712429
## [772,]        NaN      0.2419060     0.22110994     0.9312865
## [773,]        NaN      0.2419060     0.86371890     0.9312865
## [774,]        NaN     -0.9316973     0.47815352    -0.6199782
## [775,]        NaN     -0.9316973     2.53450219     0.1556541
## [776,]        NaN      0.2419060     0.86371890     1.7069188
## [777,]        NaN     -0.9316973    -1.19262977     0.1556541
## [778,]        NaN     -0.9316973    -1.32115156     2.4825512
## [779,]        NaN      2.5891126     0.99224069    -0.6199782
## [780,]        NaN      2.5891126     0.86371890    -0.6199782
## [781,]        NaN     -0.9316973    -0.16445544    -0.6199782
## [782,]        NaN      1.4155093    -0.67854260    -0.6199782
## [783,]        NaN      0.2419060    -0.55002081    -1.3956106
## [784,]        NaN     -0.9316973    -0.16445544     0.1556541
## [785,]        NaN      0.2419060     1.12076248     0.9312865
## [786,]        NaN      0.2419060     0.34963173     2.4825512
## [787,]        NaN      2.5891126    -1.06410798     0.9312865
## [788,]        NaN      0.2419060     1.50632785     0.9312865
## [789,]        NaN     -0.9316973    -0.16445544     0.9312865
## [790,]        NaN      0.2419060     1.63484965    -1.3956106
## [791,]        NaN      0.2419060    -0.29297723    -0.6199782
## [792,]        NaN     -0.9316973    -0.29297723    -0.6199782
## [793,]        NaN     -0.9316973     0.34963173     0.9312865
## [794,]        NaN      0.2419060    -0.93558618     1.7069188
## [795,]        NaN     -0.9316973    -0.55002081    -1.3956106
## [796,]        NaN      2.5891126    -0.42149902     1.7069188
## [797,]        NaN      0.2419060    -0.55002081     0.1556541
## [798,]        NaN      0.2419060    -1.32115156    -2.1712429
## [799,]        NaN     -0.9316973    -0.80706439    -2.1712429
## [800,]        NaN      0.2419060     1.50632785     0.1556541
## [801,]        NaN      1.4155093    -1.32115156    -0.6199782
## [802,]        NaN     -0.9316973    -0.80706439     0.9312865
## [803,]        NaN      0.2419060    -0.93558618     0.1556541
## [804,]        NaN      2.5891126    -0.67854260    -0.6199782
## [805,]        NaN     -0.9316973     2.02041502     0.1556541
## [806,]        NaN      0.2419060     0.47815352    -0.6199782
## [807,]        NaN     -0.9316973     0.86371890     0.9312865
## [808,]        NaN      1.4155093    -0.29297723    -0.6199782
## [809,]        NaN      0.2419060    -0.03593364    -1.3956106
## [810,]        NaN      2.5891126    -0.16445544     0.1556541
## [811,]        NaN      0.2419060     1.50632785     0.1556541
## [812,]        NaN     -0.9316973    -0.16445544    -0.6199782
## [813,]        NaN      0.2419060     0.86371890    -1.3956106
## [814,]        NaN      2.5891126     1.24928427     0.9312865
```

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## [815,]        NaN      -0.9316973      1.24928427      -0.6199782
## [816,]        NaN      -0.9316973     -1.19262977       2.4825512
## [817,]        NaN      -0.9316973     -0.29297723      -0.6199782
## [818,]        NaN      -0.9316973      0.86371890      -2.1712429
## [819,]        NaN       0.2419060     -1.06410798       0.9312865
## [820,]        NaN      -0.9316973     -0.67854260      -0.6199782
## [821,]        NaN       0.2419060     -0.80706439       0.1556541
## [822,]        NaN       0.2419060      1.37780606       0.1556541
## [823,]        NaN      -0.9316973     -0.80706439       0.1556541
## [824,]        NaN       1.4155093     -0.42149902      -0.6199782
## [825,]        NaN      -0.9316973      0.60667531       0.1556541
## [826,]        NaN       0.2419060     -0.16445544      -0.6199782
## [827,]        NaN       0.2419060     -0.55002081      -0.6199782
## [828,]        NaN       0.2419060     -1.06410798      -0.6199782
## [829,]        NaN      -0.9316973     -1.44967335      -2.1712429
## [830,]        NaN      -0.9316973     -0.67854260       0.1556541
## [831,]        NaN       0.2419060     -0.67854260       0.9312865
## [832,]        NaN       0.2419060     -1.19262977       1.7069188
## [833,]        NaN       1.4155093     -0.29297723      -0.6199782
## [834,]        NaN       0.2419060     -0.93558618      -2.1712429
## [835,]        NaN      -0.9316973     -0.67854260       0.1556541
## [836,]        NaN      -0.9316973     -0.67854260      -0.6199782
## [837,]        NaN       0.2419060     -0.03593364       0.1556541
## [838,]        NaN      -0.9316973      1.12076248       0.1556541
## [839,]        NaN      -0.9316973      1.37780606      -0.6199782
## [840,]        NaN      -0.9316973     -0.29297723       0.1556541
## [841,]        NaN       0.2419060     -0.16445544      -0.6199782
## [842,]        NaN      -0.9316973     -0.67854260      -0.6199782
## [843,]        NaN      -0.9316973     -1.32115156       0.9312865
## [844,]        NaN       0.2419060     -0.42149902      -0.6199782
## [845,]        NaN       0.2419060     -0.16445544       0.1556541
## [846,]        NaN       0.2419060      0.60667531       0.1556541
## [847,]        NaN       0.2419060      0.47815352      -0.6199782
## [848,]        NaN      -0.9316973      0.34963173       0.1556541
## [849,]        NaN       0.2419060     -1.19262977      -0.6199782
## [850,]        NaN      -0.9316973     -0.55002081      -0.6199782
## [851,]        NaN       2.5891126     -1.32115156       0.1556541
## [852,]        NaN       0.2419060      2.14893681      -0.6199782
## [853,]        NaN       0.2419060     -0.16445544       1.7069188
## [854,]        NaN      -0.9316973     -1.32115156       0.9312865
## [855,]        NaN       0.2419060     -0.55002081      -0.6199782
## [856,]        NaN       0.2419060      0.34963173      -0.6199782
## [857,]        NaN      -0.9316973     -1.19262977      -0.6199782
## [858,]        NaN      -0.9316973     -0.67854260       0.9312865
## [859,]        NaN       0.2419060      1.89189323       2.4825512
## [860,]        NaN       0.2419060     -0.67854260      -0.6199782
## [861,]        NaN       0.2419060     -1.32115156       1.7069188
## [862,]        NaN      -0.9316973      2.14893681      -0.6199782
## [863,]        NaN      -0.9316973     -0.67854260       0.1556541
## [864,]        NaN       0.2419060     -0.80706439      -0.6199782
## [865,]        NaN       0.2419060     -0.80706439      -0.6199782
## [866,]        NaN       2.5891126     -0.42149902       0.1556541
## [867,]        NaN       2.5891126     -0.80706439      -0.6199782
## [868,]        NaN       0.2419060      2.66302398       0.1556541
```

```
## [869,]         NaN     2.5891126    -0.67854260    -0.6199782
## [870,]         NaN     0.2419060     1.76337144    -0.6199782
## [871,]         NaN     2.5891126     0.47815352    -0.6199782
## [872,]         NaN     0.2419060    -1.32115156     0.1556541
## [873,]         NaN     0.2419060    -0.16445544     0.1556541
## [874,]         NaN     0.2419060    -0.55002081     0.9312865
## [875,]         NaN     2.5891126    -0.16445544     0.9312865
## [876,]         NaN    -0.9316973     1.12076248     0.1556541
## [877,]         NaN    -0.9316973    -1.19262977    -0.6199782
## [878,]         NaN     0.2419060     0.09258815     0.1556541
## [879,]         NaN     0.2419060    -0.16445544     0.1556541
## [880,]         NaN     0.2419060     0.09258815     0.1556541
## [881,]         NaN     0.2419060    -1.19262977    -0.6199782
## [882,]         NaN    -0.9316973    -0.16445544    -0.6199782
## [883,]         NaN     0.2419060     0.73519711    -0.6199782
## [884,]         NaN     0.2419060     0.47815352     1.7069188
## [885,]         NaN     0.2419060    -0.55002081    -0.6199782
## [886,]         NaN    -0.9316973    -0.80706439     0.9312865
## [887,]         NaN     0.2419060     0.09258815    -0.6199782
## [888,]         NaN    -0.9316973     1.12076248     2.4825512
## [889,]         NaN     0.2419060     0.60667531     2.4825512
## [890,]         NaN     1.4155093    -0.29297723     0.1556541
## [891,]         NaN     0.2419060     2.79154577    -0.6199782
## [892,]         NaN     0.2419060    -0.16445544     1.7069188
## [893,]         NaN    -0.9316973    -1.32115156    -0.6199782
## [894,]         NaN     2.5891126    -1.06410798     1.7069188
## [895,]         NaN    -0.9316973     3.17711114    -0.6199782
## [896,]         NaN    -0.9316973    -0.67854260    -0.6199782
## [897,]         NaN    -0.9316973    -0.16445544    -0.6199782
## [898,]         NaN    -0.9316973     0.22110994    -0.6199782
## [899,]         NaN     0.2419060     1.76337144    -0.6199782
## [900,]         NaN     0.2419060     1.50632785    -0.6199782
## [901,]         NaN    -0.9316973     0.09258815    -0.6199782
## [902,]         NaN    -0.9316973    -0.55002081     0.9312865
## [903,]         NaN     2.5891126    -0.80706439    -0.6199782
## [904,]         NaN     1.4155093    -0.67854260    -0.6199782
## [905,]         NaN    -0.9316973     1.76337144     0.1556541
## [906,]         NaN     1.4155093    -0.29297723    -0.6199782
## [907,]         NaN    -0.9316973    -1.19262977     1.7069188
## [908,]         NaN     0.2419060     1.89189323     1.7069188
## [909,]         NaN     1.4155093    -0.16445544     0.1556541
## [910,]         NaN    -0.9316973    -1.32115156    -0.6199782
## [911,]         NaN     0.2419060    -1.32115156    -0.6199782
## [912,]         NaN    -0.9316973    -1.32115156     0.9312865
## [913,]         NaN    -0.9316973    -0.42149902    -0.6199782
## [914,]         NaN    -0.9316973     1.89189323    -0.6199782
## [915,]         NaN     0.2419060     2.92006756     0.1556541
## [916,]         NaN    -0.9316973    -1.19262977    -0.6199782
## [917,]         NaN     0.2419060     1.89189323    -0.6199782
## [918,]         NaN    -0.9316973    -0.93558618     0.1556541
## [919,]         NaN     0.2419060     2.53450219     1.7069188
## [920,]         NaN    -0.9316973     1.76337144     2.4825512
## [921,]         NaN     1.4155093     0.47815352    -0.6199782
## [922,]         NaN    -0.9316973    -0.80706439    -0.6199782
```

```
## [923,]       NaN        1.4155093        1.89189323         0.9312865
## [924,]       NaN        1.4155093        0.34963173         1.7069188
## [925,]       NaN       -0.9316973       -0.93558618         0.1556541
## [926,]       NaN       -0.9316973        0.86371890        -0.6199782
## [927,]       NaN       -0.9316973        1.50632785         0.1556541
## [928,]       NaN       -0.9316973        0.86371890        -0.6199782
## [929,]       NaN        0.2419060       -0.16445544        -0.6199782
## [930,]       NaN        0.2419060       -1.19262977        -0.6199782
## [931,]       NaN       -0.9316973       -0.42149902         2.4825512
## [932,]       NaN       -0.9316973       -0.16445544         0.1556541
## [933,]       NaN        1.4155093       -0.16445544        -0.6199782
## [934,]       NaN       -0.9316973       -0.80706439        -0.6199782
## [935,]       NaN       -0.9316973       -1.19262977         0.1556541
## [936,]       NaN        1.4155093       -0.16445544         0.9312865
## [937,]       NaN       -0.9316973        1.37780606         0.9312865
## [938,]       NaN        1.4155093        1.24928427         0.9312865
## [939,]       NaN        1.4155093       -1.19262977         0.1556541
## [940,]       NaN        0.2419060       -0.16445544         0.1556541
## [941,]       NaN       -0.9316973       -0.67854260        -0.6199782
## [942,]       NaN        0.2419060       -0.16445544         2.4825512
## [943,]       NaN       -0.9316973       -0.16445544        -2.1712429
## [944,]       NaN       -0.9316973       -0.16445544         0.1556541
## [945,]       NaN        2.5891126       -0.16445544         2.4825512
## [946,]       NaN       -0.9316973        1.76337144        -0.6199782
## [947,]       NaN       -0.9316973       -0.29297723        -0.6199782
## [948,]       NaN       -0.9316973       -0.16445544        -0.6199782
## [949,]       NaN        1.4155093       -0.29297723        -0.6199782
## [950,]       NaN       -0.9316973       -0.29297723         2.4825512
## [951,]       NaN        0.2419060       -0.16445544         1.7069188
## [952,]       NaN       -0.9316973        0.99224069         0.9312865
## [953,]       NaN       -0.9316973       -1.06410798        -0.6199782
## [954,]       NaN       -0.9316973       -0.16445544         0.9312865
## [955,]       NaN       -0.9316973        1.24928427         0.1556541
## [956,]       NaN        0.2419060        1.50632785         1.7069188
## [957,]       NaN       -0.9316973        3.17711114         0.9312865
## [958,]       NaN        0.2419060       -0.67854260        -2.1712429
## [959,]       NaN        0.2419060       -0.16445544        -2.1712429
## [960,]       NaN       -0.9316973       -0.29297723         0.9312865
## [961,]       NaN        0.2419060       -0.16445544        -0.6199782
## [962,]       NaN       -0.9316973       -0.29297723         0.1556541
## [963,]       NaN        0.2419060        2.79154577        -0.6199782
## [964,]       NaN        0.2419060       -0.03593364         0.1556541
## [965,]       NaN       -0.9316973       -0.16445544         2.4825512
## [966,]       NaN        2.5891126       -0.55002081         2.4825512
## [967,]       NaN       -0.9316973        2.53450219        -2.1712429
## [968,]       NaN        0.2419060       -0.55002081         0.1556541
## [969,]       NaN        0.2419060        0.73519711        -0.6199782
## [970,]       NaN       -0.9316973       -0.03593364        -0.6199782
## [971,]       NaN        0.2419060       -0.80706439         0.9312865
## [972,]       NaN       -0.9316973        2.27745860        -1.3956106
## [973,]       NaN       -0.9316973       -1.44967335         1.7069188
## [974,]       NaN        0.2419060       -0.16445544        -2.1712429
## [975,]       NaN       -0.9316973       -0.42149902         0.1556541
## [976,]       NaN       -0.9316973        1.63484965        -0.6199782
```

```
## [977,]       NaN    0.2419060    2.79154577    -2.1712429
## [978,]       NaN    2.5891126   -0.80706439    -0.6199782
## [979,]       NaN    2.5891126    0.47815352    -2.1712429
## [980,]       NaN    1.4155093   -0.16445544    -1.3956106
## [981,]       NaN   -0.9316973   -1.06410798     0.1556541
## [982,]       NaN    0.2419060   -0.80706439    -2.1712429
## [983,]       NaN    2.5891126   -0.93558618    -0.6199782
## [984,]       NaN   -0.9316973    0.34963173    -0.6199782
## [985,]       NaN    0.2419060   -0.80706439    -2.1712429
## [986,]       NaN    1.4155093   -0.16445544     0.1556541
## [987,]       NaN    1.4155093   -0.42149902    -0.6199782
## [988,]       NaN   -0.9316973    0.34963173     1.7069188
## [989,]       NaN    1.4155093    0.09258815     0.9312865
## [990,]       NaN   -0.9316973   -0.42149902    -0.6199782
## [991,]       NaN   -0.9316973   -0.42149902    -0.6199782
## [992,]       NaN    2.5891126   -0.93558618     0.1556541
## [993,]       NaN    0.2419060    0.22110994    -0.6199782
## [994,]       NaN   -0.9316973   -0.67854260     0.1556541
## [995,]       NaN    0.2419060    1.63484965     0.1556541
## [996,]       NaN   -0.9316973    1.12076248     0.1556541
## [997,]       NaN   -0.9316973   -0.67854260     0.1556541
## [998,]       NaN   -0.9316973   -0.42149902    -0.6199782
## [999,]       NaN   -0.9316973   -0.80706439    -0.6199782
## [1000,]      NaN    0.2419060    1.24928427     1.7069188
## [1001,]      NaN   -0.9316973    0.09258815    -0.6199782
## [1002,]      NaN   -0.9316973   -0.42149902     2.4825512
## [1003,]      NaN   -0.9316973   -0.16445544    -0.6199782
## [1004,]      NaN    0.2419060   -0.55002081    -0.6199782
## [1005,]      NaN   -0.9316973   -0.42149902    -0.6199782
## [1006,]      NaN   -0.9316973   -0.16445544     0.1556541
## [1007,]      NaN   -0.9316973    1.12076248    -0.6199782
## [1008,]      NaN   -0.9316973   -0.29297723    -1.3956106
## [1009,]      NaN   -0.9316973    2.27745860     0.1556541
## [1010,]      NaN    0.2419060    2.66302398     0.1556541
## [1011,]      NaN    1.4155093    2.53450219     0.9312865
## [1012,]      NaN   -0.9316973    0.47815352     0.1556541
## [1013,]      NaN   -0.9316973   -1.32115156     0.1556541
## [1014,]      NaN    1.4155093   -0.42149902     0.1556541
## [1015,]      NaN   -0.9316973   -0.29297723     0.1556541
## [1016,]      NaN    1.4155093   -0.16445544    -0.6199782
## [1017,]      NaN   -0.9316973   -1.32115156     0.1556541
## [1018,]      NaN   -0.9316973   -0.67854260     0.1556541
## [1019,]      NaN   -0.9316973   -0.16445544    -0.6199782
## [1020,]      NaN    1.4155093   -0.03593364     0.1556541
## [1021,]      NaN    0.2419060    0.73519711    -0.6199782
## [1022,]      NaN   -0.9316973   -0.67854260    -0.6199782
## [1023,]      NaN   -0.9316973   -0.55002081    -0.6199782
## [1024,]      NaN    0.2419060   -0.80706439     0.1556541
## [1025,]      NaN    1.4155093    1.89189323    -0.6199782
## [1026,]      NaN    1.4155093   -0.80706439     0.1556541
## [1027,]      NaN    0.2419060   -0.55002081     0.1556541
## [1028,]      NaN    0.2419060   -0.55002081    -0.6199782
## [1029,]      NaN   -0.9316973   -0.55002081     1.7069188
## [1030,]      NaN    1.4155093   -0.03593364    -0.6199782
```

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## [1031,]        NaN     0.2419060      0.22110994     1.7069188
## [1032,]        NaN     0.2419060      2.14893681    -1.3956106
## [1033,]        NaN    -0.9316973     -0.03593364    -0.6199782
## [1034,]        NaN    -0.9316973     -0.16445544    -0.6199782
## [1035,]        NaN     0.2419060      1.63484965    -0.6199782
## [1036,]        NaN    -0.9316973     -0.42149902     0.1556541
## [1037,]        NaN     0.2419060     -0.55002081    -0.6199782
## [1038,]        NaN     1.4155093     -0.16445544     0.9312865
## [1039,]        NaN     2.5891126      0.47815352     0.1556541
## [1040,]        NaN    -0.9316973     -1.19262977    -2.1712429
## [1041,]        NaN     0.2419060      0.60667531     1.7069188
## [1042,]        NaN    -0.9316973     -0.67854260     0.9312865
## [1043,]        NaN    -0.9316973     -0.55002081     1.7069188
## [1044,]        NaN    -0.9316973      3.04858935    -0.6199782
## [1045,]        NaN     0.2419060      1.12076248    -2.1712429
## [1046,]        NaN     0.2419060     -0.42149902     0.1556541
## [1047,]        NaN    -0.9316973     -0.67854260     0.1556541
## [1048,]        NaN     1.4155093     -0.80706439    -0.6199782
## [1049,]        NaN    -0.9316973      0.47815352    -0.6199782
## [1050,]        NaN     1.4155093     -0.93558618    -0.6199782
## [1051,]        NaN    -0.9316973      0.09258815     0.1556541
## [1052,]        NaN     0.2419060     -0.03593364     0.9312865
## [1053,]        NaN     1.4155093     -1.32115156    -0.6199782
## [1054,]        NaN     0.2419060      0.22110994    -0.6199782
## [1055,]        NaN     1.4155093      2.27745860     0.1556541
## [1056,]        NaN     1.4155093      0.60667531     0.1556541
## [1057,]        NaN     0.2419060     -0.80706439     0.1556541
## [1058,]        NaN    -0.9316973     -0.55002081     0.9312865
## [1059,]        NaN    -0.9316973      0.60667531    -0.6199782
## [1060,]        NaN     0.2419060     -1.32115156     0.1556541
## [1061,]        NaN    -0.9316973     -0.93558618    -0.6199782
## [1062,]        NaN     0.2419060     -1.32115156    -0.6199782
## [1063,]        NaN    -0.9316973      0.60667531    -0.6199782
## [1064,]        NaN     1.4155093     -0.16445544     0.1556541
## [1065,]        NaN     0.2419060     -0.67854260     0.1556541
## [1066,]        NaN    -0.9316973     -0.93558618    -0.6199782
## [1067,]        NaN    -0.9316973     -0.42149902     1.7069188
## [1068,]        NaN     0.2419060     -0.03593364     0.9312865
## [1069,]        NaN    -0.9316973     -0.42149902    -0.6199782
## [1070,]        NaN     0.2419060     -1.32115156    -0.6199782
## [1071,]        NaN    -0.9316973     -0.80706439     1.7069188
## [1072,]        NaN     0.2419060     -0.16445544     0.1556541
## [1073,]        NaN     2.5891126     -0.93558618     0.1556541
## [1074,]        NaN     1.4155093     -0.42149902    -0.6199782
## [1075,]        NaN    -0.9316973      0.34963173     2.4825512
## [1076,]        NaN    -0.9316973     -0.16445544     1.7069188
## [1077,]        NaN     0.2419060      1.89189323    -0.6199782
## [1078,]        NaN    -0.9316973     -0.03593364    -0.6199782
## [1079,]        NaN     0.2419060      1.63484965    -1.3956106
## [1080,]        NaN    -0.9316973     -0.29297723     0.1556541
## [1081,]        NaN     0.2419060      1.50632785    -0.6199782
## [1082,]        NaN    -0.9316973     -0.03593364     0.1556541
## [1083,]        NaN    -0.9316973     -0.80706439    -0.6199782
## [1084,]        NaN    -0.9316973      0.47815352     0.1556541
```

