```
[0.40311289 0. 0.40926764 ...
0.40902323 1.94897409 0.47265209]
 [0.04690416 0.40926764 0.
0.04690416 2.01816749 0.32695565]
 [0.09273618 0.40902323 0.04690416 ... 0.
2.00987562 0.2805352 ]
 [2.01677961 1.94897409 2.01816749 ...
2.00987562 0.
                   1.98239754]
 [0.37054015 0.47265209 0.32695565 ... 0.2805352
1.98239754 0. ]]
[000000000-101000
1 0 0 0 1 1 0 1
 1 0 1 1 0 0 0 0 0 0 0 0 1 0 0 -1
0 0 0 0 -1 0 1 0]
col 155
    0.69152006 0.05830952 ...
[[0.
0.29017236 1.98075743 0.38600518]
 [0.69152006 0. 0.63890531 ...
0.48311489 1.83755272 0.65878676]
 [0.05830952 0.63890531 0.
0.24779023 1.98368344 0.37656341]
 . . .
 [0.29017236 0.48311489 0.24779023 ... 0.
1.96203975 0.23452079]
[1.98075743 1.83755272 1.98368344 ...
1.96203975 0.
                   1.95258803]
 [0.38600518 0.65878676 0.37656341 ...
0.23452079 1.95258803 0. ]]
[0 0 0 1 0 0 0 0 -1 0 1 1 0 -1 0
                                         0
1 0 0 -1 1 1 0 1
 1 0 1 1 0 1 0 0 0 0 1 0 1 0 0
                                         1
0 0 0 0 1 0 1 0]
col 156
[[0.
          0.40472213 0.15524175 ...
```

```
0.47549974 1.90947637 0.44452222]
 [0.40472213 0. 0.25787594 ...
0.08774964 1.9312949 0.29291637]
 [0.15524175 0.25787594 0.
0.33585711 1.91973957 0.37536649]
 [0.47549974 0.08774964 0.33585711 ... 0.
1.94653538 0.26476405]
 [1.90947637 1.9312949 1.91973957 ...
                   1.96430649]
1.94653538 0.
 [0.44452222 0.29291637 0.37536649 ...
0.26476405 1.96430649 0.
                            ]]
[0 0 0 1 0 0 0 0 1 0 1 1 0 -1 0
1 0 0 -1 1 1 0 1
 1 0 -1 0 0 1 0 0 0 0 1 0 1 0 0 1
0 0 0 0 1 0 1 0]
col 157
      0.09273618 0.20149442 ... 0.7377669
[[0.
1.65520391 0.35805028]
[0.09273618 0.
                     0.22
0.66400301 1.69767488 0.26570661]
 [0.20149442 0.22
                     0.
0.65092242 1.65351142 0.40472213]
 . . .
 [0.7377669 0.66400301 0.65092242 ... 0.
1.88217959 0.47759816]
 [1.65520391 1.69767488 1.65351142 ...
1.88217959 0. 1.81623236]
 [0.35805028 0.26570661 0.40472213 ...
                        ]]
0.47759816 1.81623236 0.
[0 0 0 1 0 0 0 0 1 0 1 1 0 0 0 0
1 0 0 -1 0 1 0 1
 1 0 -1 0 0 1 -1 0 0 0 1 0 -1 0 0 -1
0 0 0 0 1 0 1 0]
col 158
```

```
[[0.
           0.06403124 0.19874607 ...
0.83246622 0.48093659 0.392683081
 [0.06403124 0. 0.16186414 ...
0.78300702 0.43428102 0.35566838]
 [0.19874607 0.16186414 0.
0.79454389 0.38131352 0.45398238]
 [0.83246622 0.78300702 0.79454389 ... 0.
0.4796874 0.51166395]
 [0.48093659 0.43428102 0.38131352 ... 0.4796874
          0.41964271]
0.
 [0.39268308 0.35566838 0.45398238 ...
0.51166395 0.41964271 0.
                            ]]
[ 0 0 0 1 0 0 0 0 1 0 1 1 0 0 0
1 0 0 0 0 1 0 1
 1 0 0 0 -1 1 1 0 0 0 1 0 0 0
0 0 0 0 1 0 0 0]
col 159
[[0.
          0.1805547 0.18248288 ...
0.33481338 0.21610183 0.62976186]
 [0.1805547 0. 0.09
0.35735137 0.15 0.59581876]
 [0.18248288 0.09
                      0.
0.43197222 0.23452079 0.67786429]
 [0.33481338 \ 0.35735137 \ 0.43197222 \ \dots \ 0.
0.21400935 0.31638584]
                  0.23452079 ...
 [0.21610183 0.15
0.21400935 0. 0.45354162]
 [0.62976186 0.59581876 0.67786429 ...
0.31638584 0.45354162 0.
                             11
[0 0 0 1 0 0 0 0 1 0 1 1 0 0 0 0 1 0 0 0 0 1 0 1
1000010000100
0 0 0 0 0 0 0 1 0 0 0]
col 160
```

```
[[0.
           0.16673332 0.1933908
0.18601075 0.40422766 0.46238512]
[0.16673332 0. 0.05830952 ...
0.21633308 0.40620192 0.45321077]
[0.1933908 0.05830952 0.
0.27166155 0.46043458 0.50616203]
[0.18601075 0.21633308 0.27166155 ... 0.
0.22135944 0.27964263]
[0.40422766 0.40620192 0.46043458 ...
0.22135944 0.
                  0.06164414]
[0.46238512 0.45321077 0.50616203 ...
0.27964263 0.06164414 0.
                           ]]
1 0 0 0 0 1 0 1
-1 0 0 0 0 1 0 0 0 1 0 0 0
0 0 0 0 1 0 0 0]
col 161
[[0.
          0.17117243 0.19646883 ...
0.04358899 0.55901699 0.44485953]
[0.17117243 0. 0.0591608
0.13638182 0.53684262 0.4973932 ]
[0.19646883 0.0591608 0.
0.17117243 0.48259714 0.45793013]
[0.04358899 0.13638182 0.17117243 ... 0.
0.57218878 0.47370877]
[0.55901699 0.53684262 0.48259714 ...
0.57218878 0. 0.23622024]
[0.44485953 0.4973932 0.45793013 ...
0.47370877 0.23622024 0. ]]
[0 0 0 1 0 0 1 0 1 0 1 1 0 0 0
                                        0
1 0 0 0 0 1 0 1
 1 0 0 0 0 0 0 0 0 1 0 0 0
                                     1
                                        0
0 0 0 0 -1 0 0 0]
```

```
col 162
[[0.
           0.20832667 0.17262677 ...
0.17748239 0.35902646 0.38131352]
 [0.20832667 0.
                     0.09899495 ...
0.15264338 0.44011362 0.48682646]
 [0.17262677 0.09899495 0.
0.05385165 0.34452866 0.39242834]
 [0.17748239 0.15264338 0.05385165 ... 0.
0.29223278 0.34132096]
 [0.35902646 0.44011362 0.34452866 ...
0.29223278 0.
                   0.06557439]
 [0.38131352 0.48682646 0.39242834 