```
## [1085,]        NaN    -0.9316973    -0.16445544     0.1556541
## [1086,]        NaN    -0.9316973    -0.55002081    -0.6199782
## [1087,]        NaN    -0.9316973     2.66302398    -0.6199782
## [1088,]        NaN     0.2419060     0.09258815     0.9312865
## [1089,]        NaN     0.2419060    -0.93558618     0.1556541
## [1090,]        NaN    -0.9316973    -0.16445544    -0.6199782
## [1091,]        NaN     0.2419060    -0.29297723     0.1556541
## [1092,]        NaN    -0.9316973    -0.80706439    -0.6199782
## [1093,]        NaN     0.2419060    -0.42149902     0.1556541
## [1094,]        NaN     0.2419060     1.63484965     0.1556541
## [1095,]        NaN    -0.9316973    -0.29297723     1.7069188
## [1096,]        NaN     0.2419060     0.47815352     0.1556541
## [1097,]        NaN    -0.9316973     1.24928427    -0.6199782
## [1098,]        NaN     2.5891126    -1.19262977     0.1556541
## [1099,]        NaN    -0.9316973    -0.42149902    -0.6199782
## [1100,]        NaN     2.5891126    -0.16445544     0.9312865
## [1101,]        NaN     1.4155093    -0.67854260     1.7069188
## [1102,]        NaN     0.2419060     0.09258815    -0.6199782
## [1103,]        NaN    -0.9316973    -0.55002081     0.1556541
## [1104,]        NaN     0.2419060     0.86371890    -0.6199782
## [1105,]        NaN     1.4155093    -0.80706439    -0.6199782
## [1106,]        NaN     0.2419060    -0.42149902     2.4825512
## [1107,]        NaN     0.2419060    -0.16445544     0.9312865
## [1108,]        NaN    -0.9316973    -0.16445544    -0.6199782
## [1109,]        NaN    -0.9316973    -1.06410798     0.1556541
## [1110,]        NaN     0.2419060    -0.29297723     0.1556541
## [1111,]        NaN     0.2419060    -1.32115156    -0.6199782
## [1112,]        NaN     0.2419060     2.92006756     0.9312865
## [1113,]        NaN     1.4155093    -0.55002081    -0.6199782
## [1114,]        NaN     0.2419060    -0.29297723     0.1556541
## [1115,]        NaN     0.2419060    -0.16445544     0.1556541
## [1116,]        NaN    -0.9316973    -1.32115156     0.9312865
## [1117,]        NaN     0.2419060     3.17711114     0.1556541
## [1118,]        NaN     0.2419060    -0.29297723     0.1556541
## [1119,]        NaN    -0.9316973    -1.32115156     1.7069188
## [1120,]        NaN     0.2419060    -0.16445544     0.1556541
## [1121,]        NaN    -0.9316973    -0.42149902     1.7069188
## [1122,]        NaN    -0.9316973     0.47815352     1.7069188
## [1123,]        NaN    -0.9316973    -0.16445544     0.1556541
## [1124,]        NaN    -0.9316973    -0.16445544     0.9312865
## [1125,]        NaN     0.2419060    -0.03593364     0.1556541
## [1126,]        NaN     0.2419060    -0.67854260    -2.1712429
## [1127,]        NaN     0.2419060     2.02041502    -0.6199782
## [1128,]        NaN     0.2419060    -0.93558618    -0.6199782
## [1129,]        NaN     0.2419060    -0.29297723     0.1556541
## [1130,]        NaN    -0.9316973     1.63484965    -0.6199782
## [1131,]        NaN     1.4155093    -0.16445544     0.1556541
## [1132,]        NaN     0.2419060    -0.42149902     0.1556541
## [1133,]        NaN     0.2419060    -0.80706439    -0.6199782
## [1134,]        NaN     0.2419060    -0.42149902    -2.1712429
## [1135,]        NaN     0.2419060    -1.32115156     1.7069188
## [1136,]        NaN    -0.9316973     2.02041502     1.7069188
## [1137,]        NaN     2.5891126    -1.32115156     0.1556541
## [1138,]        NaN    -0.9316973    -0.93558618    -0.6199782
```

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## [1139,]          NaN      0.2419060      2.66302398      0.1556541
## [1140,]          NaN      1.4155093     -0.67854260      0.1556541
## [1141,]          NaN      0.2419060      1.50632785      0.9312865
## [1142,]          NaN      0.2419060     -0.67854260      0.1556541
## [1143,]          NaN     -0.9316973     -0.16445544      0.1556541
## [1144,]          NaN      0.2419060     -0.16445544     -0.6199782
## [1145,]          NaN     -0.9316973     -0.16445544      0.1556541
## [1146,]          NaN      1.4155093     -0.55002081     -0.6199782
## [1147,]          NaN      0.2419060     -0.29297723      0.1556541
## [1148,]          NaN      0.2419060     -0.16445544      0.1556541
## [1149,]          NaN      2.5891126     -0.16445544      0.1556541
## [1150,]          NaN      1.4155093     -0.55002081      0.1556541
## [1151,]          NaN     -0.9316973      0.60667531     -0.6199782
## [1152,]          NaN      0.2419060     -0.67854260      1.7069188
## [1153,]          NaN     -0.9316973     -1.06410798     -0.6199782
## [1154,]          NaN     -0.9316973     -1.44967335     -0.6199782
## [1155,]          NaN      0.2419060      2.02041502     -0.6199782
## [1156,]          NaN      0.2419060     -0.03593364      0.1556541
## [1157,]          NaN      1.4155093      0.86371890     -0.6199782
## [1158,]          NaN      0.2419060      0.47815352      1.7069188
## [1159,]          NaN      2.5891126     -0.29297723     -0.6199782
## [1160,]          NaN     -0.9316973     -0.16445544     -0.6199782
## [1161,]          NaN      1.4155093     -0.16445544      0.1556541
## [1162,]          NaN      0.2419060     -0.16445544      2.4825512
## [1163,]          NaN     -0.9316973      0.47815352      0.1556541
## [1164,]          NaN      0.2419060     -0.42149902     -0.6199782
## [1165,]          NaN     -0.9316973      0.86371890     -0.6199782
## [1166,]          NaN     -0.9316973      0.34963173      0.1556541
## [1167,]          NaN      0.2419060      1.50632785      0.1556541
## [1168,]          NaN      1.4155093     -0.55002081     -0.6199782
## [1169,]          NaN     -0.9316973     -0.67854260     -0.6199782
## [1170,]          NaN     -0.9316973     -0.80706439     -2.1712429
## [1171,]          NaN     -0.9316973     -0.67854260     -2.1712429
## [1172,]          NaN     -0.9316973     -0.16445544      0.1556541
## [1173,]          NaN     -0.9316973     -0.42149902     -0.6199782
## [1174,]          NaN      1.4155093     -0.29297723      2.4825512
## [1175,]          NaN      1.4155093     -0.55002081      2.4825512
## [1176,]          NaN     -0.9316973     -0.55002081      0.1556541
## [1177,]          NaN      1.4155093      2.02041502     -0.6199782
## [1178,]          NaN      2.5891126      0.99224069      0.1556541
## [1179,]          NaN     -0.9316973     -1.19262977      0.1556541
## [1180,]          NaN      0.2419060     -0.03593364     -0.6199782
## [1181,]          NaN     -0.9316973      0.47815352      0.9312865
## [1182,]          NaN      0.2419060      2.40598039      0.1556541
## [1183,]          NaN     -0.9316973     -0.93558618      2.4825512
## [1184,]          NaN      0.2419060      0.22110994      0.1556541
## [1185,]          NaN      0.2419060      3.17711114      2.4825512
## [1186,]          NaN      0.2419060      0.34963173      0.1556541
## [1187,]          NaN     -0.9316973      0.22110994     -0.6199782
## [1188,]          NaN      1.4155093      0.99224069      0.9312865
## [1189,]          NaN      0.2419060     -0.16445544      0.1556541
## [1190,]          NaN      1.4155093     -0.67854260      1.7069188
## [1191,]          NaN      1.4155093     -0.16445544      0.9312865
## [1192,]          NaN      1.4155093     -0.16445544     -0.6199782
```

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```
## [1193,]        NaN      0.2419060       0.73519711      -0.6199782
## [1194,]        NaN     -0.9316973      -0.93558618       0.1556541
## [1195,]        NaN      2.5891126       2.27745860      -0.6199782
## [1196,]        NaN     -0.9316973       1.50632785      -0.6199782
## [1197,]        NaN     -0.9316973       1.24928427      -0.6199782
## [1198,]        NaN     -0.9316973      -1.19262977       0.1556541
## [1199,]        NaN      0.2419060      -0.55002081      -0.6199782
## [1200,]        NaN      1.4155093      -0.16445544      -0.6199782
## [1201,]        NaN      2.5891126      -0.42149902      -0.6199782
## [1202,]        NaN     -0.9316973      -0.80706439      -0.6199782
## [1203,]        NaN      0.2419060      -0.55002081       1.7069188
## [1204,]        NaN     -0.9316973      -0.03593364      -0.6199782
## [1205,]        NaN      1.4155093       0.99224069       0.1556541
## [1206,]        NaN     -0.9316973      -1.32115156      -0.6199782
## [1207,]        NaN     -0.9316973      -0.55002081       1.7069188
## [1208,]        NaN      0.2419060      -0.42149902      -1.3956106
## [1209,]        NaN      0.2419060       0.47815352       0.1556541
## [1210,]        NaN      0.2419060       0.99224069      -0.6199782
## [1211,]        NaN      2.5891126       0.34963173       2.4825512
## [1212,]        NaN      1.4155093      -0.67854260      -0.6199782
## [1213,]        NaN     -0.9316973      -0.16445544       0.1556541
## [1214,]        NaN      0.2419060      -1.06410798      -0.6199782
## [1215,]        NaN      0.2419060      -0.29297723      -0.6199782
## [1216,]        NaN     -0.9316973      -0.67854260      -0.6199782
## [1217,]        NaN      0.2419060      -0.16445544       0.1556541
## [1218,]        NaN      0.2419060      -0.80706439      -1.3956106
## [1219,]        NaN     -0.9316973      -0.16445544       0.1556541
## [1220,]        NaN      0.2419060      -0.29297723      -0.6199782
## [1221,]        NaN     -0.9316973       0.73519711      -0.6199782
## [1222,]        NaN      0.2419060       1.76337144       0.1556541
## [1223,]        NaN      0.2419060      -1.32115156      -0.6199782
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## [1225,]        NaN      2.5891126      -1.06410798       0.1556541
## [1226,]        NaN     -0.9316973       1.24928427      -0.6199782
## [1227,]        NaN      0.2419060      -0.16445544       0.1556541
## [1228,]        NaN      0.2419060      -0.67854260      -0.6199782
## [1229,]        NaN      0.2419060      -0.16445544       0.9312865
## [1230,]        NaN      0.2419060       0.86371890       0.1556541
## [1231,]        NaN      2.5891126      -0.67854260      -0.6199782
## [1232,]        NaN     -0.9316973       0.99224069       0.1556541
## [1233,]        NaN      0.2419060       0.73519711       0.1556541
## [1234,]        NaN      0.2419060      -0.16445544      -0.6199782
## [1235,]        NaN      0.2419060      -0.93558618       0.1556541
## [1236,]        NaN      0.2419060       0.22110994       1.7069188
## [1237,]        NaN      2.5891126       0.60667531       0.1556541
## [1238,]        NaN     -0.9316973      -0.16445544      -0.6199782
## [1239,]        NaN     -0.9316973      -1.06410798       0.1556541
## [1240,]        NaN     -0.9316973      -0.29297723       0.1556541
## [1241,]        NaN      0.2419060      -0.29297723      -0.6199782
## [1242,]        NaN      0.2419060      -0.16445544      -0.6199782
## [1243,]        NaN     -0.9316973       1.24928427       0.1556541
## [1244,]        NaN      1.4155093      -0.29297723      -0.6199782
## [1245,]        NaN     -0.9316973      -0.16445544      -0.6199782
## [1246,]        NaN      0.2419060      -1.06410798      -0.6199782
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## [1250,]        NaN       -0.9316973       -1.19262977        0.1556541
## [1251,]        NaN       -0.9316973       -0.16445544        1.7069188
## [1252,]        NaN        0.2419060        0.09258815       -0.6199782
## [1253,]        NaN        2.5891126       -0.67854260        0.1556541
## [1254,]        NaN       -0.9316973        0.22110994       -0.6199782
## [1255,]        NaN       -0.9316973       -0.42149902       -1.3956106
## [1256,]        NaN       -0.9316973       -0.03593364       -0.6199782
## [1257,]        NaN        0.2419060       -0.29297723        0.9312865
## [1258,]        NaN        2.5891126       -0.16445544       -0.6199782
## [1259,]        NaN        0.2419060       -1.32115156       -0.6199782
## [1260,]        NaN        0.2419060       -0.16445544        0.1556541
## [1261,]        NaN       -0.9316973        0.09258815        0.1556541
## [1262,]        NaN        0.2419060        0.47815352       -0.6199782
## [1263,]        NaN        0.2419060       -0.67854260        0.9312865
## [1264,]        NaN        2.5891126       -0.55002081        2.4825512
## [1265,]        NaN        2.5891126        2.92006756       -0.6199782
## [1266,]        NaN        1.4155093       -0.03593364       -0.6199782
## [1267,]        NaN        1.4155093       -0.80706439       -0.6199782
## [1268,]        NaN        0.2419060        0.47815352        0.1556541
## [1269,]        NaN        2.5891126        2.02041502       -0.6199782
## [1270,]        NaN       -0.9316973       -0.16445544        1.7069188
## [1271,]        NaN       -0.9316973       -0.67854260        0.1556541
## [1272,]        NaN       -0.9316973       -1.32115156        0.1556541
## [1273,]        NaN        0.2419060       -0.80706439        0.1556541
## [1274,]        NaN       -0.9316973       -1.32115156        2.4825512
## [1275,]        NaN        1.4155093        0.22110994        0.1556541
## [1276,]        NaN       -0.9316973        0.47815352       -0.6199782
## [1277,]        NaN        1.4155093       -0.80706439       -0.6199782
## [1278,]        NaN        0.2419060        1.63484965        0.1556541
## [1279,]        NaN        0.2419060        0.47815352       -1.3956106
## [1280,]        NaN        2.5891126       -0.67854260       -0.6199782
## [1281,]        NaN       -0.9316973        0.99224069        0.9312865
## [1282,]        NaN       -0.9316973       -0.16445544       -0.6199782
## [1283,]        NaN        0.2419060        0.34963173       -1.3956106
## [1284,]        NaN        0.2419060       -0.80706439        2.4825512
## [1285,]        NaN       -0.9316973       -0.29297723        0.1556541
## [1286,]        NaN       -0.9316973       -0.67854260        0.1556541
## [1287,]        NaN        0.2419060       -0.55002081        1.7069188
## [1288,]        NaN        1.4155093       -0.16445544       -0.6199782
## [1289,]        NaN        0.2419060        0.47815352        2.4825512
## [1290,]        NaN        2.5891126        0.22110994        0.1556541
## [1291,]        NaN        0.2419060       -0.03593364        0.1556541
## [1292,]        NaN       -0.9316973       -0.16445544        0.9312865
## [1293,]        NaN        0.2419060       -0.55002081        2.4825512
## [1294,]        NaN       -0.9316973       -0.55002081       -0.6199782
## [1295,]        NaN       -0.9316973       -0.03593364        0.1556541
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## [1297,]        NaN       -0.9316973       -0.29297723        0.1556541
## [1298,]        NaN       -0.9316973       -0.67854260        0.1556541
## [1299,]        NaN        0.2419060        0.22110994       -0.6199782
## [1300,]        NaN        0.2419060        0.09258815        0.1556541
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## [1306,]       NaN      0.2419060     0.34963173         -0.6199782
## [1307,]       NaN      1.4155093    -0.29297723          0.1556541
## [1308,]       NaN      0.2419060    -1.06410798          0.1556541
## [1309,]       NaN      1.4155093     1.12076248          0.9312865
## [1310,]       NaN     -0.9316973    -0.80706439          0.9312865
## [1311,]       NaN     -0.9316973     1.50632785          0.1556541
## [1312,]       NaN     -0.9316973    -1.44967335          0.9312865
## [1313,]       NaN     -0.9316973    -1.19262977          0.9312865
## [1314,]       NaN      2.5891126    -0.93558618          0.1556541
## [1315,]       NaN      1.4155093    -0.16445544          0.1556541
## [1316,]       NaN      0.2419060     0.47815352         -0.6199782
## [1317,]       NaN      0.2419060    -0.55002081          1.7069188
## [1318,]       NaN     -0.9316973    -0.67854260          0.1556541
## [1319,]       NaN     -0.9316973    -0.03593364          0.1556541
## [1320,]       NaN     -0.9316973    -0.93558618         -0.6199782
## [1321,]       NaN      1.4155093    -0.16445544         -1.3956106
## [1322,]       NaN     -0.9316973    -0.55002081         -0.6199782
## [1323,]       NaN      0.2419060     0.09258815          0.9312865
## [1324,]       NaN      0.2419060    -1.06410798         -0.6199782
## [1325,]       NaN      1.4155093    -0.03593364          0.1556541
## [1326,]       NaN     -0.9316973    -0.42149902          0.1556541
## [1327,]       NaN     -0.9316973    -0.55002081          0.1556541
## [1328,]       NaN      0.2419060     1.76337144          1.7069188
## [1329,]       NaN      0.2419060    -0.29297723          1.7069188
## [1330,]       NaN     -0.9316973    -1.32115156          0.1556541
## [1331,]       NaN     -0.9316973     1.24928427         -0.6199782
## [1332,]       NaN     -0.9316973     2.27745860          0.1556541
## [1333,]       NaN     -0.9316973    -1.32115156          0.1556541
## [1334,]       NaN      2.5891126     0.34963173         -0.6199782
## [1335,]       NaN      0.2419060    -0.42149902         -0.6199782
## [1336,]       NaN      2.5891126    -0.55002081         -0.6199782
## [1337,]       NaN      0.2419060     0.99224069         -0.6199782
## [1338,]       NaN      0.2419060    -1.32115156          0.1556541
## [1339,]       NaN     -0.9316973    -1.32115156          0.1556541
## [1340,]       NaN     -0.9316973    -1.32115156         -0.6199782
## [1341,]       NaN      0.2419060    -0.16445544          0.9312865
## [1342,]       NaN      0.2419060    -0.16445544         -0.6199782
## [1343,]       NaN      2.5891126    -0.29297723          0.1556541
## [1344,]       NaN     -0.9316973    -0.03593364         -0.6199782
## [1345,]       NaN      0.2419060     0.60667531         -0.6199782
## [1346,]       NaN     -0.9316973    -0.93558618         -0.6199782
## [1347,]       NaN      1.4155093    -0.16445544         -0.6199782
## [1348,]       NaN     -0.9316973    -0.16445544         -0.6199782
## [1349,]       NaN      0.2419060     1.37780606          0.1556541
## [1350,]       NaN      0.2419060    -1.32115156          0.1556541
## [1351,]       NaN     -0.9316973    -0.29297723          1.7069188
## [1352,]       NaN      0.2419060     1.63484965          0.1556541
## [1353,]       NaN      0.2419060    -0.16445544          1.7069188
## [1354,]       NaN      0.2419060    -0.80706439         -0.6199782
```

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## [1355,]       NaN      -0.9316973      -0.80706439       0.1556541
## [1356,]       NaN       1.4155093       0.09258815      -1.3956106
## [1357,]       NaN       0.2419060       0.34963173       0.1556541
## [1358,]       NaN       0.2419060       0.86371890       0.1556541
## [1359,]       NaN       0.2419060      -0.42149902      -0.6199782
## [1360,]       NaN      -0.9316973      -0.29297723       0.1556541
## [1361,]       NaN       0.2419060      -0.93558618      -2.1712429
## [1362,]       NaN       0.2419060      -0.42149902       0.1556541
## [1363,]       NaN      -0.9316973       0.09258815       0.1556541
## [1364,]       NaN      -0.9316973      -0.16445544      -0.6199782
## [1365,]       NaN       0.2419060      -0.55002081      -0.6199782
## [1366,]       NaN      -0.9316973      -1.32115156       0.1556541
## [1367,]       NaN       0.2419060      -0.16445544      -1.3956106
## [1368,]       NaN       0.2419060      -0.67854260       0.1556541
## [1369,]       NaN      -0.9316973       0.60667531       0.1556541
## [1370,]       NaN      -0.9316973      -0.67854260      -2.1712429
## [1371,]       NaN       0.2419060       0.60667531       0.9312865
## [1372,]       NaN       0.2419060      -0.67854260       0.1556541
## [1373,]       NaN       0.2419060      -0.16445544       0.1556541
## [1374,]       NaN       0.2419060       1.12076248       0.1556541
## [1375,]       NaN       0.2419060       2.27745860      -0.6199782
## [1376,]       NaN      -0.9316973      -0.42149902      -0.6199782
## [1377,]       NaN       1.4155093      -0.16445544      -2.1712429
## [1378,]       NaN      -0.9316973       2.14893681       0.1556541
## [1379,]       NaN       1.4155093       0.34963173       0.9312865
## [1380,]       NaN      -0.9316973      -1.32115156      -0.6199782
## [1381,]       NaN       0.2419060      -0.67854260      -0.6199782
## [1382,]       NaN      -0.9316973      -0.80706439       0.1556541
## [1383,]       NaN       0.2419060      -0.93558618       0.1556541
## [1384,]       NaN      -0.9316973      -0.80706439       0.1556541
## [1385,]       NaN      -0.9316973       0.34963173       0.1556541
## [1386,]       NaN       0.2419060      -0.29297723      -0.6199782
## [1387,]       NaN      -0.9316973      -0.42149902       2.4825512
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## [1389,]       NaN       0.2419060      -0.29297723       2.4825512
## [1390,]       NaN      -0.9316973      -0.16445544       2.4825512
## [1391,]       NaN       0.2419060      -0.67854260      -0.6199782
## [1392,]       NaN      -0.9316973       1.12076248       0.1556541
## [1393,]       NaN      -0.9316973      -0.16445544      -0.6199782
## [1394,]       NaN      -0.9316973      -0.55002081       1.7069188
## [1395,]       NaN      -0.9316973      -0.42149902      -1.3956106
## [1396,]       NaN      -0.9316973      -0.16445544       0.9312865
## [1397,]       NaN      -0.9316973       0.47815352      -0.6199782
## [1398,]       NaN       1.4155093      -0.29297723       2.4825512
## [1399,]       NaN       2.5891126      -0.29297723      -0.6199782
## [1400,]       NaN       0.2419060      -0.16445544      -1.3956106
## [1401,]       NaN       0.2419060      -0.55002081      -0.6199782
## [1402,]       NaN       0.2419060       3.04858935      -2.1712429
## [1403,]       NaN       2.5891126      -1.32115156       0.9312865
## [1404,]       NaN      -0.9316973       1.24928427       0.1556541
## [1405,]       NaN      -0.9316973       1.12076248      -0.6199782
## [1406,]       NaN       0.2419060       0.22110994      -0.6199782
## [1407,]       NaN      -0.9316973      -0.29297723       0.1556541
## [1408,]       NaN      -0.9316973      -0.93558618      -0.6199782
```

```
## [1409,]      NaN    -0.9316973    -0.80706439     2.4825512
## [1410,]      NaN     0.2419060    -0.16445544    -0.6199782
## [1411,]      NaN     0.2419060     0.47815352     0.9312865
## [1412,]      NaN    -0.9316973    -0.67854260     0.1556541
## [1413,]      NaN    -0.9316973     0.09258815     2.4825512
## [1414,]      NaN     0.2419060    -0.55002081    -0.6199782
## [1415,]      NaN    -0.9316973     1.76337144     0.1556541
## [1416,]      NaN     2.5891126    -1.32115156    -0.6199782
## [1417,]      NaN     1.4155093     0.60667531     0.1556541
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## [1426,]      NaN     0.2419060    -0.16445544     2.4825512
## [1427,]      NaN    -0.9316973    -0.67854260     0.1556541
## [1428,]      NaN     1.4155093    -0.42149902     0.1556541
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## [1430,]      NaN    -0.9316973     0.86371890    -0.6199782
## [1431,]      NaN     0.2419060     1.12076248     0.1556541
## [1432,]      NaN     1.4155093     0.34963173     0.1556541
## [1433,]      NaN     0.2419060     0.60667531    -0.6199782
## [1434,]      NaN     0.2419060    -0.67854260     0.1556541
## [1435,]      NaN     1.4155093     0.60667531     0.1556541
## [1436,]      NaN    -0.9316973    -0.67854260    -0.6199782
## [1437,]      NaN    -0.9316973    -1.19262977     2.4825512
## [1438,]      NaN    -0.9316973     1.24928427     0.1556541
## [1439,]      NaN     0.2419060    -1.32115156     0.1556541
## [1440,]      NaN     1.4155093    -0.16445544    -0.6199782
## [1441,]      NaN     2.5891126     0.86371890     0.1556541
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## [1443,]      NaN     2.5891126    -0.93558618     0.1556541
## [1444,]      NaN    -0.9316973     1.63484965    -0.6199782
## [1445,]      NaN     0.2419060     0.34963173     0.9312865
## [1446,]      NaN     0.2419060     1.24928427     0.1556541
## [1447,]      NaN     1.4155093    -0.42149902    -0.6199782
## [1448,]      NaN     0.2419060     0.47815352     0.9312865
## [1449,]      NaN     0.2419060     0.34963173     1.7069188
## [1450,]      NaN    -0.9316973    -0.93558618     0.9312865
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## [1452,]      NaN     0.2419060    -0.16445544    -1.3956106
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## [1455,]      NaN    -0.9316973    -0.42149902     0.1556541
## [1456,]      NaN    -0.9316973    -0.42149902    -0.6199782
## [1457,]      NaN     1.4155093    -0.16445544    -0.6199782
## [1458,]      NaN     2.5891126     1.12076248    -0.6199782
## [1459,]      NaN     0.2419060    -0.93558618     1.7069188
## [1460,]      NaN     0.2419060    -0.16445544    -0.6199782
## [1461,]      NaN    -0.9316973    -0.80706439     0.1556541
## [1462,]      NaN     0.2419060     1.12076248     0.1556541
```

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## [1463,]          NaN        0.2419060        1.24928427          -0.6199782
## [1464,]          NaN       -0.9316973       -0.16445544          -0.6199782
## [1465,]          NaN       -0.9316973       -0.80706439          -0.6199782
## [1466,]          NaN        0.2419060        0.73519711           0.1556541
## [1467,]          NaN        0.2419060       -0.29297723           1.7069188
## [1468,]          NaN        0.2419060       -0.67854260          -2.1712429
## [1469,]          NaN       -0.9316973        0.73519711           0.1556541
## [1470,]          NaN       -0.9316973       -0.67854260           0.1556541
##           WorkLifeBalance YearsAtCompany YearsInCurrentRole
##    [1,]        -2.4929720    -0.164557109        -0.06327437
##    [2,]         0.3379811     0.488341541         0.76473737
##    [3,]         0.3379811    -1.143905083        -1.16729002
##    [4,]         0.3379811     0.161892216         0.76473737
##    [5,]         0.3379811    -0.817455758        -0.61528219
##    [6,]        -1.0774954    -0.001332446         0.76473737
##    [7,]        -1.0774954    -0.980680421        -1.16729002
##    [8,]         0.3379811    -0.980680421        -1.16729002
##    [9,]         0.3379811     0.325116879         0.76473737
##   [10,]        -1.0774954    -0.001332446         0.76473737
##   [11,]         0.3379811    -0.327781771        -0.06327437
##   [12,]         0.3379811     0.325116879         0.21272955
##   [13,]        -1.0774954    -0.327781771        -0.61528219
##   [14,]         0.3379811    -0.817455758        -0.61528219
##   [15,]         0.3379811    -0.491006434        -0.61528219
##   [16,]         0.3379811     0.488341541         1.31674520
##   [17,]        -1.0774954    -0.164557109        -0.61528219
##   [18,]        -1.0774954    -0.980680421        -1.16729002
##   [19,]         0.3379811     2.936711478         1.04074129
##   [20,]         0.3379811    -0.654231096        -0.61528219
##   [21,]        -1.0774954    -0.491006434        -0.61528219
##   [22,]         0.3379811    -0.327781771        -0.33927828
##   [23,]         0.3379811     0.814790866         0.48873346
##   [24,]         0.3379811    -1.143905083        -1.16729002
##   [25,]         0.3379811    -0.491006434        -0.61528219
##   [26,]        -1.0774954     1.141240191         2.42076085
##   [27,]         0.3379811     0.488341541        -0.61528219
##   [28,]         0.3379811     0.325116879         0.76473737
##   [29,]         0.3379811     2.447037491         0.48873346
##   [30,]        -1.0774954    -0.817455758        -0.61528219
##   [31,]         0.3379811    -0.980680421        -0.89128611
##   [32,]         1.7534577    -0.491006434        -0.61528219
##   [33,]         0.3379811     0.488341541        -1.16729002
##   [34,]         1.7534577    -0.980680421        -1.16729002
##   [35,]        -1.0774954    -0.817455758        -1.16729002
##   [36,]        -1.0774954    -0.327781771        -0.33927828
##   [37,]         0.3379811    -0.654231096        -0.61528219
##   [38,]         0.3379811    -0.817455758        -0.61528219
##   [39,]         1.7534577    -0.980680421        -0.89128611
##   [40,]         0.3379811    -0.327781771        -0.33927828
##   [41,]         0.3379811    -0.980680421        -1.16729002
##   [42,]         0.3379811    -0.980680421        -1.16729002
##   [43,]        -1.0774954    -0.980680421        -1.16729002
##   [44,]         0.3379811     0.325116879         1.04074129
##   [45,]         0.3379811     0.814790866         1.04074129
```

```
##    [46,]      0.3379811    2.447037491      2.97276868
##    [47,]      0.3379811    0.325116879      0.21272955
##    [48,]      0.3379811   -0.980680421     -1.16729002
##    [49,]      0.3379811    0.325116879      0.48873346
##    [50,]      0.3379811   -0.980680421     -1.16729002
##    [51,]      0.3379811   -0.980680421     -1.16729002
##    [52,]     -1.0774954   -0.817455758     -0.61528219
##    [53,]     -1.0774954   -0.491006434     -0.33927828
##    [54,]      0.3379811   -0.491006434     -1.16729002
##    [55,]     -1.0774954   -0.817455758     -0.61528219
##    [56,]      0.3379811    1.304464853      2.69676477
##    [57,]     -1.0774954    0.325116879      1.04074129
##    [58,]      0.3379811   -0.817455758     -0.61528219
##    [59,]     -1.0774954   -0.001332446      0.76473737
##    [60,]      1.7534577   -0.001332446      0.21272955
##    [61,]      0.3379811    0.325116879      1.04074129
##    [62,]      0.3379811    0.488341541     -0.33927828
##    [63,]     -1.0774954    3.263160803     -0.33927828
##    [64,]     -1.0774954    2.283812828      3.24877259
##    [65,]      0.3379811    1.630914178      2.69676477
##    [66,]      0.3379811   -0.327781771     -1.16729002
##    [67,]      0.3379811   -0.164557109      0.21272955
##    [68,]      0.3379811   -0.980680421     -1.16729002
##    [69,]     -1.0774954   -0.654231096     -0.61528219
##    [70,]     -1.0774954   -0.980680421     -1.16729002
##    [71,]     -1.0774954   -0.491006434     -0.33927828
##    [72,]      0.3379811   -0.327781771     -0.06327437
##    [73,]      0.3379811   -0.980680421     -0.89128611
##    [74,]      0.3379811    0.488341541     -0.06327437
##    [75,]      0.3379811   -0.980680421     -1.16729002
##    [76,]      0.3379811    0.651566204      0.76473737
##    [77,]      0.3379811    1.304464853      2.42076085
##    [78,]      1.7534577   -1.143905083     -1.16729002
##    [79,]      1.7534577   -0.327781771     -0.61528219
##    [80,]      0.3379811   -0.491006434     -0.61528219
##    [81,]     -1.0774954    0.488341541      1.04074129
##    [82,]      0.3379811   -0.164557109     -0.06327437
##    [83,]      0.3379811   -0.980680421     -1.16729002
##    [84,]      0.3379811    0.978015528      1.86875303
##    [85,]      0.3379811   -0.327781771     -0.61528219
##    [86,]     -1.0774954   -0.164557109     -0.06327437
##    [87,]      0.3379811   -1.143905083     -1.16729002
##    [88,]      0.3379811   -0.491006434     -0.61528219
##    [89,]      0.3379811    0.651566204      1.59274911
##    [90,]      0.3379811    0.325116879      1.04074129
##    [91,]     -1.0774954    2.447037491     -0.33927828
##    [92,]     -2.4929720    0.488341541      0.76473737
##    [93,]     -1.0774954    0.651566204      1.04074129
##    [94,]     -1.0774954    0.488341541      1.31674520
##    [95,]      0.3379811    0.651566204      1.04074129
##    [96,]     -2.4929720   -0.491006434     -0.33927828
##    [97,]     -1.0774954   -0.654231096     -0.61528219
##    [98,]      1.7534577   -0.327781771     -0.06327437
##    [99,]     -1.0774954    4.895407427      1.59274911
```

```
## [100,]      1.7534577    -0.654231096         -0.61528219
## [101,]      0.3379811    -0.654231096         -0.61528219
## [102,]      0.3379811    -0.980680421         -1.16729002
## [103,]      0.3379811    -0.980680421         -1.16729002
## [104,]      0.3379811     1.467689516          2.42076085
## [105,]      1.7534577    -0.980680421         -1.16729002
## [106,]      0.3379811    -0.654231096         -0.61528219
## [107,]     -1.0774954     0.161892216         -0.33927828
## [108,]      0.3379811    -0.164557109         -0.06327437
## [109,]      0.3379811    -0.817455758         -0.61528219
## [110,]      0.3379811    -1.143905083         -1.16729002
## [111,]     -1.0774954     0.978015528          2.14475694
## [112,]      0.3379811     0.325116879          0.76473737
## [113,]      0.3379811    -0.327781771         -0.33927828
## [114,]      0.3379811    -0.327781771         -0.33927828
## [115,]      0.3379811    -0.980680421         -1.16729002
## [116,]      0.3379811    -0.327781771         -0.33927828
## [117,]      0.3379811     0.651566204          1.59274911
## [118,]      0.3379811     0.325116879          0.76473737
## [119,]      0.3379811    -0.980680421         -1.16729002
## [120,]      1.7534577     2.936711478          2.14475694
## [121,]     -1.0774954     0.488341541          0.76473737
## [122,]      1.7534577    -0.001332446          0.76473737
## [123,]      0.3379811    -0.327781771         -0.06327437
## [124,]      0.3379811     2.120588166          3.80078042
## [125,]     -1.0774954    -0.001332446          0.76473737
## [126,]     -1.0774954    -0.327781771         -0.06327437
## [127,]     -1.0774954     5.385081415          1.59274911
## [128,]     -1.0774954    -1.143905083         -1.16729002
## [129,]      0.3379811    -0.817455758         -0.89128611
## [130,]     -1.0774954     1.304464853          1.86875303
## [131,]      0.3379811    -0.654231096         -0.61528219
## [132,]      0.3379811    -0.817455758         -0.61528219
## [133,]      0.3379811    -0.817455758         -0.61528219
## [134,]      0.3379811     0.325116879          0.76473737
## [135,]      0.3379811     0.161892216          0.76473737
## [136,]      0.3379811    -0.654231096         -0.61528219
## [137,]      0.3379811    -0.491006434         -0.61528219
## [138,]      1.7534577     1.304464853          1.86875303
## [139,]      0.3379811    -0.817455758         -0.61528219
## [140,]     -2.4929720     0.651566204          1.31674520
## [141,]      1.7534577    -0.327781771         -0.06327437
## [142,]     -1.0774954    -0.164557109          0.21272955
## [143,]      0.3379811    -0.654231096         -0.61528219
## [144,]     -1.0774954    -0.327781771         -0.06327437
## [145,]      1.7534577     0.161892216          0.76473737
## [146,]      0.3379811    -0.654231096         -0.61528219
## [147,]      0.3379811    -0.327781771         -0.33927828
## [148,]     -1.0774954    -0.001332446          0.48873346
## [149,]      0.3379811    -0.327781771         -1.16729002
## [150,]      0.3379811    -0.980680421         -1.16729002
## [151,]      0.3379811     2.120588166          0.76473737
## [152,]      0.3379811     0.488341541          1.04074129
## [153,]     -2.4929720    -0.001332446          0.76473737
```

```
## [154,]      -2.4929720     1.630914178      1.31674520
## [155,]       0.3379811     0.325116879      1.04074129
## [156,]       0.3379811     0.488341541      0.76473737
## [157,]       0.3379811    -0.980680421     -1.16729002
## [158,]      -1.0774954    -0.980680421     -1.16729002
## [159,]      -1.0774954     0.814790866      1.86875303
## [160,]       0.3379811    -0.491006434     -0.33927828
## [161,]       0.3379811    -0.817455758     -0.61528219
## [162,]      -2.4929720    -0.817455758     -0.61528219
## [163,]      -2.4929720    -0.327781771     -0.61528219
## [164,]      -2.4929720    -0.327781771     -0.33927828
## [165,]      -1.0774954    -0.980680421     -0.89128611
## [166,]       0.3379811    -0.327781771     -0.06327437
## [167,]       0.3379811     0.325116879      1.04074129
## [168,]       0.3379811     0.488341541      1.31674520
## [169,]       1.7534577     0.161892216     -0.33927828
## [170,]       0.3379811    -0.327781771     -0.06327437
## [171,]      -1.0774954    -0.327781771     -0.61528219
## [172,]       1.7534577    -1.143905083     -1.16729002
## [173,]      -1.0774954     0.161892216      0.76473737
## [174,]       0.3379811     0.814790866      1.31674520
## [175,]       1.7534577    -0.327781771     -0.06327437
## [176,]       0.3379811    -0.817455758     -0.61528219
## [177,]       1.7534577    -0.654231096     -0.89128611
## [178,]      -1.0774954    -0.980680421     -1.16729002
## [179,]       0.3379811     2.773486815      2.42076085
## [180,]       0.3379811    -0.817455758     -0.61528219
## [181,]       0.3379811    -0.491006434     -0.61528219
## [182,]       0.3379811    -0.654231096     -0.61528219
## [183,]      -1.0774954    -0.491006434     -0.33927828
## [184,]      -1.0774954    -0.654231096     -0.61528219
## [185,]       0.3379811    -0.491006434     -0.61528219
## [186,]       0.3379811     0.161892216      0.76473737
## [187,]       0.3379811     2.120588166      1.04074129
## [188,]       0.3379811     2.773486815      2.97276868
## [189,]      -1.0774954     0.488341541      1.31674520
## [190,]       0.3379811    -0.001332446      0.76473737
## [191,]       0.3379811     4.242508778      3.80078042
## [192,]      -1.0774954    -0.001332446      0.76473737
## [193,]       0.3379811    -0.980680421     -1.16729002
## [194,]       1.7534577    -0.327781771     -0.06327437
## [195,]       0.3379811     2.120588166      1.04074129
## [196,]      -1.0774954     0.161892216      0.76473737
## [197,]       0.3379811    -0.164557109     -0.61528219
## [198,]       0.3379811    -0.327781771     -0.33927828
## [199,]       0.3379811    -0.980680421     -1.16729002
## [200,]      -2.4929720    -0.001332446      0.76473737
## [201,]       0.3379811    -0.817455758     -0.61528219
## [202,]       0.3379811    -0.001332446      0.76473737
## [203,]       1.7534577    -0.327781771     -0.33927828
## [204,]       1.7534577    -0.001332446     -0.61528219
## [205,]       0.3379811    -0.980680421     -1.16729002
## [206,]      -1.0774954     0.488341541     -0.06327437
## [207,]      -1.0774954    -0.491006434     -0.61528219
```

```
## [208,]      0.3379811    0.161892216     -0.89128611
## [209,]     -2.4929720   -0.654231096     -0.61528219
## [210,]      0.3379811   -0.491006434     -0.61528219
## [211,]     -1.0774954    1.141240191      1.04074129
## [212,]      0.3379811    0.651566204      1.04074129
## [213,]      0.3379811   -0.001332446      0.76473737
## [214,]     -2.4929720    0.488341541      1.31674520
## [215,]      0.3379811   -0.327781771     -0.61528219
## [216,]      0.3379811   -0.980680421     -1.16729002
## [217,]     -1.0774954   -0.164557109     -0.33927828
## [218,]     -1.0774954   -0.164557109     -0.61528219
## [219,]      0.3379811    1.957363503      0.76473737
## [220,]      0.3379811   -0.164557109     -0.61528219
## [221,]      1.7534577    0.978015528      1.86875303
## [222,]      0.3379811   -0.654231096     -0.61528219
## [223,]      0.3379811    0.488341541      1.04074129
## [224,]     -1.0774954    1.467689516      1.59274911
## [225,]      0.3379811   -0.327781771     -0.06327437
## [226,]      0.3379811   -0.980680421     -1.16729002
## [227,]      0.3379811    0.325116879      1.04074129
## [228,]      0.3379811    0.651566204      1.59274911
## [229,]      1.7534577    0.488341541      0.76473737
## [230,]     -1.0774954   -0.491006434     -0.33927828
## [231,]     -1.0774954   -0.817455758     -0.61528219
## [232,]      0.3379811    2.447037491      3.52477651
## [233,]     -1.0774954   -0.817455758     -0.61528219
## [234,]     -1.0774954   -0.001332446     -1.16729002
## [235,]     -2.4929720   -0.327781771     -0.06327437
## [236,]      0.3379811    1.630914178      2.42076085
## [237,]      1.7534577    0.325116879      0.76473737
## [238,]      1.7534577    4.242508778      0.76473737
## [239,]      0.3379811   -0.491006434     -0.33927828
## [240,]     -2.4929720   -0.654231096     -0.61528219
## [241,]      0.3379811   -0.654231096     -0.61528219
## [242,]      0.3379811   -0.654231096     -0.61528219
## [243,]     -1.0774954   -0.980680421     -1.16729002
## [244,]      0.3379811    0.325116879      1.04074129
## [245,]      0.3379811    2.773486815     -1.16729002
## [246,]      0.3379811   -0.817455758     -0.61528219
## [247,]     -1.0774954   -0.817455758     -0.61528219
## [248,]      0.3379811    0.651566204      1.31674520
## [249,]     -1.0774954   -0.654231096     -0.89128611
## [250,]      0.3379811   -0.654231096     -0.61528219
## [251,]      0.3379811   -0.980680421     -1.16729002
## [252,]      0.3379811    1.957363503      0.48873346
## [253,]      0.3379811   -0.164557109      0.21272955
## [254,]      0.3379811   -0.654231096     -0.61528219
## [255,]      0.3379811   -0.654231096     -0.61528219
## [256,]      0.3379811   -0.491006434     -0.61528219
## [257,]      0.3379811    0.325116879      0.48873346
## [258,]      0.3379811    2.283812828      0.76473737
## [259,]     -1.0774954   -0.980680421     -1.16729002
## [260,]      1.7534577   -0.327781771     -0.06327437
## [261,]     -2.4929720   -0.327781771     -0.89128611
```

```
## [262,]    0.3379811    0.161892216     0.76473737
## [263,]    0.3379811   -0.164557109    -0.61528219
## [264,]   -1.0774954   -0.001332446     0.76473737
## [265,]   -2.4929720   -1.143905083    -1.16729002
## [266,]    0.3379811   -1.143905083    -1.16729002
## [267,]    0.3379811    0.325116879    -1.16729002
## [268,]    0.3379811   -0.164557109    -0.33927828
## [269,]    0.3379811    2.120588166     0.76473737
## [270,]    0.3379811    1.304464853     2.42076085
## [271,]    0.3379811    4.732182765     1.59274911
## [272,]   -1.0774954    0.488341541     0.76473737
## [273,]   -1.0774954   -0.327781771    -0.61528219
## [274,]    1.7534577   -0.327781771    -0.06327437
## [275,]    1.7534577   -0.654231096    -0.61528219
## [276,]    0.3379811   -0.327781771    -0.61528219
## [277,]   -1.0774954   -0.001332446     0.76473737
## [278,]    0.3379811    0.161892216    -1.16729002
## [279,]   -2.4929720   -0.164557109     0.21272955
## [280,]   -1.0774954    0.488341541    -0.06327437
## [281,]   -1.0774954   -0.327781771    -0.33927828
## [282,]    0.3379811    2.120588166     3.24877259
## [283,]   -1.0774954    0.488341541     0.76473737
## [284,]    0.3379811    0.488341541     0.76473737
## [285,]    0.3379811   -0.327781771    -0.33927828
## [286,]    0.3379811    1.630914178     2.14475694
## [287,]   -2.4929720   -0.980680421    -1.16729002
## [288,]    0.3379811   -0.817455758    -0.61528219
## [289,]    0.3379811   -0.654231096    -0.61528219
## [290,]    0.3379811   -0.327781771    -0.33927828
## [291,]    0.3379811   -0.654231096    -0.61528219
## [292,]    0.3379811    0.161892216    -1.16729002
## [293,]   -1.0774954   -0.817455758    -0.61528219
## [294,]    0.3379811    0.161892216     0.76473737
## [295,]   -1.0774954   -0.491006434    -0.61528219
## [296,]    1.7534577    2.120588166    -0.06327437
## [297,]    0.3379811   -1.143905083    -1.16729002
## [298,]   -1.0774954    0.651566204     1.31674520
## [299,]    0.3379811   -0.980680421    -1.16729002
## [300,]    0.3379811   -0.491006434    -0.89128611
## [301,]    0.3379811    2.447037491     1.59274911
## [302,]    0.3379811   -1.143905083    -1.16729002
## [303,]    0.3379811    0.161892216    -0.33927828
## [304,]   -1.0774954    0.161892216     0.76473737
## [305,]   -1.0774954    1.794138841     1.59274911
## [306,]    0.3379811    0.325116879     1.04074129
## [307,]   -1.0774954    0.978015528     1.04074129
## [308,]    0.3379811    0.488341541     1.04074129
## [309,]    0.3379811   -0.327781771    -0.33927828
## [310,]    0.3379811   -0.327781771    -0.61528219
## [311,]    0.3379811   -0.817455758    -0.61528219
## [312,]    0.3379811    2.773486815     1.31674520
## [313,]   -2.4929720   -0.817455758    -0.61528219
## [314,]    0.3379811    0.488341541     0.48873346
## [315,]    0.3379811    2.283812828     1.31674520
```

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##  [316,]     0.3379811   0.161892216     0.76473737
##  [317,]     0.3379811  -0.001332446    -0.89128611
##  [318,]    -1.0774954   0.161892216    -0.61528219
##  [319,]    -1.0774954  -0.491006434    -0.33927828
##  [320,]     0.3379811   0.978015528     2.14475694
##  [321,]     0.3379811  -0.327781771    -0.06327437
##  [322,]     0.3379811  -0.001332446     0.76473737
##  [323,]    -1.0774954  -0.001332446     0.76473737
##  [324,]    -1.0774954  -0.654231096    -0.61528219
##  [325,]     0.3379811   0.488341541     1.04074129
##  [326,]     0.3379811   0.488341541     1.31674520
##  [327,]     0.3379811   2.283812828     1.31674520
##  [328,]    -1.0774954  -0.980680421    -1.16729002
##  [329,]    -1.0774954  -0.001332446     0.76473737
##  [330,]     0.3379811  -0.654231096    -0.61528219
##  [331,]     1.7534577   0.325116879     0.76473737
##  [332,]     0.3379811  -0.327781771    -0.06327437
##  [333,]    -1.0774954  -0.491006434    -0.33927828
##  [334,]    -1.0774954  -0.980680421    -1.16729002
##  [335,]     0.3379811   0.488341541     1.31674520
##  [336,]    -1.0774954  -0.491006434    -0.33927828
##  [337,]    -1.0774954  -0.001332446     0.76473737
##  [338,]     0.3379811  -0.654231096    -0.61528219
##  [339,]     0.3379811   0.488341541     1.31674520
##  [340,]     0.3379811   0.161892216     0.76473737
##  [341,]    -1.0774954  -0.164557109    -0.61528219
##  [342,]     0.3379811   0.651566204     1.59274911
##  [343,]    -1.0774954   0.651566204     1.31674520
##  [344,]     0.3379811  -0.001332446     0.76473737
##  [345,]     0.3379811   1.467689516     0.48873346
##  [346,]    -1.0774954  -0.491006434    -0.61528219
##  [347,]     0.3379811  -0.327781771    -0.06327437
##  [348,]     0.3379811  -1.143905083    -1.16729002
##  [349,]     0.3379811  -0.980680421    -1.16729002
##  [350,]    -1.0774954  -0.491006434    -0.33927828
##  [351,]     0.3379811  -0.654231096    -0.61528219
##  [352,]     0.3379811   0.161892216    -1.16729002
##  [353,]    -2.4929720  -1.143905083    -1.16729002
##  [354,]     0.3379811  -0.001332446     0.76473737
##  [355,]     1.7534577  -0.817455758    -0.61528219
##  [356,]     0.3379811   0.161892216     0.76473737
##  [357,]     0.3379811  -0.980680421    -1.16729002
##  [358,]     0.3379811  -0.654231096    -0.61528219
##  [359,]     0.3379811  -0.980680421    -1.16729002
##  [360,]     0.3379811   0.978015528     1.31674520
##  [361,]     0.3379811  -0.654231096    -0.61528219
##  [362,]     0.3379811  -0.001332446     0.76473737
##  [363,]    -1.0774954  -0.654231096    -0.61528219
##  [364,]     0.3379811  -0.980680421    -1.16729002
##  [365,]     0.3379811  -0.327781771    -0.06327437
##  [366,]     1.7534577  -0.980680421    -1.16729002
##  [367,]     0.3379811   0.161892216     0.76473737
##  [368,]     0.3379811  -0.491006434    -0.33927828
##  [369,]     0.3379811  -0.164557109    -0.06327437
```

```
## [370,]    0.3379811   -0.817455758   -0.61528219
## [371,]    0.3379811   -0.980680421   -1.16729002
## [372,]    0.3379811   -0.654231096   -0.61528219
## [373,]    0.3379811   -0.980680421   -0.89128611
## [374,]    0.3379811   -0.327781771   -0.61528219
## [375,]    0.3379811   -0.001332446    0.21272955
## [376,]    0.3379811   -0.327781771   -0.61528219
## [377,]   -1.0774954   -0.001332446    0.76473737
## [378,]    0.3379811   -0.817455758   -0.61528219
## [379,]   -1.0774954   -0.327781771   -0.61528219
## [380,]    0.3379811   -0.327781771   -0.06327437
## [381,]    1.7534577   -0.327781771   -0.61528219
## [382,]    0.3379811   -0.980680421   -1.16729002
## [383,]    0.3379811   -0.164557109   -0.06327437
## [384,]    0.3379811   -0.817455758   -0.89128611
## [385,]    0.3379811    0.488341541    1.31674520
## [386,]    0.3379811   -0.980680421   -1.16729002
## [387,]   -1.0774954    1.794138841    0.76473737
## [388,]    0.3379811   -0.327781771   -0.06327437
## [389,]    0.3379811   -0.327781771   -0.61528219
## [390,]   -1.0774954   -0.980680421   -1.16729002
## [391,]    0.3379811    2.936711478    1.59274911
## [392,]    0.3379811   -0.980680421   -1.16729002
## [393,]   -1.0774954   -0.491006434   -0.61528219
## [394,]    0.3379811   -0.654231096   -0.61528219
## [395,]   -2.4929720    0.978015528    1.59274911
## [396,]    0.3379811   -0.654231096   -0.61528219
## [397,]    0.3379811   -0.327781771   -0.61528219
## [398,]    0.3379811   -0.327781771   -0.06327437
## [399,]    0.3379811    0.978015528    1.86875303
## [400,]    0.3379811   -0.491006434   -0.61528219
## [401,]    0.3379811    2.283812828    1.04074129
## [402,]   -1.0774954   -0.001332446    0.76473737
## [403,]    0.3379811   -0.327781771   -0.06327437
## [404,]    0.3379811    0.488341541    0.76473737
## [405,]    0.3379811    0.488341541   -1.16729002
## [406,]    0.3379811   -0.817455758   -0.61528219
## [407,]    0.3379811   -0.327781771   -0.06327437
## [408,]   -1.0774954   -0.817455758   -0.61528219
## [409,]   -2.4929720   -0.327781771   -0.61528219
## [410,]    0.3379811   -0.327781771   -0.06327437
## [411,]    0.3379811   -0.327781771   -0.06327437
## [412,]   -2.4929720    3.589610128    1.04074129
## [413,]   -1.0774954    0.488341541    0.76473737
## [414,]    1.7534577   -0.164557109    0.21272955
## [415,]    0.3379811   -0.327781771   -0.33927828
## [416,]   -1.0774954   -0.817455758   -0.61528219
## [417,]    0.3379811   -0.980680421   -1.16729002
## [418,]    0.3379811    2.120588166    2.97276868
## [419,]   -2.4929720   -0.654231096   -0.61528219
## [420,]   -2.4929720   -0.327781771   -0.33927828
## [421,]    0.3379811    0.488341541   -0.61528219
## [422,]    1.7534577   -0.817455758   -0.61528219
## [423,]    1.7534577   -0.980680421   -1.16729002
```

472

```
## [424,]      0.3379811   0.325116879       1.04074129
## [425,]     -1.0774954  -0.980680421      -1.16729002
## [426,]      0.3379811   3.263160803       1.59274911
## [427,]     -1.0774954   0.651566204       0.76473737
## [428,]      1.7534577   1.794138841       2.42076085
## [429,]      0.3379811  -0.327781771      -1.16729002
## [430,]     -2.4929720  -0.654231096      -0.61528219
## [431,]      0.3379811  -0.327781771      -0.06327437
## [432,]      0.3379811  -0.980680421      -1.16729002
## [433,]      0.3379811  -0.001332446      -0.33927828
## [434,]      0.3379811  -0.654231096      -0.61528219
## [435,]      1.7534577   0.978015528       1.04074129
## [436,]      1.7534577  -0.001332446       0.48873346
## [437,]      0.3379811  -0.491006434      -0.33927828
## [438,]      0.3379811  -0.654231096      -0.61528219
## [439,]      0.3379811   0.161892216       0.76473737
## [440,]      0.3379811  -0.980680421      -1.16729002
## [441,]      0.3379811  -0.654231096      -0.61528219
## [442,]      0.3379811  -0.817455758      -0.61528219
## [443,]     -1.0774954   0.488341541      -0.33927828
## [444,]      0.3379811  -0.817455758      -0.61528219
## [445,]      0.3379811   0.325116879       0.76473737
## [446,]      0.3379811   0.488341541       1.31674520
## [447,]      0.3379811   1.141240191      -0.33927828
## [448,]      0.3379811   0.651566204       1.31674520
## [449,]      0.3379811   2.120588166       0.48873346
## [450,]      0.3379811   0.161892216      -0.33927828
## [451,]      1.7534577  -0.164557109       0.21272955
## [452,]     -1.0774954   0.488341541       1.31674520
## [453,]      1.7534577   0.161892216       0.76473737
## [454,]     -1.0774954  -0.001332446       0.76473737
## [455,]      1.7534577  -0.654231096      -0.61528219
## [456,]      0.3379811  -0.164557109      -0.89128611
## [457,]     -1.0774954  -0.327781771      -0.06327437
## [458,]      0.3379811  -1.143905083      -1.16729002
## [459,]      0.3379811  -0.980680421      -1.16729002
## [460,]      0.3379811   0.161892216       0.76473737
## [461,]      0.3379811  -1.143905083      -1.16729002
## [462,]      0.3379811  -0.327781771      -0.06327437
## [463,]      0.3379811   0.488341541       0.76473737
## [464,]     -2.4929720  -0.980680421      -1.16729002
## [465,]      1.7534577  -0.164557109       0.21272955
## [466,]     -1.0774954  -0.817455758      -0.61528219
## [467,]      0.3379811   1.794138841       3.24877259
## [468,]      0.3379811   0.325116879       0.21272955
## [469,]      0.3379811   0.488341541       1.31674520
## [470,]      0.3379811  -0.491006434      -0.61528219
## [471,]      0.3379811  -0.817455758      -0.61528219
## [472,]      0.3379811  -0.980680421      -1.16729002
## [473,]     -1.0774954  -0.164557109       0.21272955
## [474,]      0.3379811   3.916059453       1.31674520
## [475,]      0.3379811  -0.164557109       0.21272955
## [476,]      1.7534577  -0.327781771      -0.33927828
## [477,]      0.3379811  -0.980680421      -1.16729002
```

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## [478,]      0.3379811    4.079284115     0.21272955
## [479,]      0.3379811   -0.001332446    -0.06327437
## [480,]      0.3379811   -0.164557109    -0.33927828
## [481,]      1.7534577   -0.980680421    -1.16729002
## [482,]      0.3379811   -0.164557109     0.21272955
## [483,]     -2.4929720   -0.654231096    -0.89128611
## [484,]      0.3379811   -0.654231096    -0.61528219
## [485,]      1.7534577   -0.001332446     0.76473737
## [486,]     -1.0774954   -0.327781771    -0.33927828
## [487,]     -1.0774954   -0.654231096    -1.16729002
## [488,]      1.7534577   -0.980680421    -1.16729002
## [489,]      0.3379811    0.488341541    -0.61528219
## [490,]     -1.0774954   -0.980680421    -1.16729002
## [491,]     -1.0774954   -1.143905083    -1.16729002
## [492,]      0.3379811    0.161892216     0.76473737
## [493,]     -2.4929720   -0.654231096    -0.61528219
## [494,]      1.7534577   -0.817455758    -0.61528219
## [495,]      0.3379811    0.161892216    -0.61528219
## [496,]      0.3379811   -0.491006434    -0.33927828
## [497,]      0.3379811   -0.654231096    -0.61528219
## [498,]      1.7534577   -0.817455758    -0.61528219
## [499,]      0.3379811   -0.817455758    -0.61528219
## [500,]      0.3379811   -0.327781771    -1.16729002
## [501,]     -1.0774954   -0.164557109    -0.06327437
## [502,]      0.3379811   -0.980680421    -1.16729002
## [503,]      1.7534577    1.141240191     0.76473737
## [504,]     -1.0774954    0.488341541     1.31674520
## [505,]      0.3379811   -0.980680421    -0.89128611
## [506,]      0.3379811   -0.654231096    -0.61528219
## [507,]      0.3379811    0.488341541     0.76473737
## [508,]     -1.0774954   -0.164557109    -1.16729002
## [509,]      0.3379811    1.630914178     1.86875303
## [510,]     -2.4929720    0.978015528     1.86875303
## [511,]      1.7534577    0.325116879     0.76473737
## [512,]      0.3379811   -0.654231096    -0.61528219
## [513,]      0.3379811   -0.491006434    -0.61528219
## [514,]      0.3379811   -0.980680421    -1.16729002
## [515,]      0.3379811    0.488341541     1.04074129
## [516,]      0.3379811   -0.980680421    -1.16729002
## [517,]      1.7534577   -0.654231096    -0.61528219
## [518,]      0.3379811   -0.654231096    -0.61528219
## [519,]      0.3379811   -0.001332446     0.76473737
## [520,]      0.3379811    0.488341541     0.76473737
## [521,]      0.3379811   -0.817455758    -0.61528219
## [522,]      0.3379811   -0.164557109     0.21272955
## [523,]      0.3379811   -0.980680421    -1.16729002
## [524,]      0.3379811    2.120588166     1.04074129
## [525,]      1.7534577    0.161892216     0.76473737
## [526,]      0.3379811   -0.817455758    -0.61528219
## [527,]      0.3379811    2.120588166     0.76473737
## [528,]     -1.0774954    0.488341541     0.76473737
## [529,]      0.3379811   -0.491006434    -0.33927828
## [530,]     -1.0774954    0.325116879     0.76473737
## [531,]      0.3379811    0.325116879     0.76473737
```

```
## [532,]     0.3379811  -0.001332446      0.76473737
## [533,]     0.3379811  -0.001332446      0.76473737
## [534,]     0.3379811   1.794138841      2.42076085
## [535,]     0.3379811  -0.327781771     -0.89128611
## [536,]    -1.0774954   2.283812828      0.48873346
## [537,]     0.3379811  -0.817455758     -0.61528219
## [538,]    -1.0774954   0.325116879      0.76473737
## [539,]     0.3379811   2.447037491      0.76473737
## [540,]     0.3379811  -0.817455758     -0.61528219
## [541,]     0.3379811  -0.001332446      0.76473737
## [542,]     0.3379811   0.161892216      0.76473737
## [543,]     1.7534577  -0.980680421     -1.16729002
## [544,]     0.3379811  -0.327781771     -0.61528219
## [545,]    -1.0774954   2.447037491     -0.61528219
## [546,]    -1.0774954   0.161892216      0.76473737
## [547,]     0.3379811  -0.980680421     -1.16729002
## [548,]     0.3379811  -0.817455758     -0.61528219
## [549,]     0.3379811  -0.817455758     -0.61528219
## [550,]     0.3379811  -0.327781771     -0.89128611
## [551,]     1.7534577  -0.491006434     -0.33927828
## [552,]    -2.4929720   0.161892216     -0.33927828
## [553,]    -1.0774954   0.488341541      0.76473737
## [554,]    -1.0774954  -0.491006434     -0.61528219
## [555,]    -2.4929720  -0.001332446      0.48873346
## [556,]     0.3379811  -0.817455758     -0.61528219
## [557,]     0.3379811  -0.817455758     -0.61528219
## [558,]     1.7534577  -0.980680421     -1.16729002
## [559,]     0.3379811   0.488341541      1.04074129
## [560,]    -2.4929720  -0.980680421     -1.16729002
## [561,]     0.3379811  -1.143905083     -1.16729002
## [562,]     1.7534577   4.405733440      0.48873346
## [563,]    -1.0774954   0.488341541      1.31674520
## [564,]    -1.0774954  -0.164557109      0.21272955
## [565,]     0.3379811   0.161892216      0.76473737
## [566,]     0.3379811  -0.817455758     -0.61528219
## [567,]     0.3379811  -0.327781771     -0.06327437
## [568,]     0.3379811  -0.164557109      0.21272955
## [569,]     0.3379811  -0.327781771     -0.61528219
## [570,]     0.3379811   0.488341541      0.76473737
## [571,]     0.3379811  -0.491006434     -0.33927828
## [572,]     0.3379811  -0.817455758     -0.61528219
## [573,]    -1.0774954   0.161892216      0.76473737
## [574,]    -1.0774954  -0.491006434     -0.33927828
## [575,]     0.3379811  -0.491006434     -0.61528219
## [576,]     0.3379811  -0.327781771     -0.33927828
## [577,]     0.3379811  -0.491006434     -0.61528219
## [578,]    -1.0774954  -0.327781771     -0.33927828
## [579,]     0.3379811   1.304464853      0.76473737
## [580,]     0.3379811  -0.164557109      0.21272955
## [581,]    -1.0774954  -0.654231096     -0.61528219
## [582,]     0.3379811  -0.817455758     -0.61528219
## [583,]     0.3379811   0.161892216      0.76473737
## [584,]     0.3379811  -0.654231096     -0.61528219
## [585,]    -1.0774954   2.773486815      0.76473737
```

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## [586,]     0.3379811    -1.143905083    -1.16729002
## [587,]     0.3379811    -0.980680421    -1.16729002
## [588,]     0.3379811    -0.327781771    -0.61528219
## [589,]     0.3379811    -0.491006434    -0.33927828
## [590,]     0.3379811    -0.980680421    -1.16729002
## [591,]     1.7534577     0.978015528     1.31674520
## [592,]     0.3379811    -0.654231096    -0.61528219
## [593,]    -1.0774954     3.099936140     2.69676477
## [594,]     0.3379811     0.325116879     0.76473737
## [595,]     0.3379811     0.488341541     0.76473737
## [596,]     0.3379811     3.916059453     2.97276868
## [597,]     0.3379811    -0.817455758    -0.61528219
## [598,]     0.3379811    -0.491006434    -0.33927828
## [599,]    -1.0774954    -0.817455758    -0.61528219
## [600,]     0.3379811    -0.327781771    -0.61528219
## [601,]     0.3379811     1.141240191     2.42076085
## [602,]     0.3379811    -0.980680421    -1.16729002
## [603,]    -1.0774954    -1.143905083    -1.16729002
## [604,]     0.3379811    -0.980680421    -1.16729002
## [605,]    -1.0774954     0.325116879     1.04074129
## [606,]    -1.0774954    -0.491006434    -0.33927828
## [607,]     0.3379811    -0.327781771    -0.61528219
## [608,]     1.7534577     0.325116879     1.04074129
## [609,]    -1.0774954     0.325116879     0.76473737
## [610,]     0.3379811    -0.491006434    -0.89128611
## [611,]     0.3379811     0.325116879     1.04074129
## [612,]     1.7534577     0.161892216     0.21272955
## [613,]     0.3379811     0.161892216     0.76473737
## [614,]    -2.4929720    -0.654231096    -0.61528219
## [615,]     0.3379811     0.161892216     0.76473737
## [616,]    -1.0774954    -1.143905083    -1.16729002
## [617,]    -1.0774954     2.120588166     0.48873346
## [618,]    -1.0774954    -0.327781771    -0.61528219
## [619,]    -1.0774954    -0.491006434    -0.33927828
## [620,]     0.3379811     0.325116879     1.04074129
## [621,]    -1.0774954    -0.164557109     0.21272955
## [622,]    -1.0774954     1.794138841     2.69676477
## [623,]    -1.0774954    -0.327781771    -0.61528219
## [624,]    -1.0774954    -0.327781771    -0.06327437
## [625,]     0.3379811    -0.327781771    -0.61528219
## [626,]     0.3379811    -0.327781771    -0.06327437
## [627,]    -1.0774954    -0.327781771    -0.33927828
## [628,]     0.3379811     0.325116879     1.04074129
## [629,]     0.3379811    -0.980680421    -1.16729002
## [630,]     0.3379811    -0.327781771    -0.89128611
## [631,]    -2.4929720    -0.817455758    -0.61528219
## [632,]    -1.0774954    -0.654231096    -0.61528219
## [633,]     0.3379811    -0.817455758    -0.89128611
## [634,]     0.3379811    -0.327781771    -0.06327437
## [635,]     0.3379811    -0.327781771    -0.33927828
## [636,]     0.3379811     1.630914178     2.69676477
## [637,]    -1.0774954     0.488341541    -0.61528219
## [638,]     0.3379811    -0.654231096    -1.16729002
## [639,]     1.7534577    -0.327781771    -0.61528219
```

```
## [640,]     0.3379811  -0.491006434   -0.61528219
## [641,]    -1.0774954  -0.327781771   -0.61528219
## [642,]     0.3379811   0.488341541    1.04074129
## [643,]     0.3379811  -0.817455758   -0.61528219
## [644,]    -1.0774954  -0.327781771   -0.33927828
## [645,]     0.3379811  -0.164557109   -0.06327437
## [646,]     0.3379811  -0.654231096   -0.61528219
## [647,]     0.3379811  -0.817455758   -1.16729002
## [648,]     0.3379811   0.978015528    1.59274911
## [649,]     0.3379811  -0.327781771   -0.06327437
## [650,]     0.3379811   0.814790866    1.31674520
## [651,]    -1.0774954  -0.327781771   -0.61528219
## [652,]     0.3379811  -0.001332446    0.48873346
## [653,]     0.3379811   0.488341541   -1.16729002
## [654,]     0.3379811   3.916059453    0.48873346
## [655,]     0.3379811  -0.327781771   -0.06327437
## [656,]     1.7534577  -0.491006434   -0.33927828
## [657,]    -2.4929720  -0.980680421   -1.16729002
## [658,]     0.3379811  -0.491006434   -0.33927828
## [659,]     0.3379811   0.161892216    0.76473737
## [660,]     0.3379811  -0.491006434   -0.61528219
## [661,]    -1.0774954  -0.980680421   -1.16729002
## [662,]     1.7534577  -0.980680421   -1.16729002
## [663,]    -1.0774954  -0.817455758   -0.61528219
## [664,]    -1.0774954  -0.980680421   -1.16729002
## [665,]    -1.0774954   1.467689516    1.04074129
## [666,]    -1.0774954  -0.654231096   -0.61528219
## [667,]     1.7534577  -0.654231096   -0.61528219
## [668,]    -1.0774954  -0.001332446    0.76473737
## [669,]     0.3379811  -0.817455758   -0.61528219
## [670,]    -2.4929720  -0.817455758   -0.61528219
## [671,]     0.3379811  -0.980680421   -0.89128611
## [672,]     0.3379811  -0.980680421   -1.16729002
## [673,]     0.3379811  -0.327781771   -0.06327437
## [674,]     0.3379811  -0.654231096   -0.61528219
## [675,]     0.3379811  -0.164557109   -1.16729002
## [676,]     1.7534577  -0.001332446    0.76473737
## [677,]    -2.4929720   0.488341541    0.48873346
## [678,]    -1.0774954   3.099936140    1.31674520
## [679,]    -1.0774954  -1.143905083   -1.16729002
## [680,]    -1.0774954   0.325116879    1.04074129
## [681,]     0.3379811  -0.164557109   -0.61528219
## [682,]     0.3379811   1.304464853    2.14475694
## [683,]     0.3379811  -0.654231096   -1.16729002
## [684,]     0.3379811  -0.980680421   -1.16729002
## [685,]    -1.0774954  -0.980680421   -1.16729002
## [686,]     0.3379811  -0.001332446    0.76473737
## [687,]     0.3379811   1.794138841    2.42076085
## [688,]     0.3379811   0.651566204    1.04074129
## [689,]     1.7534577  -0.980680421   -1.16729002
## [690,]     0.3379811  -0.980680421   -1.16729002
## [691,]    -2.4929720   0.325116879    0.76473737
## [692,]     0.3379811  -0.980680421   -0.89128611
## [693,]     1.7534577   0.161892216    0.76473737
```

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```
## [694,]      0.3379811    1.467689516     0.76473737
## [695,]      0.3379811   -0.327781771    -1.16729002
## [696,]     -2.4929720    1.141240191    -0.89128611
## [697,]     -1.0774954    0.325116879     0.76473737
## [698,]      0.3379811   -0.654231096    -0.89128611
## [699,]      0.3379811   -0.327781771    -0.61528219
## [700,]     -1.0774954    0.325116879     1.04074129
## [701,]      0.3379811   -0.980680421    -1.16729002
## [702,]      1.7534577    1.630914178     2.42076085
## [703,]      1.7534577    0.161892216    -0.06327437
## [704,]      0.3379811   -0.327781771    -0.33927828
## [705,]      0.3379811    0.488341541     1.31674520
## [706,]      0.3379811    0.161892216     0.76473737
## [707,]     -1.0774954   -0.980680421    -1.16729002
## [708,]      1.7534577    1.957363503     1.59274911
## [709,]      0.3379811   -0.001332446     0.76473737
## [710,]      0.3379811   -0.654231096    -0.61528219
## [711,]      0.3379811    0.488341541     1.04074129
## [712,]      0.3379811   -1.143905083    -1.16729002
## [713,]      0.3379811   -0.654231096    -0.61528219
## [714,]      0.3379811   -0.327781771    -0.33927828
## [715,]     -1.0774954   -0.327781771    -0.06327437
## [716,]      0.3379811   -0.164557109     0.21272955
## [717,]      1.7534577    1.794138841     3.24877259
## [718,]      0.3379811   -0.817455758    -0.61528219
## [719,]      0.3379811    0.325116879     1.04074129
## [720,]      0.3379811    0.325116879    -1.16729002
## [721,]      0.3379811   -0.327781771    -0.61528219
## [722,]      0.3379811    0.814790866     1.86875303
## [723,]     -1.0774954   -0.817455758    -0.89128611
## [724,]      0.3379811    0.161892216     0.76473737
## [725,]      0.3379811   -0.491006434    -0.61528219
## [726,]     -2.4929720   -0.491006434    -0.61528219
## [727,]      0.3379811   -0.491006434    -0.33927828
## [728,]      0.3379811   -1.143905083    -1.16729002
## [729,]      0.3379811    0.488341541     0.76473737
## [730,]     -1.0774954    1.467689516     1.59274911
## [731,]     -1.0774954    0.161892216     0.76473737
## [732,]      0.3379811   -0.980680421    -1.16729002
## [733,]      0.3379811   -0.654231096    -0.61528219
## [734,]      0.3379811    0.161892216     0.76473737
## [735,]     -1.0774954   -0.491006434    -0.33927828
## [736,]      0.3379811   -0.817455758    -0.61528219
## [737,]      0.3379811    1.304464853     1.86875303
## [738,]      0.3379811   -0.817455758    -0.61528219
## [739,]      0.3379811    2.283812828     0.48873346
## [740,]      0.3379811   -0.654231096    -0.61528219
## [741,]     -1.0774954   -0.654231096    -0.61528219
## [742,]      1.7534577   -0.980680421    -1.16729002
## [743,]      0.3379811   -0.980680421    -1.16729002
## [744,]      0.3379811   -0.327781771    -0.33927828
## [745,]     -2.4929720   -0.980680421    -1.16729002
## [746,]      0.3379811    0.161892216     0.76473737
## [747,]      0.3379811    2.283812828     3.24877259
```

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```
## [748,]       0.3379811   -0.980680421      -1.16729002
## [749,]       0.3379811   -0.817455758      -0.61528219
## [750,]       0.3379811    4.079284115       2.69676477
## [751,]       0.3379811    0.814790866       1.86875303
## [752,]       0.3379811    1.794138841       0.76473737
## [753,]       0.3379811    1.630914178       2.42076085
## [754,]       0.3379811    2.283812828       0.48873346
## [755,]      -1.0774954   -0.817455758      -0.61528219
## [756,]       1.7534577    0.325116879      -0.33927828
## [757,]       0.3379811    0.161892216       0.76473737
## [758,]      -1.0774954    1.304464853      -0.89128611
## [759,]      -2.4929720   -0.164557109      -0.06327437
## [760,]       0.3379811   -0.164557109      -0.33927828
## [761,]       0.3379811    1.304464853       0.76473737
## [762,]      -1.0774954   -0.980680421      -1.16729002
## [763,]       0.3379811   -0.654231096      -0.61528219
## [764,]       0.3379811   -0.980680421      -0.89128611
## [765,]       0.3379811   -0.980680421      -1.16729002
## [766,]       0.3379811   -0.817455758      -0.61528219
## [767,]      -1.0774954    0.161892216      -0.89128611
## [768,]      -1.0774954   -0.491006434      -0.33927828
## [769,]      -1.0774954   -0.001332446       0.76473737
## [770,]       0.3379811   -0.327781771      -0.33927828
## [771,]       0.3379811   -0.817455758      -0.61528219
## [772,]       0.3379811    0.325116879      -0.06327437
## [773,]       0.3379811   -0.327781771      -0.06327437
## [774,]      -1.0774954    1.141240191       1.04074129
## [775,]       1.7534577    0.325116879       0.76473737
## [776,]       0.3379811   -0.980680421      -1.16729002
## [777,]       0.3379811   -0.817455758      -0.61528219
## [778,]      -1.0774954   -0.980680421      -1.16729002
## [779,]       0.3379811    1.467689516       2.42076085
## [780,]       1.7534577    0.488341541      -1.16729002
## [781,]      -1.0774954    0.488341541       0.76473737
## [782,]       0.3379811   -0.327781771      -0.33927828
## [783,]      -1.0774954   -0.164557109      -0.61528219
## [784,]       0.3379811    0.488341541       0.48873346
## [785,]      -1.0774954    1.957363503       1.31674520
## [786,]       0.3379811    0.651566204       1.59274911
## [787,]       0.3379811   -0.654231096      -0.61528219
## [788,]       0.3379811   -0.654231096      -0.61528219
## [789,]       1.7534577    0.161892216       0.76473737
## [790,]       0.3379811    2.120588166       0.48873346
## [791,]       0.3379811   -0.654231096      -0.61528219
## [792,]       0.3379811    0.161892216       0.76473737
## [793,]       0.3379811    0.978015528       0.76473737
## [794,]      -1.0774954   -0.491006434      -0.61528219
## [795,]      -1.0774954   -0.164557109      -0.61528219
## [796,]       0.3379811   -0.980680421      -1.16729002
## [797,]       1.7534577   -0.001332446       0.76473737
## [798,]      -1.0774954   -0.980680421      -0.89128611
## [799,]       0.3379811   -0.817455758      -0.61528219
## [800,]       0.3379811    2.447037491       0.48873346
## [801,]       0.3379811   -0.980680421      -1.16729002
```

```
## [802,]        0.3379811   -1.143905083   -1.16729002
## [803,]        0.3379811   -0.654231096   -0.61528219
## [804,]        0.3379811   -1.143905083   -1.16729002
## [805,]       -1.0774954   -0.327781771   -0.06327437
## [806,]        0.3379811    1.304464853    1.59274911
## [807,]        0.3379811    0.161892216    0.48873346
## [808,]        0.3379811    0.161892216    0.76473737
## [809,]        0.3379811   -0.001332446    0.21272955
## [810,]       -1.0774954    0.325116879    0.76473737
## [811,]        0.3379811    0.814790866    1.31674520
## [812,]        0.3379811   -0.980680421   -1.16729002
## [813,]        0.3379811    0.161892216    0.76473737
## [814,]        0.3379811    1.794138841    0.76473737
## [815,]        1.7534577    2.120588166    0.76473737
## [816,]        1.7534577   -0.817455758   -0.61528219
## [817,]       -1.0774954   -0.327781771   -0.06327437
## [818,]        0.3379811    0.651566204    1.31674520
## [819,]        0.3379811   -0.817455758   -0.61528219
## [820,]       -2.4929720   -0.327781771   -0.33927828
## [821,]        0.3379811   -0.327781771   -0.61528219
## [822,]        0.3379811    0.325116879    1.04074129
## [823,]       -1.0774954   -0.654231096   -0.61528219
## [824,]       -1.0774954   -0.001332446    0.21272955
## [825,]        0.3379811   -0.980680421   -1.16729002
## [826,]       -1.0774954    0.488341541    0.76473737
## [827,]        1.7534577   -0.001332446    0.48873346
## [828,]        0.3379811   -0.654231096   -0.89128611
## [829,]        0.3379811   -1.143905083   -1.16729002
## [830,]        0.3379811   -0.327781771   -0.61528219
## [831,]        0.3379811   -0.980680421   -1.16729002
## [832,]       -1.0774954   -0.817455758   -0.61528219
## [833,]        0.3379811   -0.164557109   -0.61528219
## [834,]        0.3379811   -0.491006434   -0.61528219
## [835,]       -1.0774954   -0.164557109    0.21272955
## [836,]       -2.4929720   -0.327781771   -0.06327437
## [837,]       -2.4929720    0.651566204    1.04074129
## [838,]       -1.0774954    1.794138841    0.76473737
## [839,]       -1.0774954    2.283812828    1.31674520
## [840,]        1.7534577   -0.164557109   -0.06327437
## [841,]        0.3379811    0.161892216   -1.16729002
## [842,]        0.3379811   -0.491006434   -0.33927828
## [843,]       -1.0774954   -0.980680421   -0.89128611
## [844,]        0.3379811    0.161892216    0.76473737
## [845,]        0.3379811    0.488341541   -0.33927828
## [846,]       -2.4929720   -0.980680421   -0.89128611
## [847,]        1.7534577   -0.001332446    0.76473737
## [848,]        0.3379811    0.978015528    1.31674520
## [849,]        1.7534577   -0.817455758   -0.61528219
## [850,]       -1.0774954   -0.491006434   -0.33927828
## [851,]        0.3379811   -0.980680421   -1.16729002
## [852,]        0.3379811   -0.327781771   -0.61528219
## [853,]        0.3379811    0.488341541    1.04074129
## [854,]        0.3379811   -0.980680421   -0.89128611
## [855,]       -1.0774954   -0.654231096   -0.61528219
```

```
## [856,]     -1.0774954    1.141240191     1.04074129
## [857,]     -1.0774954   -0.817455758    -0.61528219
## [858,]      0.3379811   -0.164557109    -0.06327437
## [859,]      0.3379811   -0.001332446     0.76473737
## [860,]     -1.0774954   -0.327781771    -0.06327437
## [861,]      0.3379811   -1.143905083    -1.16729002
## [862,]      0.3379811    3.099936140     2.97276868
## [863,]      0.3379811   -1.143905083    -1.16729002
## [864,]      0.3379811   -0.327781771    -0.06327437
## [865,]     -2.4929720   -0.980680421    -1.16729002
## [866,]      0.3379811   -0.491006434    -0.33927828
## [867,]      0.3379811   -1.143905083    -1.16729002
## [868,]      0.3379811   -0.817455758    -0.61528219
## [869,]      0.3379811   -0.164557109     0.21272955
## [870,]      0.3379811   -0.491006434    -0.61528219
## [871,]      0.3379811   -0.001332446     0.76473737
## [872,]     -2.4929720   -0.980680421    -1.16729002
## [873,]     -1.0774954    0.488341541     0.76473737
## [874,]      0.3379811   -0.001332446     0.76473737
## [875,]     -1.0774954    0.488341541     0.76473737
## [876,]      0.3379811    2.120588166     1.86875303
## [877,]      0.3379811   -0.817455758    -0.89128611
## [878,]     -1.0774954   -0.164557109    -0.33927828
## [879,]      1.7534577   -0.491006434    -0.33927828
## [880,]      0.3379811    0.651566204     0.76473737
## [881,]      0.3379811   -0.817455758    -0.61528219
## [882,]      0.3379811    0.161892216     0.76473737
## [883,]      0.3379811   -0.001332446     0.76473737
## [884,]      0.3379811    1.141240191     1.59274911
## [885,]      1.7534577   -0.327781771    -0.89128611
## [886,]      0.3379811   -0.491006434    -0.33927828
## [887,]      0.3379811    0.651566204     1.31674520
## [888,]      0.3379811   -0.980680421    -1.16729002
## [889,]     -1.0774954    0.978015528    -0.61528219
## [890,]     -1.0774954    0.325116879     0.76473737
## [891,]     -2.4929720   -0.327781771    -0.06327437
## [892,]      0.3379811    0.488341541     0.21272955
## [893,]      1.7534577   -0.980680421    -0.89128611
## [894,]      0.3379811   -0.654231096    -0.61528219
## [895,]      0.3379811    0.488341541     1.31674520
## [896,]     -1.0774954   -0.164557109     0.21272955
## [897,]      0.3379811    0.488341541     1.31674520
## [898,]      0.3379811   -0.164557109    -0.89128611
## [899,]      0.3379811    0.161892216     0.76473737
## [900,]      1.7534577   -0.980680421    -1.16729002
## [901,]     -1.0774954    0.651566204     1.59274911
## [902,]     -1.0774954   -0.980680421    -1.16729002
## [903,]      0.3379811   -0.327781771    -0.33927828
## [904,]      0.3379811   -0.164557109    -1.16729002
## [905,]      1.7534577   -0.980680421    -1.16729002
## [906,]     -1.0774954   -0.001332446     0.76473737
## [907,]     -1.0774954   -0.980680421    -1.16729002
## [908,]      0.3379811    2.447037491     1.31674520
## [909,]      0.3379811    0.325116879     1.04074129
```

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##  [910,]     0.3379811   -0.980680421    -1.16729002
##  [911,]     0.3379811   -0.980680421    -1.16729002
##  [912,]     0.3379811   -0.980680421    -1.16729002
##  [913,]    -1.0774954    0.161892216     0.21272955
##  [914,]     0.3379811    2.773486815     1.59274911
##  [915,]     0.3379811    4.242508778     1.31674520
##  [916,]    -2.4929720   -0.817455758    -0.61528219
##  [917,]     0.3379811    0.651566204    -0.06327437
##  [918,]     0.3379811   -0.654231096    -0.61528219
##  [919,]    -1.0774954    3.589610128     1.59274911
##  [920,]    -1.0774954    0.325116879     0.76473737
##  [921,]     1.7534577    0.651566204     1.04074129
##  [922,]    -1.0774954   -0.491006434    -0.61528219
##  [923,]    -1.0774954    2.936711478     1.31674520
##  [924,]     1.7534577    0.488341541     1.31674520
##  [925,]     0.3379811   -0.654231096    -0.61528219
##  [926,]     0.3379811   -0.980680421    -1.16729002
##  [927,]     1.7534577    2.283812828     0.76473737
##  [928,]     0.3379811    1.467689516     2.69676477
##  [929,]     0.3379811    0.488341541     0.76473737
##  [930,]     0.3379811   -0.817455758    -0.61528219
##  [931,]    -1.0774954   -0.001332446    -1.16729002
##  [932,]     0.3379811    0.161892216    -0.06327437
##  [933,]     0.3379811   -0.001332446     0.76473737
##  [934,]    -1.0774954   -0.654231096    -0.61528219
##  [935,]    -1.0774954   -0.817455758    -0.61528219
##  [936,]     1.7534577    0.488341541     0.76473737
##  [937,]     0.3379811   -1.143905083    -1.16729002
##  [938,]     0.3379811    1.957363503     1.31674520
##  [939,]     0.3379811   -0.817455758    -0.61528219
##  [940,]     0.3379811    0.488341541    -0.06327437
##  [941,]     0.3379811   -0.327781771    -0.61528219
##  [942,]     0.3379811    0.325116879    -0.61528219
##  [943,]     0.3379811   -0.001332446     0.76473737
##  [944,]     1.7534577   -0.001332446     0.48873346
##  [945,]     0.3379811    0.325116879     1.04074129
##  [946,]     0.3379811   -0.654231096    -0.61528219
##  [947,]     0.3379811   -0.327781771    -0.06327437
##  [948,]    -1.0774954    0.161892216     0.76473737
##  [949,]     0.3379811    0.325116879    -0.89128611
##  [950,]     0.3379811    0.161892216     0.76473737
##  [951,]    -1.0774954    0.488341541     1.04074129
##  [952,]     0.3379811    1.957363503    -0.61528219
##  [953,]     1.7534577   -0.654231096    -0.61528219
##  [954,]     1.7534577   -0.654231096    -0.61528219
##  [955,]    -1.0774954    2.120588166     1.04074129
##  [956,]     0.3379811    1.957363503     1.31674520
##  [957,]     0.3379811   -0.001332446    -0.33927828
##  [958,]     0.3379811   -0.491006434    -0.61528219
##  [959,]    -1.0774954    0.325116879     0.76473737
##  [960,]     0.3379811    0.325116879     1.04074129
##  [961,]     0.3379811    0.325116879    -0.33927828
##  [962,]     0.3379811    0.325116879     0.48873346
##  [963,]     0.3379811    4.242508778     1.31674520
```

```
## [964,]      0.3379811  -0.001332446     0.76473737
## [965,]      1.7534577   0.488341541     1.04074129
## [966,]     -1.0774954  -0.654231096    -0.61528219
## [967,]     -1.0774954   0.488341541     1.31674520
## [968,]      0.3379811  -0.491006434    -0.61528219
## [969,]     -1.0774954   1.304464853     0.76473737
## [970,]      0.3379811   0.488341541     1.31674520
## [971,]      0.3379811  -0.980680421    -1.16729002
## [972,]     -1.0774954  -0.327781771    -0.61528219
## [973,]      1.7534577  -1.143905083    -1.16729002
## [974,]      0.3379811   0.325116879     0.76473737
## [975,]      0.3379811  -0.164557109    -0.61528219
## [976,]     -1.0774954   1.957363503     0.76473737
## [977,]      0.3379811   1.957363503     3.24877259
## [978,]      0.3379811  -0.327781771    -0.06327437
## [979,]      0.3379811   0.814790866     1.86875303
## [980,]      0.3379811   0.161892216     0.76473737
## [981,]      1.7534577  -0.980680421    -1.16729002
## [982,]     -1.0774954  -0.491006434    -0.61528219
## [983,]      0.3379811  -0.491006434    -0.61528219
## [984,]      1.7534577   1.141240191     1.86875303
## [985,]      0.3379811  -0.327781771    -0.33927828
## [986,]     -1.0774954   0.488341541    -0.61528219
## [987,]      1.7534577  -0.327781771    -0.06327437
## [988,]      0.3379811  -0.491006434    -0.61528219
## [989,]     -1.0774954  -0.164557109    -0.61528219
## [990,]      0.3379811  -0.164557109    -0.06327437
## [991,]      1.7534577  -0.327781771    -0.06327437
## [992,]     -1.0774954  -0.654231096    -0.61528219
## [993,]      0.3379811  -0.164557109    -0.06327437
## [994,]     -1.0774954  -0.654231096    -0.61528219
## [995,]     -1.0774954  -0.327781771    -0.33927828
## [996,]     -2.4929720   2.120588166     0.76473737
## [997,]      0.3379811  -0.164557109    -0.61528219
## [998,]      0.3379811   0.161892216    -0.61528219
## [999,]      0.3379811  -0.491006434    -0.33927828
## [1000,]     0.3379811   2.120588166     0.76473737
## [1001,]    -2.4929720  -0.327781771    -0.06327437
## [1002,]     0.3379811  -0.654231096    -0.61528219
## [1003,]     0.3379811  -0.817455758    -0.61528219
## [1004,]    -1.0774954  -0.654231096    -0.61528219
## [1005,]     0.3379811  -0.001332446     0.76473737
## [1006,]    -1.0774954   0.488341541     1.31674520
## [1007,]     0.3379811  -0.491006434    -0.33927828
## [1008,]     0.3379811   0.161892216     0.76473737
## [1009,]    -1.0774954   2.120588166     0.76473737
## [1010,]     0.3379811   0.325116879     1.04074129
## [1011,]     1.7534577  -0.001332446     0.76473737
## [1012,]     0.3379811  -0.327781771    -0.06327437
## [1013,]     0.3379811  -0.980680421    -1.16729002
## [1014,]     0.3379811  -0.654231096    -0.61528219
## [1015,]     1.7534577  -0.654231096    -0.61528219
## [1016,]     0.3379811  -0.491006434    -0.33927828
## [1017,]     1.7534577  -0.980680421    -1.16729002
```

```
## [1018,]     1.7534577   -0.327781771     -1.16729002
## [1019,]    -1.0774954    0.488341541     -0.06327437
## [1020,]    -1.0774954   -0.654231096     -0.61528219
## [1021,]    -1.0774954   -0.164557109      0.21272955
## [1022,]     0.3379811   -0.654231096     -0.61528219
## [1023,]    -2.4929720   -0.164557109      0.21272955
## [1024,]     1.7534577   -0.654231096     -0.61528219
## [1025,]     1.7534577    2.120588166      3.52477651
## [1026,]     0.3379811   -0.327781771     -0.06327437
## [1027,]    -1.0774954   -0.491006434     -0.33927828
## [1028,]    -1.0774954   -0.327781771     -0.06327437
## [1029,]    -1.0774954   -0.491006434     -0.61528219
## [1030,]     1.7534577    0.161892216      0.76473737
## [1031,]     0.3379811    0.978015528      0.76473737
## [1032,]     1.7534577   -0.001332446      0.76473737
## [1033,]     1.7534577   -0.980680421     -1.16729002
## [1034,]     0.3379811    0.488341541      1.04074129
## [1035,]     0.3379811   -0.001332446      0.76473737
## [1036,]     0.3379811   -0.654231096     -0.61528219
## [1037,]    -2.4929720   -0.817455758     -0.61528219
## [1038,]     1.7534577   -0.654231096     -0.89128611
## [1039,]     0.3379811   -0.817455758     -0.61528219
## [1040,]     0.3379811   -0.817455758     -0.61528219
## [1041,]     0.3379811    0.325116879      1.04074129
## [1042,]     0.3379811   -0.327781771     -0.06327437
## [1043,]     0.3379811   -0.327781771     -0.61528219
## [1044,]    -1.0774954    0.325116879      1.04074129
## [1045,]    -1.0774954   -0.654231096     -0.61528219
## [1046,]     1.7534577   -0.654231096     -0.89128611
## [1047,]    -1.0774954   -0.327781771     -0.61528219
## [1048,]     0.3379811   -0.491006434     -0.33927828
## [1049,]     0.3379811    0.978015528      1.31674520
## [1050,]    -1.0774954   -0.817455758     -0.89128611
## [1051,]     0.3379811    0.814790866      1.31674520
## [1052,]    -1.0774954   -0.980680421     -1.16729002
## [1053,]    -1.0774954   -0.980680421     -1.16729002
## [1054,]    -1.0774954    0.814790866      1.31674520
## [1055,]     0.3379811    0.161892216      0.76473737
## [1056,]    -1.0774954    1.141240191      1.04074129
## [1057,]     1.7534577   -0.654231096     -0.61528219
## [1058,]    -2.4929720   -0.327781771     -0.33927828
## [1059,]     1.7534577    1.304464853      1.31674520
## [1060,]     0.3379811   -0.980680421     -1.16729002
## [1061,]    -1.0774954   -1.143905083     -1.16729002
## [1062,]     0.3379811   -0.980680421     -1.16729002
## [1063,]    -1.0774954   -0.817455758     -0.61528219
## [1064,]     0.3379811    0.488341541      0.76473737
## [1065,]     1.7534577   -0.327781771     -0.33927828
## [1066,]     0.3379811   -0.654231096     -0.61528219
## [1067,]     0.3379811   -0.327781771     -0.06327437
## [1068,]    -1.0774954   -0.327781771     -0.06327437
## [1069,]    -1.0774954   -1.143905083     -1.16729002
## [1070,]    -2.4929720   -0.980680421     -1.16729002
## [1071,]     0.3379811   -0.491006434     -0.61528219
```

```
## [1072,]      0.3379811   -0.654231096       -0.61528219
## [1073,]      0.3379811   -0.654231096       -0.61528219
## [1074,]     -1.0774954    0.161892216        0.48873346
## [1075,]      0.3379811   -1.143905083       -1.16729002
## [1076,]      1.7534577   -0.327781771       -0.61528219
## [1077,]      0.3379811    1.141240191        1.31674520
## [1078,]     -2.4929720    0.325116879        0.76473737
## [1079,]      1.7534577    2.120588166        0.48873346
## [1080,]      0.3379811   -0.817455758       -1.16729002
## [1081,]      1.7534577    0.978015528        2.14475694
## [1082,]     -2.4929720    0.651566204        1.04074129
## [1083,]      0.3379811   -0.491006434       -0.33927828
## [1084,]     -2.4929720   -0.327781771       -0.06327437
## [1085,]      0.3379811    0.488341541        1.31674520
## [1086,]     -2.4929720   -0.001332446       -0.61528219
## [1087,]      0.3379811    4.079284115        0.48873346
## [1088,]      0.3379811    0.651566204        1.59274911
## [1089,]      0.3379811   -0.980680421       -1.16729002
## [1090,]      0.3379811    0.488341541        1.04074129
## [1091,]      0.3379811   -0.001332446        0.76473737
## [1092,]      0.3379811   -0.327781771       -0.33927828
## [1093,]      0.3379811   -0.327781771       -0.06327437
## [1094,]     -2.4929720    2.120588166        1.04074129
## [1095,]      1.7534577    0.161892216       -0.06327437
## [1096,]      0.3379811    1.304464853        2.69676477
## [1097,]      0.3379811    2.283812828        0.76473737
## [1098,]      0.3379811   -0.980680421       -0.89128611
## [1099,]      0.3379811   -0.817455758       -0.61528219
## [1100,]      0.3379811    0.488341541        1.04074129
## [1101,]      0.3379811   -0.327781771       -0.33927828
## [1102,]      0.3379811   -0.001332446       -0.89128611
## [1103,]     -1.0774954   -0.654231096       -0.61528219
## [1104,]      0.3379811    0.161892216        0.76473737
## [1105,]     -1.0774954   -0.980680421       -1.16729002
## [1106,]     -2.4929720   -0.817455758       -0.61528219
## [1107,]      0.3379811    0.488341541        1.04074129
## [1108,]      0.3379811   -0.164557109       -0.33927828
## [1109,]      0.3379811   -0.654231096       -1.16729002
## [1110,]      0.3379811   -0.491006434       -0.61528219
## [1111,]      0.3379811   -0.980680421       -1.16729002
## [1112,]      0.3379811    4.242508778        0.76473737
## [1113,]      0.3379811   -0.327781771       -0.61528219
## [1114,]     -1.0774954   -0.164557109        0.21272955
## [1115,]     -1.0774954    0.161892216       -0.61528219
## [1116,]     -2.4929720   -0.980680421       -1.16729002
## [1117,]      0.3379811    4.732182765        0.48873346
## [1118,]     -1.0774954   -0.817455758       -0.61528219
## [1119,]      0.3379811   -0.980680421       -1.16729002
## [1120,]      0.3379811    0.325116879        1.04074129
## [1121,]      1.7534577   -0.654231096       -0.61528219
## [1122,]      0.3379811   -0.980680421       -1.16729002
## [1123,]      0.3379811    0.488341541        1.31674520
## [1124,]      0.3379811   -0.327781771       -0.61528219
## [1125,]      0.3379811   -0.001332446        0.48873346
```

```
## [1126,]      1.7534577  -0.164557109       -0.06327437
## [1127,]      0.3379811  -0.980680421       -1.16729002
## [1128,]      0.3379811  -0.817455758       -0.61528219
## [1129,]      0.3379811  -0.654231096       -0.61528219
## [1130,]      0.3379811  -0.980680421       -1.16729002
## [1131,]     -1.0774954   0.488341541        1.31674520
## [1132,]     -1.0774954   0.161892216       -0.61528219
## [1133,]      0.3379811  -0.327781771       -0.06327437
## [1134,]      0.3379811  -0.164557109       -0.06327437
## [1135,]     -1.0774954  -0.980680421       -1.16729002
## [1136,]     -2.4929720   3.099936140       -1.16729002
## [1137,]      0.3379811  -0.980680421       -0.89128611
## [1138,]     -1.0774954  -0.491006434       -0.61528219
## [1139,]      0.3379811   3.752834790        1.04074129
## [1140,]      0.3379811  -0.654231096       -0.61528219
## [1141,]     -1.0774954   2.447037491        0.76473737
## [1142,]     -1.0774954  -0.164557109       -0.06327437
## [1143,]      0.3379811   0.488341541        0.76473737
## [1144,]      0.3379811   0.488341541        0.76473737
## [1145,]      0.3379811  -0.327781771       -0.61528219
## [1146,]      0.3379811  -0.654231096       -0.61528219
## [1147,]      0.3379811   0.325116879        0.76473737
## [1148,]     -1.0774954   0.325116879        0.48873346
## [1149,]      0.3379811  -0.001332446        0.76473737
## [1150,]      0.3379811  -0.001332446        0.76473737
## [1151,]      0.3379811   1.467689516        2.97276868
## [1152,]     -1.0774954  -0.327781771       -0.33927828
## [1153,]      0.3379811  -0.817455758       -0.61528219
## [1154,]      1.7534577  -1.143905083       -1.16729002
## [1155,]      0.3379811  -0.327781771       -0.61528219
## [1156,]      0.3379811   0.488341541        1.04074129
## [1157,]      0.3379811   1.794138841        2.97276868
## [1158,]      0.3379811   1.141240191        1.86875303
## [1159,]     -1.0774954  -0.491006434       -0.33927828
## [1160,]     -2.4929720   0.325116879       -0.61528219
## [1161,]      0.3379811   0.488341541        0.76473737
## [1162,]      1.7534577  -0.327781771       -0.06327437
## [1163,]      0.3379811   0.978015528        2.14475694
## [1164,]     -2.4929720   0.161892216       -0.06327437
## [1165,]     -1.0774954  -0.491006434       -0.61528219
## [1166,]      0.3379811   0.488341541        0.76473737
## [1167,]      0.3379811  -0.817455758       -0.61528219
## [1168,]     -1.0774954  -0.817455758       -0.61528219
## [1169,]      0.3379811  -0.164557109       -0.33927828
## [1170,]      0.3379811  -0.654231096       -0.61528219
## [1171,]     -1.0774954  -0.491006434       -0.61528219
## [1172,]     -2.4929720  -0.491006434       -0.61528219
## [1173,]      0.3379811  -0.327781771       -0.61528219
## [1174,]      0.3379811  -0.654231096       -0.61528219
## [1175,]      0.3379811  -0.001332446        0.76473737
## [1176,]      0.3379811  -0.327781771       -0.06327437
## [1177,]      0.3379811  -0.491006434       -0.61528219
## [1178,]      0.3379811   1.141240191        1.86875303
## [1179,]      0.3379811  -0.817455758       -0.61528219
```

```
## [1180,]      0.3379811    0.651566204     1.04074129
## [1181,]      0.3379811   -0.491006434    -0.33927828
## [1182,]      0.3379811    1.304464853     1.86875303
## [1183,]      0.3379811   -0.654231096    -0.61528219
## [1184,]      0.3379811   -0.327781771    -0.06327437
## [1185,]      0.3379811    0.488341541     1.04074129
## [1186,]      0.3379811    1.141240191     1.59274911
## [1187,]      1.7534577    0.651566204     1.31674520
## [1188,]      1.7534577    0.978015528     1.86875303
## [1189,]     -1.0774954    0.488341541    -1.16729002
## [1190,]      0.3379811   -0.164557109    -0.61528219
## [1191,]     -1.0774954    0.325116879     0.21272955
## [1192,]      0.3379811    0.488341541    -1.16729002
## [1193,]     -1.0774954   -0.817455758    -0.61528219
## [1194,]      0.3379811   -0.491006434    -0.33927828
## [1195,]      0.3379811   -0.654231096    -0.61528219
## [1196,]      0.3379811    0.161892216     0.76473737
## [1197,]      0.3379811   -0.817455758    -1.16729002
## [1198,]      0.3379811   -0.817455758    -0.61528219
## [1199,]      0.3379811   -0.164557109     0.21272955
## [1200,]     -1.0774954   -0.654231096    -0.61528219
## [1201,]      0.3379811   -0.817455758    -0.61528219
## [1202,]      0.3379811   -0.327781771    -0.06327437
## [1203,]     -1.0774954   -1.143905083    -1.16729002
## [1204,]      0.3379811   -0.491006434    -0.33927828
## [1205,]      0.3379811    0.325116879     0.76473737
## [1206,]      0.3379811   -0.980680421    -1.16729002
## [1207,]      0.3379811   -0.001332446     0.76473737
## [1208,]      0.3379811   -0.491006434    -0.61528219
## [1209,]      1.7534577    1.304464853     1.59274911
## [1210,]      1.7534577   -0.980680421    -1.16729002
## [1211,]      0.3379811    1.141240191     1.86875303
## [1212,]     -1.0774954   -0.164557109    -0.33927828
## [1213,]      0.3379811    0.488341541     1.31674520
## [1214,]      0.3379811   -0.654231096    -0.61528219
## [1215,]      0.3379811    0.161892216     0.76473737
## [1216,]      1.7534577   -0.327781771    -0.06327437
## [1217,]      0.3379811    0.488341541     1.31674520
## [1218,]      0.3379811   -0.327781771    -0.33927828
## [1219,]      0.3379811    0.488341541     1.04074129
## [1220,]      0.3379811   -0.327781771    -0.33927828
## [1221,]     -1.0774954    0.978015528     0.76473737
## [1222,]     -1.0774954    2.610262153     2.97276868
## [1223,]      0.3379811   -0.980680421    -1.16729002
## [1224,]     -2.4929720    2.610262153     0.21272955
## [1225,]      1.7534577   -0.654231096    -0.61528219
## [1226,]      0.3379811    2.283812828     0.48873346
## [1227,]     -1.0774954   -0.327781771    -0.61528219
## [1228,]      1.7534577   -0.327781771    -0.61528219
## [1229,]      0.3379811   -0.654231096    -0.61528219
## [1230,]      0.3379811   -0.980680421    -1.16729002
## [1231,]      1.7534577   -0.164557109    -0.61528219
## [1232,]      0.3379811    0.488341541     0.76473737
## [1233,]      0.3379811   -0.001332446     0.76473737
```

```
## [1234,]     -1.0774954    0.488341541    -1.16729002
## [1235,]     -2.4929720   -0.980680421    -1.16729002
## [1236,]     -1.0774954    0.488341541     0.48873346
## [1237,]      0.3379811   -0.817455758    -0.61528219
## [1238,]      0.3379811   -1.143905083    -1.16729002
## [1239,]     -2.4929720   -0.654231096    -0.61528219
## [1240,]     -1.0774954   -0.327781771    -0.06327437
## [1241,]      0.3379811    0.325116879     1.04074129
## [1242,]     -2.4929720   -0.491006434    -0.33927828
## [1243,]     -1.0774954    2.283812828     1.04074129
## [1244,]      1.7534577   -0.327781771    -1.16729002
## [1245,]      0.3379811    0.325116879     0.76473737
## [1246,]      0.3379811   -0.817455758    -0.61528219
## [1247,]     -1.0774954   -0.491006434    -0.61528219
## [1248,]      0.3379811   -0.327781771    -0.61528219
## [1249,]     -1.0774954   -0.164557109    -0.61528219
## [1250,]      0.3379811   -0.817455758    -0.61528219
## [1251,]      1.7534577   -0.654231096    -0.61528219
## [1252,]      0.3379811   -0.001332446     0.76473737
## [1253,]      0.3379811   -0.327781771    -1.16729002
## [1254,]     -1.0774954    0.651566204     0.76473737
## [1255,]      1.7534577   -0.327781771    -0.89128611
## [1256,]     -1.0774954   -1.143905083    -1.16729002
## [1257,]     -1.0774954   -0.164557109    -0.89128611
## [1258,]      0.3379811   -0.980680421    -1.16729002
## [1259,]      0.3379811   -0.980680421    -1.16729002
## [1260,]      0.3379811   -0.001332446    -1.16729002
## [1261,]      0.3379811   -0.001332446     0.76473737
## [1262,]      0.3379811   -0.980680421    -1.16729002
## [1263,]      0.3379811   -0.980680421    -1.16729002
## [1264,]     -1.0774954   -0.327781771    -0.33927828
## [1265,]      0.3379811   -0.980680421    -1.16729002
## [1266,]     -1.0774954    0.325116879     1.04074129
## [1267,]      0.3379811   -0.327781771    -0.33927828
## [1268,]      0.3379811    1.304464853     2.69676477
## [1269,]     -1.0774954   -0.654231096    -0.61528219
## [1270,]      0.3379811    0.325116879     0.76473737
## [1271,]      0.3379811   -0.817455758    -0.61528219
## [1272,]      0.3379811   -0.980680421    -1.16729002
## [1273,]      0.3379811   -0.327781771    -0.06327437
## [1274,]      0.3379811   -0.980680421    -1.16729002
## [1275,]      0.3379811    0.814790866     0.76473737
## [1276,]      0.3379811   -0.817455758    -0.61528219
## [1277,]      0.3379811   -0.327781771    -0.61528219
## [1278,]      0.3379811   -0.817455758    -0.89128611
## [1279,]      0.3379811    0.814790866     1.04074129
## [1280,]     -1.0774954   -0.327781771    -0.33927828
## [1281,]     -1.0774954    0.488341541    -1.16729002
## [1282,]      0.3379811    0.488341541     0.76473737
## [1283,]      0.3379811    0.488341541     1.04074129
## [1284,]      1.7534577   -0.327781771    -0.33927828
## [1285,]      0.3379811   -0.491006434    -0.33927828
## [1286,]      0.3379811   -0.817455758    -0.61528219
## [1287,]     -1.0774954   -0.491006434    -0.33927828
```

```
## [1288,]      -1.0774954   -1.143905083        -1.16729002
## [1289,]       0.3379811   -0.001332446         0.76473737
## [1290,]       0.3379811    0.651566204         1.59274911
## [1291,]      -1.0774954   -0.001332446        -0.89128611
## [1292,]      -2.4929720    0.488341541        -0.33927828
## [1293,]       0.3379811   -0.817455758        -0.89128611
## [1294,]      -1.0774954   -0.654231096        -0.61528219
## [1295,]      -2.4929720   -0.654231096        -0.61528219
## [1296,]       1.7534577    2.447037491         2.69676477
## [1297,]       0.3379811   -0.001332446         0.76473737
## [1298,]       0.3379811   -0.327781771        -0.89128611
## [1299,]       1.7534577    0.325116879         0.76473737
## [1300,]       0.3379811   -0.327781771        -0.33927828
## [1301,]       0.3379811    0.488341541         1.04074129
## [1302,]      -1.0774954    1.467689516         1.31674520
## [1303,]       1.7534577   -0.327781771        -0.06327437
## [1304,]       0.3379811    2.447037491         1.86875303
## [1305,]       0.3379811   -0.001332446        -0.06327437
## [1306,]      -1.0774954   -0.001332446        -0.89128611
## [1307,]       0.3379811   -0.654231096        -0.61528219
## [1308,]       0.3379811   -0.654231096        -0.61528219
## [1309,]      -1.0774954   -0.491006434        -0.61528219
## [1310,]       0.3379811   -0.327781771        -0.33927828
## [1311,]       0.3379811   -0.817455758        -0.61528219
## [1312,]      -2.4929720   -1.143905083        -1.16729002
## [1313,]       0.3379811   -0.980680421        -1.16729002
## [1314,]       0.3379811   -0.817455758        -0.61528219
## [1315,]       1.7534577    0.161892216         0.76473737
## [1316,]       0.3379811   -0.980680421        -1.16729002
## [1317,]       0.3379811   -0.001332446         0.76473737
## [1318,]      -1.0774954   -0.327781771        -0.06327437
## [1319,]       1.7534577    0.651566204         1.04074129
## [1320,]       1.7534577   -1.143905083        -1.16729002
## [1321,]      -1.0774954   -0.164557109        -0.33927828
## [1322,]       0.3379811   -0.817455758        -0.61528219
## [1323,]      -1.0774954    0.325116879         1.04074129
## [1324,]       0.3379811   -0.654231096        -0.61528219
## [1325,]       0.3379811   -0.001332446        -1.16729002
## [1326,]       0.3379811   -1.143905083        -1.16729002
## [1327,]      -1.0774954   -0.817455758        -0.61528219
## [1328,]       0.3379811    1.957363503         3.52477651
## [1329,]       0.3379811    0.325116879         1.04074129
## [1330,]       0.3379811   -0.980680421        -1.16729002
## [1331,]       0.3379811    1.467689516         2.14475694
## [1332,]       0.3379811    2.447037491         1.59274911
## [1333,]      -1.0774954   -0.980680421        -1.16729002
## [1334,]       0.3379811    0.161892216         0.76473737
## [1335,]      -1.0774954   -0.001332446         0.48873346
## [1336,]       0.3379811   -0.817455758        -0.61528219
## [1337,]       1.7534577   -0.327781771        -0.61528219
## [1338,]       0.3379811   -0.980680421        -1.16729002
## [1339,]      -1.0774954   -0.980680421        -1.16729002
## [1340,]       0.3379811   -0.980680421        -1.16729002
## [1341,]       0.3379811    0.488341541         1.31674520
```

```
## [1342,]      0.3379811    0.488341541      1.04074129
## [1343,]      0.3379811   -0.327781771     -0.33927828
## [1344,]      0.3379811   -0.654231096     -0.61528219
## [1345,]      0.3379811   -0.327781771     -0.33927828
## [1346,]      0.3379811   -0.654231096     -0.61528219
## [1347,]     -1.0774954    0.325116879      1.04074129
## [1348,]     -1.0774954    0.488341541     -0.89128611
## [1349,]      0.3379811    1.957363503      0.76473737
## [1350,]     -1.0774954   -0.980680421     -1.16729002
## [1351,]     -1.0774954    0.161892216      0.76473737
## [1352,]      0.3379811    2.447037491      3.52477651
## [1353,]      0.3379811   -0.817455758     -1.16729002
## [1354,]      0.3379811   -0.327781771     -0.61528219
## [1355,]      0.3379811   -0.491006434     -0.61528219
## [1356,]     -2.4929720   -0.491006434     -0.61528219
## [1357,]      0.3379811   -0.327781771     -0.06327437
## [1358,]      1.7534577    0.978015528      0.76473737
## [1359,]      0.3379811   -0.327781771     -0.61528219
## [1360,]     -1.0774954   -0.491006434     -0.61528219
## [1361,]     -1.0774954   -0.817455758     -0.61528219
## [1362,]      0.3379811   -0.001332446      0.76473737
## [1363,]      0.3379811   -0.491006434     -0.61528219
## [1364,]     -1.0774954    0.488341541     -0.06327437
## [1365,]      0.3379811   -0.001332446      0.76473737
## [1366,]      0.3379811   -0.980680421     -1.16729002
## [1367,]      0.3379811   -0.654231096     -0.61528219
## [1368,]     -1.0774954   -0.327781771     -0.33927828
## [1369,]      0.3379811    1.304464853      1.59274911
## [1370,]      0.3379811   -0.817455758     -1.16729002
## [1371,]      1.7534577    0.161892216      0.76473737
## [1372,]      0.3379811   -1.143905083     -1.16729002
## [1373,]      0.3379811    0.488341541     -1.16729002
## [1374,]      0.3379811    2.120588166      1.86875303
## [1375,]     -1.0774954   -0.980680421     -1.16729002
## [1376,]      0.3379811   -0.491006434     -0.89128611
## [1377,]      1.7534577   -0.327781771     -0.61528219
## [1378,]      0.3379811   -0.327781771     -0.06327437
## [1379,]      0.3379811   -1.143905083     -1.16729002
## [1380,]      0.3379811   -0.980680421     -1.16729002
## [1381,]     -2.4929720   -0.327781771     -0.33927828
## [1382,]     -1.0774954   -0.327781771     -0.33927828
## [1383,]      1.7534577   -0.491006434     -0.61528219
## [1384,]      0.3379811   -0.327781771     -0.06327437
## [1385,]     -1.0774954    1.141240191      1.04074129
## [1386,]     -1.0774954    0.161892216      0.76473737
## [1387,]     -1.0774954   -0.001332446      0.76473737
## [1388,]     -1.0774954   -0.327781771     -0.33927828
## [1389,]      0.3379811   -0.327781771     -0.89128611
## [1390,]      0.3379811    0.488341541      1.04074129
## [1391,]     -1.0774954   -0.491006434     -0.89128611
## [1392,]     -1.0774954   -0.980680421     -1.16729002
## [1393,]      0.3379811    0.488341541      1.04074129
## [1394,]      0.3379811   -0.001332446      0.76473737
## [1395,]      0.3379811   -0.980680421     -1.16729002
```

```
## [1396,]      0.3379811    0.488341541     0.76473737
## [1397,]     -1.0774954   -0.817455758    -0.61528219
## [1398,]     -1.0774954   -0.491006434    -0.33927828
## [1399,]      0.3379811    0.325116879     0.76473737
## [1400,]      0.3379811    0.488341541     1.31674520
## [1401,]      0.3379811   -0.164557109    -0.61528219
## [1402,]      0.3379811    0.488341541     1.31674520
## [1403,]      0.3379811   -0.980680421    -1.16729002
## [1404,]      0.3379811    2.120588166     1.04074129
## [1405,]      0.3379811    2.120588166     1.31674520
## [1406,]      1.7534577    0.651566204     0.76473737
## [1407,]      0.3379811   -0.327781771    -0.61528219
## [1408,]     -1.0774954   -0.491006434    -0.33927828
## [1409,]      1.7534577   -0.327781771    -0.61528219
## [1410,]      1.7534577    0.488341541     1.31674520
## [1411,]      0.3379811    0.651566204     1.04074129
## [1412,]      0.3379811   -0.817455758    -1.16729002
## [1413,]     -1.0774954    0.814790866     1.04074129
## [1414,]     -1.0774954   -0.817455758    -0.61528219
## [1415,]      0.3379811    1.630914178     2.69676477
## [1416,]     -1.0774954   -0.980680421    -0.89128611
## [1417,]      0.3379811    1.304464853     2.42076085
## [1418,]      0.3379811   -0.817455758    -0.61528219
## [1419,]      0.3379811    0.161892216    -0.33927828
## [1420,]     -1.0774954   -0.491006434    -0.33927828
## [1421,]      0.3379811   -0.327781771    -0.33927828
## [1422,]     -2.4929720    0.978015528     1.04074129
## [1423,]      0.3379811   -0.817455758    -0.61528219
## [1424,]      1.7534577   -0.654231096    -0.61528219
## [1425,]      0.3379811    0.488341541     0.76473737
## [1426,]      0.3379811    0.325116879     0.76473737
## [1427,]      0.3379811   -0.164557109    -0.61528219
## [1428,]     -1.0774954   -0.980680421    -1.16729002
## [1429,]      0.3379811   -0.817455758    -0.61528219
## [1430,]      0.3379811   -0.001332446     0.76473737
## [1431,]      0.3379811    1.794138841     3.24877259
## [1432,]      0.3379811    1.141240191     1.59274911
## [1433,]      0.3379811    1.467689516     1.86875303
## [1434,]     -1.0774954   -0.327781771    -0.33927828
## [1435,]     -1.0774954    0.325116879     1.04074129
## [1436,]      0.3379811   -0.491006434    -0.33927828
## [1437,]      0.3379811   -0.817455758    -0.61528219
## [1438,]     -1.0774954   -0.164557109    -1.16729002
## [1439,]     -1.0774954   -0.980680421    -1.16729002
## [1440,]      0.3379811    0.325116879     0.76473737
## [1441,]      0.3379811   -0.491006434    -0.61528219
## [1442,]     -1.0774954    0.978015528     2.14475694
## [1443,]      1.7534577   -0.817455758    -0.61528219
## [1444,]     -1.0774954    2.447037491     0.48873346
## [1445,]     -2.4929720    0.488341541     1.31674520
## [1446,]      0.3379811    2.120588166     0.76473737
## [1447,]      0.3379811    0.161892216     0.76473737
## [1448,]     -1.0774954    1.304464853     2.14475694
## [1449,]      0.3379811   -0.327781771    -0.06327437
```

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```
## [1450,]       0.3379811   -0.491006434        -0.61528219
## [1451,]       0.3379811    0.325116879        -1.16729002
## [1452,]       0.3379811    0.488341541         0.76473737
## [1453,]       0.3379811   -0.164557109        -0.33927828
## [1454,]      -1.0774954   -0.164557109        -0.33927828
## [1455,]       0.3379811   -0.327781771        -0.33927828
## [1456,]       0.3379811   -0.817455758        -0.61528219
## [1457,]       1.7534577    0.488341541        -0.61528219
## [1458,]       0.3379811   -0.327781771        -0.33927828
## [1459,]       0.3379811   -0.491006434        -0.33927828
## [1460,]       0.3379811   -0.491006434        -0.33927828
## [1461,]      -2.4929720   -0.327781771        -0.06327437
## [1462,]       0.3379811   -0.654231096        -0.61528219
## [1463,]      -1.0774954    2.120588166         1.31674520
## [1464,]       0.3379811    0.325116879        -0.06327437
## [1465,]       0.3379811   -0.491006434        -0.61528219
## [1466,]       0.3379811   -0.327781771        -0.61528219
## [1467,]       0.3379811   -0.001332446         0.76473737
## [1468,]       0.3379811   -0.164557109        -0.61528219
## [1469,]      -1.0774954    0.325116879         0.48873346
## [1470,]       1.7534577   -0.491006434        -0.33927828
##          YearsSinceLastPromotion YearsWithCurrManager
##    [1,]              -0.67891464            0.2457504
##    [2,]              -0.36858985            0.8062671
##    [3,]              -0.67891464           -1.1555415
##    [4,]               0.25205973           -1.1555415
##    [5,]              -0.05826506           -0.5950247
##    [6,]               0.25205973            0.5260087
##    [7,]              -0.67891464           -1.1555415
##    [8,]              -0.67891464           -1.1555415
##    [9,]              -0.36858985            1.0865255
##   [10,]               1.49335889            0.8062671
##   [11,]              -0.67891464           -0.3147664
##   [12,]              -0.67891464            1.0865255
##   [13,]               0.56238452           -0.3147664
##   [14,]              -0.36858985           -0.5950247
##   [15,]              -0.67891464           -0.3147664
##   [16,]               1.80368368            1.0865255
##   [17,]              -0.67891464            0.2457504
##   [18,]              -0.67891464           -1.1555415
##   [19,]               0.25205973            0.8062671
##   [20,]              -0.36858985           -0.5950247
##   [21,]              -0.36858985           -0.3147664
##   [22,]              -0.67891464           -0.3147664
##   [23,]              -0.05826506            1.9273006
##   [24,]              -0.67891464           -1.1555415
##   [25,]              -0.36858985           -0.3147664
##   [26,]               0.56238452            1.0865255
##   [27,]               1.18303410            0.8062671
##   [28,]               0.56238452           -0.5950247
##   [29,]               0.87270931            3.6088508
##   [30,]              -0.05826506           -0.8752831
##   [31,]              -0.67891464           -1.1555415
##   [32,]              -0.36858985           -0.3147664
```

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```
##  [33,]            -0.36858985             1.0865255
##  [34,]            -0.67891464            -1.1555415
##  [35,]            -0.05826506            -1.1555415
##  [36,]            -0.36858985            -0.0345080
##  [37,]            -0.67891464            -0.5950247
##  [38,]            -0.05826506            -0.5950247
##  [39,]            -0.67891464            -1.1555415
##  [40,]            -0.36858985            -0.3147664
##  [41,]            -0.67891464            -1.1555415
##  [42,]            -0.67891464            -1.1555415
##  [43,]            -0.67891464            -0.8752831
##  [44,]            -0.36858985             0.8062671
##  [45,]             0.25205973             0.8062671
##  [46,]             3.97595721             1.0865255
##  [47,]             1.80368368             0.8062671
##  [48,]            -0.67891464            -1.1555415
##  [49,]            -0.67891464             1.0865255
##  [50,]            -0.67891464            -0.8752831
##  [51,]            -0.67891464            -1.1555415
##  [52,]            -0.05826506            -0.5950247
##  [53,]            -0.36858985            -0.3147664
##  [54,]            -0.05826506            -0.3147664
##  [55,]            -0.67891464            -1.1555415
##  [56,]             1.80368368             2.2075589
##  [57,]            -0.36858985             1.0865255
##  [58,]            -0.05826506            -0.5950247
##  [59,]            -0.36858985             0.8062671
##  [60,]            -0.67891464             0.8062671
##  [61,]             1.49335889             1.0865255
##  [62,]             2.11400847             1.3667838
##  [63,]             3.35530763             1.0865255
##  [64,]             1.49335889             1.3667838
##  [65,]             3.04498284             1.0865255
##  [66,]            -0.67891464            -0.5950247
##  [67,]            -0.67891464            -0.3147664
##  [68,]            -0.67891464            -1.1555415
##  [69,]            -0.36858985            -0.5950247
##  [70,]            -0.67891464            -1.1555415
##  [71,]            -0.36858985            -0.3147664
##  [72,]            -0.67891464            -0.0345080
##  [73,]            -0.36858985            -1.1555415
##  [74,]            -0.67891464             1.3667838
##  [75,]            -0.67891464            -1.1555415
##  [76,]            -0.36858985             1.0865255
##  [77,]            -0.05826506             1.0865255
##  [78,]            -0.67891464            -1.1555415
##  [79,]            -0.67891464            -0.5950247
##  [80,]            -0.67891464            -0.5950247
##  [81,]             0.25205973            -1.1555415
##  [82,]            -0.67891464            -0.0345080
##  [83,]            -0.36858985            -1.1555415
##  [84,]            -0.36858985             1.3667838
##  [85,]            -0.36858985            -0.3147664
##  [86,]            -0.67891464            -0.5950247
```

```
##  [87,]          -0.67891464          -1.1555415
##  [88,]          -0.67891464          -0.3147664
##  [89,]           2.42433326           1.0865255
##  [90,]           0.56238452           0.8062671
##  [91,]           2.73465805           1.9273006
##  [92,]          -0.36858985          -1.1555415
##  [93,]          -0.05826506           0.8062671
##  [94,]           2.11400847           0.2457504
##  [95,]           0.87270931           0.8062671
##  [96,]          -0.67891464          -0.3147664
##  [97,]          -0.67891464          -0.5950247
##  [98,]          -0.67891464          -0.0345080
##  [99,]          -0.36858985           1.0865255
## [100,]          -0.36858985          -0.5950247
## [101,]          -0.67891464          -0.5950247
## [102,]          -0.67891464          -1.1555415
## [103,]          -0.36858985          -1.1555415
## [104,]          -0.05826506           1.6470422
## [105,]          -0.67891464          -1.1555415
## [106,]          -0.05826506          -0.5950247
## [107,]          -0.67891464           0.8062671
## [108,]          -0.67891464          -0.3147664
## [109,]          -0.05826506          -0.8752831
## [110,]          -0.67891464          -1.1555415
## [111,]           3.04498284           1.0865255
## [112,]          -0.67891464           0.5260087
## [113,]           0.56238452          -0.0345080
## [114,]          -0.36858985          -0.5950247
## [115,]          -0.67891464          -1.1555415
## [116,]          -0.36858985          -0.3147664
## [117,]           0.87270931           1.0865255
## [118,]          -0.05826506           1.0865255
## [119,]          -0.67891464          -1.1555415
## [120,]           0.56238452           2.2075589
## [121,]          -0.67891464           1.3667838
## [122,]          -0.67891464           0.8062671
## [123,]           0.56238452          -0.3147664
## [124,]           3.97595721           3.0483340
## [125,]           1.49335889           0.8062671
## [126,]           0.56238452          -0.3147664
## [127,]           3.97595721           0.5260087
## [128,]          -0.67891464          -1.1555415
## [129,]          -0.05826506          -0.8752831
## [130,]           0.87270931           1.9273006
## [131,]          -0.36858985          -0.5950247
## [132,]          -0.05826506          -0.8752831
## [133,]          -0.05826506          -0.5950247
## [134,]          -0.67891464           0.8062671
## [135,]           0.87270931           0.8062671
## [136,]          -0.67891464          -0.8752831
## [137,]          -0.67891464          -0.3147664
## [138,]           0.87270931           1.3667838
## [139,]          -0.05826506          -0.5950247
## [140,]           0.56238452           0.8062671
```

```
##   [141,]          -0.67891464            -0.0345080
##   [142,]          -0.67891464            -0.3147664
##   [143,]          -0.05826506            -0.5950247
##   [144,]          -0.67891464            -0.0345080
##   [145,]          -0.67891464             0.8062671
##   [146,]          -0.05826506            -0.5950247
##   [147,]          -0.36858985            -0.5950247
##   [148,]           1.49335889             0.8062671
##   [149,]          -0.36858985            -0.0345080
##   [150,]          -0.67891464            -1.1555415
##   [151,]          -0.05826506             2.4878173
##   [152,]          -0.67891464             0.5260087
##   [153,]           0.56238452             0.2457504
##   [154,]          -0.67891464             3.0483340
##   [155,]           0.25205973             0.8062671
##   [156,]          -0.67891464             1.3667838
##   [157,]          -0.67891464            -1.1555415
##   [158,]          -0.67891464            -1.1555415
##   [159,]          -0.05826506             1.9273006
##   [160,]          -0.36858985            -0.5950247
##   [161,]          -0.05826506            -0.5950247
##   [162,]          -0.05826506            -0.5950247
##   [163,]          -0.67891464            -0.5950247
##   [164,]          -0.36858985            -0.0345080
##   [165,]          -0.67891464            -0.8752831
##   [166,]           0.56238452            -0.0345080
##   [167,]          -0.36858985             1.0865255
##   [168,]           1.49335889            -0.0345080
##   [169,]          -0.67891464             0.8062671
##   [170,]          -0.36858985            -0.0345080
##   [171,]          -0.36858985            -0.8752831
##   [172,]          -0.67891464            -1.1555415
##   [173,]           1.49335889            -0.5950247
##   [174,]           1.18303410             1.6470422
##   [175,]          -0.67891464            -0.3147664
##   [176,]          -0.05826506            -0.5950247
##   [177,]          -0.67891464            -0.5950247
##   [178,]          -0.36858985            -1.1555415
##   [179,]           3.97595721             0.8062671
##   [180,]          -0.05826506            -0.8752831
##   [181,]          -0.67891464            -0.5950247
##   [182,]          -0.36858985            -0.5950247
##   [183,]          -0.67891464            -0.5950247
##   [184,]          -0.67891464            -0.5950247
##   [185,]          -0.36858985            -0.3147664
##   [186,]          -0.36858985             0.5260087
##   [187,]           2.11400847             1.3667838
##   [188,]          -0.05826506             3.0483340
##   [189,]          -0.36858985             1.3667838
##   [190,]          -0.36858985            -1.1555415
##   [191,]           2.73465805             1.3667838
##   [192,]          -0.67891464            -0.3147664
##   [193,]          -0.67891464            -0.8752831
##   [194,]          -0.05826506            -0.5950247
```

```
## [195,]           2.73465805            1.0865255
## [196,]          -0.36858985            0.8062671
## [197,]          -0.36858985           -0.5950247
## [198,]          -0.67891464           -0.5950247
## [199,]          -0.67891464           -1.1555415
## [200,]          -0.36858985            0.8062671
## [201,]          -0.05826506           -1.1555415
## [202,]          -0.36858985            0.8062671
## [203,]          -0.05826506           -1.1555415
## [204,]           0.25205973            0.8062671
## [205,]          -0.67891464           -1.1555415
## [206,]          -0.36858985            1.3667838
## [207,]          -0.05826506           -0.5950247
## [208,]          -0.36858985            0.8062671
## [209,]          -0.67891464           -0.5950247
## [210,]          -0.67891464           -0.3147664
## [211,]           2.11400847            1.0865255
## [212,]           0.87270931            1.0865255
## [213,]          -0.67891464            0.8062671
## [214,]           0.56238452            0.8062671
## [215,]          -0.67891464           -0.0345080
## [216,]          -0.67891464           -1.1555415
## [217,]          -0.67891464           -0.8752831
## [218,]          -0.36858985            0.2457504
## [219,]           3.04498284            1.0865255
## [220,]          -0.67891464            0.2457504
## [221,]           0.25205973            0.8062671
## [222,]          -0.36858985           -0.8752831
## [223,]          -0.67891464            0.8062671
## [224,]           0.87270931            2.4878173
## [225,]          -0.36858985           -0.0345080
## [226,]          -0.67891464           -1.1555415
## [227,]           0.87270931            1.0865255
## [228,]           0.56238452           -0.8752831
## [229,]          -0.67891464            1.0865255
## [230,]          -0.67891464           -0.8752831
## [231,]          -0.05826506           -0.5950247
## [232,]           2.73465805            3.0483340
## [233,]          -0.05826506           -0.5950247
## [234,]          -0.67891464            0.5260087
## [235,]          -0.67891464           -0.0345080
## [236,]          -0.36858985            1.3667838
## [237,]          -0.36858985            0.8062671
## [238,]           3.97595721            2.2075589
## [239,]          -0.36858985           -0.5950247
## [240,]          -0.36858985           -0.5950247
## [241,]          -0.36858985           -0.5950247
## [242,]          -0.05826506           -0.5950247
## [243,]          -0.67891464           -1.1555415
## [244,]           0.56238452            0.8062671
## [245,]          -0.36858985            0.8062671
## [246,]          -0.05826506           -0.5950247
## [247,]          -0.67891464           -0.5950247
## [248,]           0.87270931            1.3667838
```

```
## [249,]          -0.67891464          -0.5950247
## [250,]          -0.67891464          -0.5950247
## [251,]          -0.67891464          -1.1555415
## [252,]           2.73465805           1.0865255
## [253,]          -0.36858985           0.2457504
## [254,]          -0.67891464          -0.5950247
## [255,]          -0.67891464          -0.5950247
## [256,]          -0.36858985          -0.5950247
## [257,]           1.49335889           1.0865255
## [258,]           0.25205973           1.3667838
## [259,]          -0.67891464          -1.1555415
## [260,]          -0.36858985          -0.0345080
## [261,]          -0.67891464          -0.3147664
## [262,]           1.49335889           0.2457504
## [263,]          -0.67891464          -0.0345080
## [264,]           1.49335889           0.8062671
## [265,]          -0.67891464          -1.1555415
## [266,]          -0.67891464          -1.1555415
## [267,]           1.49335889           1.0865255
## [268,]          -0.36858985           0.2457504
## [269,]           0.56238452           1.6470422
## [270,]           2.42433326           1.9273006
## [271,]           0.56238452           2.4878173
## [272,]           2.11400847           1.3667838
## [273,]          -0.67891464          -0.0345080
## [274,]          -0.67891464          -0.8752831
## [275,]          -0.36858985          -1.1555415
## [276,]          -0.67891464          -0.5950247
## [277,]           1.18303410          -0.5950247
## [278,]           1.49335889           0.8062671
## [279,]          -0.36858985          -0.0345080
## [280,]          -0.36858985           0.5260087
## [281,]          -0.36858985          -0.3147664
## [282,]           2.73465805           0.5260087
## [283,]          -0.67891464           1.3667838
## [284,]          -0.67891464           1.0865255
## [285,]           0.25205973          -0.3147664
## [286,]           0.87270931           0.8062671
## [287,]          -0.67891464          -1.1555415
## [288,]          -0.36858985          -0.5950247
## [289,]          -0.67891464          -0.5950247
## [290,]          -0.67891464          -0.5950247
## [291,]          -0.36858985          -0.5950247
## [292,]           1.49335889           0.8062671
## [293,]          -0.05826506          -0.5950247
## [294,]           1.49335889          -0.0345080
## [295,]          -0.36858985          -0.5950247
## [296,]           0.56238452           1.0865255
## [297,]          -0.67891464          -1.1555415
## [298,]           1.18303410           1.3667838
## [299,]          -0.67891464          -1.1555415
## [300,]          -0.36858985          -0.5950247
## [301,]          -0.67891464          -0.0345080
## [302,]          -0.67891464          -1.1555415
```

```
## [303,]              -0.67891464              0.8062671
## [304,]               1.49335889              0.8062671
## [305,]               0.25205973              0.8062671
## [306,]              -0.67891464              1.0865255
## [307,]               0.56238452              1.0865255
## [308,]              -0.67891464             -0.8752831
## [309,]              -0.36858985             -0.5950247
## [310,]              -0.67891464             -0.3147664
## [311,]              -0.36858985             -1.1555415
## [312,]               2.11400847              1.9273006
## [313,]              -0.05826506             -0.5950247
## [314,]               1.80368368              1.0865255
## [315,]               2.73465805              1.6470422
## [316,]              -0.36858985              0.8062671
## [317,]              -0.67891464              0.8062671
## [318,]               1.49335889              0.8062671
## [319,]              -0.36858985             -0.5950247
## [320,]               2.73465805              1.3667838
## [321,]              -0.67891464             -0.0345080
## [322,]              -0.36858985              0.8062671
## [323,]              -0.67891464              0.8062671
## [324,]              -0.05826506             -0.5950247
## [325,]              -0.36858985              1.3667838
## [326,]               1.80368368              1.3667838
## [327,]               3.35530763             -0.3147664
## [328,]              -0.67891464             -1.1555415
## [329,]              -0.67891464             -0.8752831
## [330,]              -0.36858985             -0.8752831
## [331,]              -0.67891464             -1.1555415
## [332,]              -0.36858985             -0.0345080
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## [334,]              -0.67891464             -1.1555415
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## [336,]              -0.67891464             -0.5950247
## [337,]              -0.67891464              0.8062671
## [338,]              -0.05826506             -0.5950247
## [339,]              -0.36858985             -0.5950247
## [340,]              -0.67891464              0.8062671
## [341,]              -0.67891464             -0.0345080
## [342,]              -0.05826506              1.3667838
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## [344,]              -0.36858985              0.8062671
## [345,]              -0.67891464              2.4878173
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## [347,]              -0.36858985             -0.5950247
## [348,]              -0.67891464             -1.1555415
## [349,]              -0.67891464             -1.1555415
## [350,]              -0.67891464             -0.5950247
## [351,]              -0.36858985             -1.1555415
## [352,]              -0.67891464              0.8062671
## [353,]              -0.67891464             -1.1555415
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## [355,]              -0.05826506             -0.5950247
## [356,]               1.49335889              0.8062671
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## [359,]            -0.67891464          -1.1555415
## [360,]            -0.36858985           2.2075589
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## [362,]            -0.36858985           0.8062671
## [363,]            -0.05826506          -0.5950247
## [364,]            -0.67891464          -1.1555415
## [365,]            -0.67891464          -0.3147664
## [366,]            -0.67891464          -1.1555415
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## [368,]            -0.36858985          -0.3147664
## [369,]            -0.36858985          -1.1555415
## [370,]            -0.05826506          -0.5950247
## [371,]            -0.67891464          -1.1555415
## [372,]            -0.36858985          -0.5950247
## [373,]            -0.67891464          -1.1555415
## [374,]            -0.67891464          -0.0345080
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## [376,]            -0.67891464          -1.1555415
## [377,]            -0.67891464           0.8062671
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## [379,]            -0.67891464          -0.0345080
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## [383,]            -0.67891464          -0.0345080
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## [389,]            -0.36858985          -0.5950247
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## [394,]            -0.36858985          -0.5950247
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## [397,]            -0.67891464          -0.5950247
## [398,]            -0.36858985          -0.3147664
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## [401,]            -0.36858985           0.5260087
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## [403,]             0.56238452          -0.0345080
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## [405,]            -0.36858985           1.0865255
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## [407,]            -0.67891464          -0.0345080
## [408,]            -0.67891464          -0.5950247
## [409,]            -0.36858985          -0.0345080
## [410,]            -0.67891464          -0.5950247
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499

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## [416,]             -0.36858985              -1.1555415
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## [419,]             -0.67891464              -0.5950247
## [420,]             -0.36858985              -0.0345080
## [421,]             -0.67891464               0.8062671
## [422,]             -0.36858985              -0.8752831
## [423,]             -0.67891464              -1.1555415
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## [425,]             -0.67891464              -1.1555415
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## [432,]             -0.67891464              -1.1555415
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## [435,]             -0.67891464               1.0865255
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## [438,]             -0.36858985              -0.5950247
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## [450,]             -0.67891464               0.8062671
## [451,]             -0.67891464               0.2457504
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## [454,]             -0.36858985              -1.1555415
## [455,]             -0.36858985              -0.5950247
## [456,]             -0.67891464               0.2457504
## [457,]             -0.67891464              -0.8752831
## [458,]             -0.67891464              -1.1555415
## [459,]             -0.67891464              -0.8752831
## [460,]             -0.67891464               0.8062671
## [461,]             -0.67891464              -1.1555415
## [462,]             -0.67891464              -0.3147664
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## [464,]             -0.67891464              -1.1555415
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## [470,]         -0.36858985        -0.5950247
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## [474,]         -0.67891464         1.3667838
## [475,]         -0.36858985        -0.0345080
## [476,]         -0.36858985        -0.0345080
## [477,]         -0.67891464        -1.1555415
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## [479,]         -0.67891464         0.5260087
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## [481,]         -0.67891464        -1.1555415
## [482,]         -0.36858985        -0.3147664
## [483,]         -0.36858985        -0.5950247
## [484,]         -0.67891464        -0.5950247
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## [486,]         -0.67891464        -0.3147664
## [487,]         -0.36858985        -1.1555415
## [488,]         -0.67891464        -1.1555415
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## [491,]         -0.67891464        -1.1555415
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## [494,]         -0.67891464        -0.5950247
## [495,]         -0.67891464         0.5260087
## [496,]         -0.67891464        -0.5950247
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## [498,]         -0.67891464        -0.8752831
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## [500,]         -0.36858985        -0.5950247
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## [510,]          0.56238452         0.8062671
## [511,]          1.49335889        -0.8752831
## [512,]         -0.67891464        -0.5950247
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## [515,]          2.11400847         0.8062671
## [516,]         -0.67891464        -1.1555415
## [517,]         -0.67891464        -0.5950247
## [518,]         -0.36858985        -0.5950247
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## [527,]              2.73465805              1.6470422
## [528,]             -0.67891464              1.0865255
## [529,]             -0.36858985             -0.3147664
## [530,]             -0.36858985              1.0865255
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## [535,]             -0.36858985             -0.3147664
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## [537,]             -0.05826506             -0.5950247
## [538,]             -0.36858985              0.8062671
## [539,]             -0.05826506              1.6470422
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## [549,]             -0.05826506             -0.5950247
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## [557,]             -0.05826506             -0.5950247
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## [571,]             -0.36858985             -0.5950247
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## [576,]            -0.36858985              -0.0345080
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## [587,]            -0.67891464              -1.1555415
## [588,]            -0.36858985              -0.0345080
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## [640,]        -0.67891464        -0.5950247
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## [644,]        -0.36858985        -0.3147664
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## [662,]        -0.67891464        -1.1555415
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## [674,]        -0.67891464        -0.5950247
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## [677,]        -0.67891464         0.8062671
## [678,]        -0.36858985         0.8062671
## [679,]        -0.67891464        -1.1555415
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## [684,]            -0.67891464            -1.1555415
## [685,]            -0.67891464            -1.1555415
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## [690,]            -0.67891464            -1.1555415
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## [693,]             1.18303410            -0.3147664
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## [695,]            -0.36858985            -0.0345080
## [696,]             2.73465805             0.8062671
## [697,]            -0.67891464             1.0865255
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## [704,]            -0.36858985            -0.3147664
## [705,]            -0.67891464             1.0865255
## [706,]            -0.67891464             0.8062671
## [707,]            -0.67891464            -1.1555415
## [708,]            -0.05826506             0.8062671
## [709,]            -0.67891464             0.8062671
## [710,]            -0.36858985            -0.5950247
## [711,]             1.18303410            -1.1555415
## [712,]            -0.67891464            -1.1555415
## [713,]            -0.67891464            -0.5950247
## [714,]            -0.67891464            -0.5950247
## [715,]            -0.36858985            -0.3147664
## [716,]            -0.36858985            -0.5950247
## [717,]            -0.67891464             1.9273006
## [718,]            -0.05826506            -0.5950247
## [719,]            -0.67891464             1.0865255
## [720,]            -0.67891464             0.8062671
## [721,]            -0.67891464            -0.8752831
## [722,]            -0.36858985             0.2457504
## [723,]            -0.67891464            -0.5950247
## [724,]            -0.67891464             0.8062671
## [725,]             0.25205973            -0.5950247
## [726,]            -0.67891464            -0.5950247
## [727,]            -0.67891464            -0.3147664
## [728,]            -0.67891464            -1.1555415
## [729,]            -0.67891464             1.0865255
## [730,]             2.42433326            -0.8752831
## [731,]            -0.36858985             0.8062671
## [732,]            -0.67891464            -1.1555415
## [733,]            -0.36858985            -0.5950247
## [734,]            -0.36858985            -0.3147664
```

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## [735,]            -0.36858985            -0.8752831
## [736,]            -0.05826506            -0.5950247
## [737,]             0.56238452             1.0865255
## [738,]            -0.05826506            -0.8752831
## [739,]             2.73465805             1.0865255
## [740,]            -0.05826506            -0.5950247
## [741,]            -0.36858985            -0.5950247
## [742,]            -0.67891464            -1.1555415
## [743,]            -0.67891464            -1.1555415
## [744,]             0.56238452            -0.3147664
## [745,]            -0.67891464            -1.1555415
## [746,]             1.18303410             0.8062671
## [747,]             0.87270931             1.6470422
## [748,]            -0.67891464            -1.1555415
## [749,]            -0.05826506            -0.5950247
## [750,]             1.18303410             1.3667838
## [751,]             2.73465805             1.9273006
## [752,]            -0.67891464             2.4878173
## [753,]             3.97595721             2.7680757
## [754,]            -0.05826506             1.0865255
## [755,]            -0.05826506            -0.5950247
## [756,]            -0.36858985            -0.8752831
## [757,]             1.49335889             0.8062671
## [758,]            -0.67891464             1.3667838
## [759,]            -0.67891464            -0.0345080
## [760,]            -0.67891464            -0.0345080
## [761,]             1.18303410             2.2075589
## [762,]            -0.67891464            -1.1555415
## [763,]            -0.36858985            -0.5950247
## [764,]            -0.67891464            -1.1555415
## [765,]            -0.67891464            -1.1555415
## [766,]            -0.05826506            -0.5950247
## [767,]             1.49335889             0.8062671
## [768,]            -0.67891464            -0.8752831
## [769,]             1.49335889             0.2457504
## [770,]            -0.36858985            -0.3147664
## [771,]            -0.05826506            -0.5950247
## [772,]             1.49335889            -1.1555415
## [773,]            -0.67891464            -0.3147664
## [774,]             1.49335889             1.0865255
## [775,]             1.18303410            -0.5950247
## [776,]            -0.67891464            -1.1555415
## [777,]            -0.67891464            -0.5950247
## [778,]            -0.36858985            -1.1555415
## [779,]            -0.36858985             0.8062671
## [780,]            -0.05826506             0.8062671
## [781,]            -0.36858985             1.3667838
## [782,]            -0.36858985            -0.3147664
## [783,]            -0.67891464            -0.5950247
## [784,]            -0.67891464             1.0865255
## [785,]            -0.36858985             1.3667838
## [786,]             2.73465805            -0.8752831
## [787,]            -0.36858985            -0.5950247
## [788,]            -0.36858985            -0.5950247
```

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## [789,]             -0.36858985           0.8062671
## [790,]              0.25205973           0.5260087
## [791,]             -0.36858985          -0.5950247
## [792,]              0.56238452           0.8062671
## [793,]              0.25205973           1.0865255
## [794,]             -0.05826506          -0.5950247
## [795,]             -0.67891464          -0.0345080
## [796,]             -0.67891464          -1.1555415
## [797,]              0.87270931           0.5260087
## [798,]             -0.67891464          -1.1555415
## [799,]             -0.05826506          -0.5950247
## [800,]              3.35530763           0.8062671
## [801,]             -0.67891464          -1.1555415
## [802,]             -0.67891464          -1.1555415
## [803,]             -0.67891464          -0.5950247
## [804,]             -0.67891464          -1.1555415
## [805,]             -0.05826506          -0.8752831
## [806,]              0.56238452           2.2075589
## [807,]              0.56238452          -1.1555415
## [808,]             -0.05826506           0.8062671
## [809,]             -0.36858985           0.8062671
## [810,]             -0.36858985           0.8062671
## [811,]              0.56238452           1.3667838
## [812,]             -0.67891464          -1.1555415
## [813,]             -0.67891464          -0.8752831
## [814,]              2.73465805           0.2457504
## [815,]              0.56238452           1.3667838
## [816,]             -0.05826506          -0.5950247
## [817,]             -0.67891464          -0.3147664
## [818,]             -0.67891464           1.3667838
## [819,]             -0.05826506          -0.5950247
## [820,]             -0.67891464          -0.0345080
## [821,]             -0.67891464          -0.5950247
## [822,]             -0.05826506          -0.3147664
## [823,]             -0.67891464          -0.5950247
## [824,]             -0.36858985          -0.8752831
## [825,]             -0.67891464          -1.1555415
## [826,]             -0.36858985          -0.5950247
## [827,]              0.87270931          -1.1555415
## [828,]             -0.67891464          -0.5950247
## [829,]             -0.67891464          -1.1555415
## [830,]             -0.67891464          -0.3147664
## [831,]             -0.67891464          -1.1555415
## [832,]             -0.05826506          -0.5950247
## [833,]             -0.36858985          -0.3147664
## [834,]             -0.05826506          -0.5950247
## [835,]             -0.36858985          -0.3147664
## [836,]             -0.36858985          -0.0345080
## [837,]              0.25205973           1.6470422
## [838,]             -0.05826506           2.4878173
## [839,]              3.35530763           2.7680757
## [840,]             -0.36858985           0.2457504
## [841,]             -0.36858985           0.8062671
## [842,]             -0.36858985          -0.5950247
```

```
## [843,]        -0.67891464        -1.1555415
## [844,]        -0.67891464         0.8062671
## [845,]        -0.36858985        -0.0345080
## [846,]        -0.67891464        -1.1555415
## [847,]         1.18303410        -0.0345080
## [848,]         0.56238452         1.3667838
## [849,]        -0.05826506        -0.5950247
## [850,]        -0.36858985        -0.3147664
## [851,]        -0.67891464        -1.1555415
## [852,]         0.56238452        -0.5950247
## [853,]        -0.67891464         1.0865255
## [854,]        -0.67891464        -1.1555415
## [855,]        -0.67891464        -0.5950247
## [856,]         0.25205973         1.9273006
## [857,]        -0.36858985        -0.5950247
## [858,]        -0.67891464        -0.5950247
## [859,]         0.56238452         0.8062671
## [860,]        -0.36858985        -0.3147664
## [861,]        -0.67891464        -1.1555415
## [862,]         3.97595721         1.3667838
## [863,]        -0.67891464        -1.1555415
## [864,]        -0.36858985        -0.0345080
## [865,]        -0.67891464        -1.1555415
## [866,]        -0.67891464        -0.3147664
## [867,]        -0.67891464        -1.1555415
## [868,]        -0.05826506        -0.5950247
## [869,]         0.25205973        -0.3147664
## [870,]        -0.67891464        -0.3147664
## [871,]        -0.36858985         0.8062671
## [872,]        -0.67891464        -1.1555415
## [873,]        -0.67891464        -0.8752831
## [874,]        -0.36858985         0.8062671
## [875,]         1.80368368         1.3667838
## [876,]         3.35530763         3.6088508
## [877,]        -0.05826506        -0.5950247
## [878,]        -0.36858985        -0.0345080
## [879,]        -0.67891464        -0.3147664
## [880,]        -0.36858985         1.3667838
## [881,]        -0.05826506        -0.5950247
## [882,]        -0.67891464         0.8062671
## [883,]         1.49335889         0.8062671
## [884,]         0.56238452         1.6470422
## [885,]        -0.36858985        -0.3147664
## [886,]        -0.36858985        -0.8752831
## [887,]         0.87270931         0.8062671
## [888,]        -0.67891464        -1.1555415
## [889,]         0.56238452         2.2075589
## [890,]         1.18303410         1.0865255
## [891,]        -0.36858985        -0.0345080
## [892,]         1.49335889         0.8062671
## [893,]        -0.67891464        -1.1555415
## [894,]        -0.36858985        -0.5950247
## [895,]        -0.67891464         1.3667838
## [896,]        -0.67891464        -0.8752831
```

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## [897,]              -0.36858985               1.0865255
## [898,]              -0.67891464               0.2457504
## [899,]              -0.67891464               0.8062671
## [900,]              -0.67891464              -1.1555415
## [901,]              -0.67891464               0.8062671
## [902,]              -0.67891464              -1.1555415
## [903,]              -0.67891464              -0.3147664
## [904,]              -0.36858985              -1.1555415
## [905,]              -0.67891464              -1.1555415
## [906,]              -0.36858985               0.8062671
## [907,]              -0.67891464              -1.1555415
## [908,]               0.25205973               1.6470422
## [909,]              -0.67891464               1.0865255
## [910,]              -0.67891464              -0.8752831
## [911,]              -0.67891464              -0.8752831
## [912,]              -0.36858985              -1.1555415
## [913,]              -0.05826506              -0.5950247
## [914,]              -0.36858985               1.9273006
## [915,]               3.97595721              -1.1555415
## [916,]              -0.05826506              -0.5950247
## [917,]              -0.67891464               1.0865255
## [918,]              -0.67891464              -0.5950247
## [919,]               2.73465805               1.6470422
## [920,]               0.87270931              -0.0345080
## [921,]               0.87270931               1.6470422
## [922,]              -0.67891464              -0.5950247
## [923,]               3.66563242               2.4878173
## [924,]              -0.36858985               1.0865255
## [925,]              -0.05826506              -0.5950247
## [926,]              -0.67891464              -1.1555415
## [927,]               3.97595721               3.6088508
## [928,]               0.87270931               2.2075589
## [929,]              -0.67891464               0.2457504
## [930,]              -0.05826506              -0.5950247
## [931,]               1.49335889               0.8062671
## [932,]              -0.36858985               0.8062671
## [933,]               1.49335889               0.8062671
## [934,]              -0.36858985              -0.5950247
## [935,]              -0.05826506              -0.8752831
## [936,]              -0.67891464               1.0865255
## [937,]              -0.67891464              -1.1555415
## [938,]               3.97595721              -0.5950247
## [939,]              -0.05826506              -0.5950247
## [940,]              -0.36858985              -0.8752831
## [941,]              -0.67891464              -0.3147664
## [942,]               1.18303410               0.8062671
## [943,]              -0.36858985               0.8062671
## [944,]               0.87270931               0.8062671
## [945,]               1.49335889               0.2457504
## [946,]              -0.36858985              -0.5950247
## [947,]              -0.36858985              -1.1555415
## [948,]               1.49335889               0.8062671
## [949,]              -0.67891464               1.0865255
## [950,]              -0.36858985               0.8062671
```

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##  [951,]             2.11400847              0.5260087
##  [952,]             2.73465805              1.3667838
##  [953,]            -0.05826506             -0.5950247
##  [954,]            -0.36858985             -0.5950247
##  [955,]            -0.05826506              1.6470422
##  [956,]             2.11400847              1.9273006
##  [957,]             1.49335889              0.8062671
##  [958,]            -0.67891464             -1.1555415
##  [959,]            -0.36858985              0.5260087
##  [960,]             1.80368368              1.0865255
##  [961,]            -0.36858985              0.8062671
##  [962,]            -0.36858985             -0.8752831
##  [963,]            -0.67891464              1.6470422
##  [964,]            -0.36858985              0.8062671
##  [965,]             2.11400847              0.5260087
##  [966,]            -0.36858985             -0.5950247
##  [967,]             0.87270931              1.3667838
##  [968,]            -0.67891464             -0.3147664
##  [969,]             1.18303410              2.4878173
##  [970,]            -0.67891464              1.0865255
##  [971,]            -0.67891464             -1.1555415
##  [972,]            -0.67891464             -0.3147664
##  [973,]            -0.67891464             -1.1555415
##  [974,]            -0.67891464             -1.1555415
##  [975,]            -0.67891464             -1.1555415
##  [976,]             0.25205973              1.0865255
##  [977,]             3.97595721              1.3667838
##  [978,]            -0.67891464             -1.1555415
##  [979,]             2.73465805              1.0865255
##  [980,]             1.49335889              0.8062671
##  [981,]            -0.67891464             -1.1555415
##  [982,]             0.25205973             -0.5950247
##  [983,]            -0.67891464             -0.3147664
##  [984,]             0.56238452              1.9273006
##  [985,]            -0.67891464             -0.0345080
##  [986,]             1.18303410              0.8062671
##  [987,]            -0.36858985             -0.0345080
##  [988,]             0.25205973             -0.5950247
##  [989,]             0.25205973             -0.3147664
##  [990,]            -0.36858985             -0.3147664
##  [991,]            -0.36858985             -0.5950247
##  [992,]            -0.36858985             -0.5950247
##  [993,]            -0.67891464              0.2457504
##  [994,]            -0.36858985             -0.5950247
##  [995,]            -0.67891464             -0.5950247
##  [996,]            -0.36858985              1.0865255
##  [997,]             0.56238452             -0.0345080
##  [998,]             1.49335889              0.8062671
##  [999,]            -0.36858985             -0.8752831
## [1000,]            -0.67891464              1.3667838
## [1001,]            -0.67891464             -0.0345080
## [1002,]            -0.67891464             -0.5950247
## [1003,]            -0.05826506             -0.5950247
## [1004,]            -0.67891464             -0.5950247
```

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## [1005,]          -0.67891464           0.8062671
## [1006,]          -0.67891464           1.3667838
## [1007,]          -0.36858985          -0.3147664
## [1008,]           1.49335889           0.8062671
## [1009,]           3.04498284           0.8062671
## [1010,]          -0.36858985           0.2457504
## [1011,]          -0.67891464          -1.1555415
## [1012,]          -0.67891464          -0.8752831
## [1013,]          -0.67891464          -1.1555415
## [1014,]          -0.67891464          -0.5950247
## [1015,]          -0.36858985          -1.1555415
## [1016,]          -0.36858985          -0.3147664
## [1017,]          -0.67891464          -1.1555415
## [1018,]          -0.36858985          -0.0345080
## [1019,]          -0.36858985           1.0865255
## [1020,]          -0.67891464          -0.5950247
## [1021,]          -0.36858985          -0.5950247
## [1022,]          -0.05826506          -0.5950247
## [1023,]          -0.36858985          -0.3147664
## [1024,]          -0.36858985          -1.1555415
## [1025,]           0.87270931           0.5260087
## [1026,]          -0.67891464          -0.3147664
## [1027,]          -0.67891464          -0.3147664
## [1028,]          -0.67891464          -0.5950247
## [1029,]          -0.67891464          -0.3147664
## [1030,]          -0.67891464           0.8062671
## [1031,]           2.11400847           1.3667838
## [1032,]           0.56238452          -0.3147664
## [1033,]          -0.67891464          -1.1555415
## [1034,]           0.56238452           0.8062671
## [1035,]          -0.67891464           0.8062671
## [1036,]          -0.67891464          -0.5950247
## [1037,]          -0.05826506          -0.5950247
## [1038,]          -0.36858985          -0.5950247
## [1039,]          -0.05826506          -0.5950247
## [1040,]          -0.05826506          -0.5950247
## [1041,]           0.56238452           1.0865255
## [1042,]          -0.36858985          -0.3147664
## [1043,]          -0.67891464          -0.3147664
## [1044,]           1.80368368           1.0865255
## [1045,]          -0.36858985          -0.5950247
## [1046,]          -0.36858985          -0.5950247
## [1047,]          -0.36858985          -0.3147664
## [1048,]          -0.67891464          -0.3147664
## [1049,]           0.25205973           2.2075589
## [1050,]          -0.05826506          -0.5950247
## [1051,]           0.87270931           1.0865255
## [1052,]          -0.67891464          -1.1555415
## [1053,]          -0.67891464          -1.1555415
## [1054,]          -0.05826506           1.0865255
## [1055,]          -0.67891464           0.8062671
## [1056,]           1.18303410           1.3667838
## [1057,]          -0.36858985          -0.5950247
## [1058,]          -0.67891464          -1.1555415
```

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## [1059,]              2.42433326               1.6470422
## [1060,]             -0.67891464              -1.1555415
## [1061,]             -0.67891464              -1.1555415
## [1062,]             -0.67891464              -1.1555415
## [1063,]             -0.05826506              -0.5950247
## [1064,]             -0.67891464              -0.0345080
## [1065,]             -0.36858985              -0.3147664
## [1066,]             -0.36858985              -0.5950247
## [1067,]             -0.67891464              -0.5950247
## [1068,]             -0.36858985              -0.5950247
## [1069,]             -0.67891464              -1.1555415
## [1070,]             -0.67891464              -1.1555415
## [1071,]             -0.36858985              -0.3147664
## [1072,]             -0.36858985              -0.5950247
## [1073,]             -0.67891464              -0.5950247
## [1074,]             -0.36858985               0.8062671
## [1075,]             -0.67891464              -1.1555415
## [1076,]             -0.67891464              -1.1555415
## [1077,]             -0.36858985               2.2075589
## [1078,]             -0.67891464               0.8062671
## [1079,]              3.66563242               3.6088508
## [1080,]             -0.05826506              -0.5950247
## [1081,]              0.87270931              -0.8752831
## [1082,]              0.25205973              -0.3147664
## [1083,]             -0.36858985              -0.5950247
## [1084,]             -0.36858985              -1.1555415
## [1085,]              1.80368368               0.5260087
## [1086,]              1.49335889               0.8062671
## [1087,]              3.35530763               1.3667838
## [1088,]              0.87270931               0.8062671
## [1089,]             -0.67891464              -1.1555415
## [1090,]              0.25205973               0.8062671
## [1091,]             -0.67891464               0.8062671
## [1092,]             -0.67891464              -0.5950247
## [1093,]             -0.67891464              -0.3147664
## [1094,]              3.35530763               1.3667838
## [1095,]              1.49335889              -0.8752831
## [1096,]              0.87270931               0.8062671
## [1097,]              1.49335889               0.8062671
## [1098,]             -0.67891464              -1.1555415
## [1099,]             -0.05826506              -0.5950247
## [1100,]              1.49335889               0.8062671
## [1101,]              0.56238452              -0.5950247
## [1102,]             -0.05826506               0.2457504
## [1103,]             -0.36858985              -0.5950247
## [1104,]              1.49335889               0.8062671
## [1105,]             -0.67891464              -1.1555415
## [1106,]             -0.05826506              -0.5950247
## [1107,]              1.18303410               0.8062671
## [1108,]             -0.36858985              -0.5950247
## [1109,]             -0.36858985              -0.5950247
## [1110,]             -0.36858985              -0.3147664
## [1111,]             -0.67891464              -1.1555415
## [1112,]             -0.36858985               1.3667838
```

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## [1113,]           -0.36858985              -0.0345080
## [1114,]           -0.36858985              -0.5950247
## [1115,]            1.49335889               0.5260087
## [1116,]           -0.67891464              -1.1555415
## [1117,]           -0.05826506               2.4878173
## [1118,]           -0.05826506              -0.8752831
## [1119,]           -0.67891464              -1.1555415
## [1120,]            1.49335889               0.8062671
## [1121,]           -0.36858985              -0.5950247
## [1122,]           -0.67891464              -1.1555415
## [1123,]           -0.36858985               0.2457504
## [1124,]           -0.67891464              -0.0345080
## [1125,]            1.49335889               0.5260087
## [1126,]           -0.36858985              -0.3147664
## [1127,]           -0.67891464              -1.1555415
## [1128,]           -0.05826506              -0.5950247
## [1129,]           -0.67891464              -0.5950247
## [1130,]           -0.67891464              -0.8752831
## [1131,]            1.18303410               1.0865255
## [1132,]            1.49335889               0.8062671
## [1133,]           -0.36858985              -0.5950247
## [1134,]           -0.67891464              -0.5950247
## [1135,]           -0.67891464              -0.8752831
## [1136,]           -0.67891464               2.2075589
## [1137,]           -0.67891464              -1.1555415
## [1138,]           -0.36858985              -0.3147664
## [1139,]            3.04498284               2.4878173
## [1140,]           -0.67891464              -0.5950247
## [1141,]           -0.36858985               1.6470422
## [1142,]           -0.36858985              -0.8752831
## [1143,]           -0.36858985              -0.0345080
## [1144,]            0.56238452               0.2457504
## [1145,]           -0.67891464              -0.3147664
## [1146,]           -0.36858985              -0.8752831
## [1147,]            1.49335889              -0.5950247
## [1148,]           -0.36858985              -0.0345080
## [1149,]            1.49335889               0.8062671
## [1150,]           -0.67891464               0.8062671
## [1151,]           -0.36858985               1.6470422
## [1152,]           -0.67891464              -1.1555415
## [1153,]           -0.05826506              -0.5950247
## [1154,]           -0.67891464              -1.1555415
## [1155,]           -0.36858985              -1.1555415
## [1156,]           -0.67891464               0.8062671
## [1157,]            3.66563242               2.2075589
## [1158,]           -0.05826506               1.3667838
## [1159,]           -0.67891464              -0.5950247
## [1160,]            0.25205973               1.0865255
## [1161,]            0.25205973               1.3667838
## [1162,]           -0.67891464              -0.5950247
## [1163,]            1.18303410              -1.1555415
## [1164,]            1.49335889               0.8062671
## [1165,]            0.25205973              -0.3147664
## [1166,]           -0.67891464              -0.5950247
```

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## [1167,]            -0.05826506            -0.5950247
## [1168,]            -0.05826506            -0.5950247
## [1169,]            -0.36858985            -0.3147664
## [1170,]            -0.67891464            -0.5950247
## [1171,]            -0.36858985            -0.5950247
## [1172,]            -0.67891464            -0.3147664
## [1173,]            -0.36858985            -0.0345080
## [1174,]            -0.67891464            -0.5950247
## [1175,]            -0.67891464             0.8062671
## [1176,]            -0.36858985            -1.1555415
## [1177,]            -0.36858985            -0.5950247
## [1178,]            -0.36858985             1.9273006
## [1179,]            -0.05826506            -0.5950247
## [1180,]             1.49335889             1.3667838
## [1181,]            -0.36858985            -0.3147664
## [1182,]            -0.05826506             2.2075589
## [1183,]            -0.36858985            -0.5950247
## [1184,]            -0.67891464            -0.0345080
## [1185,]             0.56238452             0.8062671
## [1186,]             1.18303410             1.9273006
## [1187,]             1.18303410             0.8062671
## [1188,]            -0.05826506             1.3667838
## [1189,]            -0.67891464             1.3667838
## [1190,]            -0.67891464            -0.0345080
## [1191,]            -0.36858985             0.5260087
## [1192,]            -0.67891464            -0.5950247
## [1193,]            -0.05826506            -0.5950247
## [1194,]             0.25205973            -0.3147664
## [1195,]            -0.36858985            -0.5950247
## [1196,]            -0.67891464            -1.1555415
## [1197,]            -0.67891464            -0.5950247
## [1198,]            -0.67891464            -0.5950247
## [1199,]            -0.36858985            -0.5950247
## [1200,]            -0.67891464            -0.5950247
## [1201,]            -0.05826506            -0.5950247
## [1202,]            -0.36858985            -0.5950247
## [1203,]            -0.67891464            -1.1555415
## [1204,]            -0.36858985            -0.5950247
## [1205,]             1.49335889             0.8062671
## [1206,]            -0.67891464            -1.1555415
## [1207,]             0.87270931             0.8062671
## [1208,]            -0.36858985            -0.5950247
## [1209,]             0.56238452             2.4878173
## [1210,]            -0.67891464            -1.1555415
## [1211,]            -0.05826506             2.4878173
## [1212,]            -0.36858985            -0.3147664
## [1213,]             1.80368368             0.8062671
## [1214,]            -0.67891464            -0.5950247
## [1215,]             1.18303410             0.8062671
## [1216,]            -0.36858985            -0.0345080
## [1217,]             1.80368368             1.0865255
## [1218,]            -0.67891464            -0.0345080
## [1219,]             1.80368368             0.8062671
## [1220,]            -0.36858985            -0.5950247
```

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## [1221,]          1.18303410          0.8062671
## [1222,]          3.66563242         -0.0345080
## [1223,]         -0.67891464         -1.1555415
## [1224,]          3.66563242          1.6470422
## [1225,]         -0.67891464         -0.5950247
## [1226,]          1.80368368          0.5260087
## [1227,]         -0.36858985         -0.3147664
## [1228,]         -0.67891464         -0.3147664
## [1229,]         -0.36858985         -0.5950247
## [1230,]         -0.67891464         -1.1555415
## [1231,]         -0.36858985         -0.5950247
## [1232,]         -0.67891464          1.3667838
## [1233,]         -0.67891464          0.8062671
## [1234,]         -0.67891464          1.0865255
## [1235,]         -0.67891464         -1.1555415
## [1236,]         -0.67891464         -0.3147664
## [1237,]         -0.05826506         -0.5950247
## [1238,]         -0.67891464         -1.1555415
## [1239,]         -0.36858985         -0.5950247
## [1240,]         -0.36858985         -0.0345080
## [1241,]          0.87270931          1.0865255
## [1242,]         -0.67891464         -0.5950247
## [1243,]          3.04498284          1.0865255
## [1244,]         -0.67891464         -0.3147664
## [1245,]         -0.67891464          0.8062671
## [1246,]         -0.05826506         -0.8752831
## [1247,]         -0.36858985         -0.5950247
## [1248,]         -0.67891464         -0.5950247
## [1249,]         -0.36858985         -0.0345080
## [1250,]         -0.05826506         -0.5950247
## [1251,]         -0.67891464         -0.5950247
## [1252,]         -0.36858985          0.8062671
## [1253,]         -0.36858985         -0.5950247
## [1254,]         -0.36858985          0.8062671
## [1255,]         -0.67891464         -0.0345080
## [1256,]         -0.67891464         -1.1555415
## [1257,]         -0.67891464          0.2457504
## [1258,]         -0.67891464         -1.1555415
## [1259,]         -0.67891464         -1.1555415
## [1260,]         -0.36858985          0.8062671
## [1261,]         -0.67891464          0.8062671
## [1262,]         -0.36858985         -1.1555415
## [1263,]         -0.67891464         -1.1555415
## [1264,]         -0.67891464         -0.0345080
## [1265,]         -0.67891464         -1.1555415
## [1266,]         -0.36858985          0.8062671
## [1267,]         -0.67891464         -0.0345080
## [1268,]         -0.67891464          0.8062671
## [1269,]         -0.67891464         -0.5950247
## [1270,]         -0.36858985          1.0865255
## [1271,]         -0.05826506         -0.5950247
## [1272,]         -0.36858985         -1.1555415
## [1273,]         -0.67891464         -0.0345080
## [1274,]         -0.67891464         -1.1555415
```

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## [1275,]      0.87270931      0.8062671
## [1276,]     -0.05826506     -0.5950247
## [1277,]     -0.67891464     -0.3147664
## [1278,]     -0.05826506     -0.5950247
## [1279,]      0.87270931      0.8062671
## [1280,]     -0.05826506     -0.3147664
## [1281,]      0.56238452      0.8062671
## [1282,]      1.49335889      0.8062671
## [1283,]      1.49335889      0.5260087
## [1284,]     -0.67891464     -0.3147664
## [1285,]     -0.05826506     -0.5950247
## [1286,]     -0.05826506     -0.5950247
## [1287,]     -0.67891464     -0.5950247
## [1288,]     -0.67891464     -1.1555415
## [1289,]     -0.36858985      0.8062671
## [1290,]      0.25205973      1.0865255
## [1291,]     -0.67891464      0.8062671
## [1292,]     -0.67891464      1.0865255
## [1293,]     -0.05826506     -0.5950247
## [1294,]     -0.36858985     -0.5950247
## [1295,]     -0.36858985     -0.5950247
## [1296,]      3.35530763      0.2457504
## [1297,]     -0.67891464     -0.5950247
## [1298,]     -0.36858985     -0.0345080
## [1299,]      0.25205973      0.8062671
## [1300,]     -0.67891464     -0.3147664
## [1301,]      0.56238452      1.0865255
## [1302,]      3.66563242      2.7680757
## [1303,]     -0.67891464     -0.3147664
## [1304,]      3.66563242      1.6470422
## [1305,]      1.49335889      0.8062671
## [1306,]     -0.36858985      0.8062671
## [1307,]     -0.05826506     -0.5950247
## [1308,]     -0.36858985     -0.5950247
## [1309,]     -0.67891464     -0.3147664
## [1310,]     -0.36858985     -0.5950247
## [1311,]     -0.05826506     -0.5950247
## [1312,]     -0.67891464     -1.1555415
## [1313,]     -0.67891464     -1.1555415
## [1314,]     -0.05826506     -1.1555415
## [1315,]      0.87270931      0.8062671
## [1316,]     -0.67891464     -1.1555415
## [1317,]      1.49335889      0.8062671
## [1318,]     -0.67891464     -0.5950247
## [1319,]      0.25205973      1.6470422
## [1320,]     -0.67891464     -1.1555415
## [1321,]      0.25205973     -0.3147664
## [1322,]     -0.05826506     -1.1555415
## [1323,]      0.56238452      0.8062671
## [1324,]     -0.05826506     -0.5950247
## [1325,]     -0.36858985      0.5260087
## [1326,]     -0.67891464     -1.1555415
## [1327,]     -0.05826506     -0.5950247
## [1328,]     -0.05826506      1.0865255
```

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## [1329,]            0.87270931           1.0865255
## [1330,]           -0.67891464          -1.1555415
## [1331,]            1.18303410           2.7680757
## [1332,]            3.04498284           1.3667838
## [1333,]           -0.36858985          -1.1555415
## [1334,]           -0.67891464           0.8062671
## [1335,]            1.49335889          -0.3147664
## [1336,]           -0.05826506          -0.5950247
## [1337,]           -0.67891464          -0.0345080
## [1338,]           -0.67891464          -1.1555415
## [1339,]           -0.67891464          -1.1555415
## [1340,]           -0.67891464          -1.1555415
## [1341,]           -0.36858985           0.8062671
## [1342,]           -0.67891464          -0.5950247
## [1343,]           -0.36858985          -1.1555415
## [1344,]           -0.36858985          -0.5950247
## [1345,]           -0.67891464          -0.0345080
## [1346,]           -0.67891464          -0.5950247
## [1347,]            0.25205973           1.0865255
## [1348,]           -0.67891464           1.0865255
## [1349,]            2.73465805           3.3285924
## [1350,]           -0.36858985          -1.1555415
## [1351,]           -0.67891464           0.8062671
## [1352,]            0.56238452           0.8062671
## [1353,]           -0.05826506          -0.5950247
## [1354,]            0.25205973          -1.1555415
## [1355,]           -0.36858985          -1.1555415
## [1356,]           -0.36858985          -0.3147664
## [1357,]           -0.36858985          -0.0345080
## [1358,]            0.87270931           0.8062671
## [1359,]           -0.36858985          -0.0345080
## [1360,]           -0.67891464          -0.8752831
## [1361,]           -0.05826506          -0.5950247
## [1362,]            1.49335889           0.8062671
## [1363,]           -0.67891464          -0.3147664
## [1364,]           -0.67891464           1.3667838
## [1365,]           -0.67891464           0.8062671
## [1366,]           -0.67891464          -1.1555415
## [1367,]           -0.36858985          -0.5950247
## [1368,]           -0.36858985          -0.5950247
## [1369,]            1.18303410           1.9273006
## [1370,]           -0.05826506          -0.5950247
## [1371,]           -0.36858985           0.8062671
## [1372,]           -0.67891464          -1.1555415
## [1373,]            1.49335889           1.3667838
## [1374,]           -0.67891464           0.8062671
## [1375,]           -0.67891464          -1.1555415
## [1376,]           -0.67891464          -0.3147664
## [1377,]           -0.67891464          -0.3147664
## [1378,]            0.56238452          -0.3147664
## [1379,]           -0.67891464          -1.1555415
## [1380,]           -0.67891464          -1.1555415
## [1381,]           -0.67891464          -0.0345080
## [1382,]           -0.36858985          -0.0345080
```

```
## [1383,]          -0.05826506          -0.3147664
## [1384,]          -0.67891464          -0.5950247
## [1385,]          -0.05826506          -0.8752831
## [1386,]          -0.36858985          -0.8752831
## [1387,]           1.49335889           0.5260087
## [1388,]          -0.67891464          -0.5950247
## [1389,]          -0.36858985          -0.5950247
## [1390,]           1.80368368           0.8062671
## [1391,]          -0.67891464          -0.3147664
## [1392,]          -0.67891464          -1.1555415
## [1393,]          -0.67891464           1.3667838
## [1394,]          -0.67891464           0.8062671
## [1395,]          -0.67891464          -1.1555415
## [1396,]          -0.67891464           1.0865255
## [1397,]          -0.05826506          -0.5950247
## [1398,]          -0.05826506          -0.3147664
## [1399,]          -0.05826506           1.0865255
## [1400,]          -0.67891464           1.3667838
## [1401,]          -0.36858985          -0.5950247
## [1402,]          -0.36858985          -0.0345080
## [1403,]          -0.67891464          -1.1555415
## [1404,]           2.73465805           1.6470422
## [1405,]           0.25205973           0.8062671
## [1406,]           0.56238452           1.0865255
## [1407,]          -0.36858985          -0.0345080
## [1408,]          -0.36858985          -0.5950247
## [1409,]          -0.36858985          -0.0345080
## [1410,]           2.11400847          -0.0345080
## [1411,]           0.87270931           1.6470422
## [1412,]          -0.36858985          -0.5950247
## [1413,]          -0.36858985           0.8062671
## [1414,]          -0.67891464          -0.5950247
## [1415,]           3.04498284           1.9273006
## [1416,]          -0.67891464          -1.1555415
## [1417,]           0.87270931           1.0865255
## [1418,]          -0.36858985          -0.5950247
## [1419,]           1.49335889           0.8062671
## [1420,]          -0.36858985          -0.5950247
## [1421,]          -0.36858985          -1.1555415
## [1422,]           0.87270931           2.2075589
## [1423,]          -0.05826506          -0.5950247
## [1424,]          -0.36858985          -0.5950247
## [1425,]          -0.67891464           1.0865255
## [1426,]           1.80368368          -0.8752831
## [1427,]           0.56238452          -0.8752831
## [1428,]          -0.67891464          -1.1555415
## [1429,]          -0.05826506          -0.5950247
## [1430,]          -0.36858985           0.8062671
## [1431,]          -0.36858985           1.9273006
## [1432,]           0.87270931           0.8062671
## [1433,]           1.18303410           1.0865255
## [1434,]          -0.67891464          -0.0345080
## [1435,]          -0.67891464          -1.1555415
## [1436,]          -0.36858985          -0.5950247
```

```
## [1437,]              -0.36858985               -0.5950247
## [1438,]              -0.36858985               -0.3147664
## [1439,]              -0.36858985               -1.1555415
## [1440,]               0.25205973               -0.0345080
## [1441,]              -0.67891464               -0.5950247
## [1442,]              -0.36858985                1.3667838
## [1443,]              -0.05826506               -0.5950247
## [1444,]               0.56238452                2.7680757
## [1445,]               2.11400847                1.0865255
## [1446,]              -0.67891464                1.6470422
## [1447,]              -0.36858985                0.8062671
## [1448,]               2.73465805                1.9273006
## [1449,]              -0.67891464               -0.0345080
## [1450,]              -0.36858985               -0.5950247
## [1451,]              -0.36858985                0.8062671
## [1452,]              -0.36858985                1.3667838
## [1453,]              -0.67891464               -0.8752831
## [1454,]              -0.67891464               -1.1555415
## [1455,]              -0.67891464               -0.8752831
## [1456,]              -0.05826506               -0.5950247
## [1457,]              -0.67891464               -0.5950247
## [1458,]              -0.67891464               -0.5950247
## [1459,]              -0.36858985               -0.8752831
## [1460,]              -0.67891464               -0.3147664
## [1461,]              -0.67891464               -0.0345080
## [1462,]              -0.05826506               -1.1555415
## [1463,]               2.11400847                0.5260087
## [1464,]              -0.36858985                0.8062671
## [1465,]              -0.67891464               -1.1555415
## [1466,]              -0.67891464               -0.3147664
## [1467,]              -0.36858985                0.8062671
## [1468,]              -0.67891464               -0.3147664
## [1469,]              -0.67891464                1.0865255
## [1470,]              -0.36858985               -0.5950247
## attr(,"scaled:center")
##                  ï..Age                  Attrition              BusinessTravel
##            3.692381e+01               1.161224e+00                2.607483e+00
##               DailyRate                 Department            DistanceFromHome
##            8.024857e+02               2.260544e+00                9.192517e+00
##               Education             EducationField               EmployeeCount
##            2.912925e+00               3.247619e+00                1.000000e+00
##          EmployeeNumber    EnvironmentSatisfaction                      Gender
##            1.024865e+03               2.721769e+00                1.600000e+00
##               HourlyRate             JobInvolvement                    JobLevel
##            6.589116e+01               2.729932e+00                2.063946e+00
##                 JobRole            JobSatisfaction               MaritalStatus
##            5.458503e+00               2.728571e+00                2.097279e+00
##           MonthlyIncome                MonthlyRate           NumCompaniesWorked
##            6.502931e+03               1.431310e+04                2.693197e+00
##                  Over18                   OverTime            PercentSalaryHike
##            1.000000e+00               1.282993e+00                1.520952e+01
##       PerformanceRating   RelationshipSatisfaction               StandardHours
##            3.153741e+00               2.712245e+00                8.000000e+01
##         StockOptionLevel          TotalWorkingYears          TrainingTimesLastYear
```

```
##              7.938776e-01           1.127959e+01           2.799320e+00
##             WorkLifeBalance          YearsAtCompany        YearsInCurrentRole
##              2.761224e+00           7.008163e+00           4.229252e+00
##  YearsSinceLastPromotion      YearsWithCurrManager
##              2.187755e+00           4.123129e+00
## attr(,"scaled:scale")
##                   ï..Age               Attrition           BusinessTravel
##                9.1353735               0.3678630                0.6654549
##                DailyRate              Department          DistanceFromHome
##              403.5090999               0.5277923                8.1068644
##                Education           EducationField             EmployeeCount
##                1.0241649               1.3313691                0.0000000
##           EmployeeNumber   EnvironmentSatisfaction                    Gender
##              602.0243348               1.0930822                0.4900647
##                HourlyRate           JobInvolvement                  JobLevel
##               20.3294276               0.7115611                1.1069399
##                  JobRole          JobSatisfaction             MaritalStatus
##                2.4618213               1.1028461                0.7301208
##            MonthlyIncome              MonthlyRate        NumCompaniesWorked
##             4707.9567831            7117.7860441                2.4980090
##                   Over18                 OverTime          PercentSalaryHike
##                0.0000000               0.4506065                3.6599377
##        PerformanceRating RelationshipSatisfaction             StandardHours
##                0.3608235               1.0812089                0.0000000
##          StockOptionLevel         TotalWorkingYears     TrainingTimesLastYear
##                0.8520767               7.7807817                1.2892706
##           WorkLifeBalance           YearsAtCompany        YearsInCurrentRole
##                0.7064758               6.1265252                3.6231370
##   YearsSinceLastPromotion      YearsWithCurrManager
##                3.2224303               3.5681361
```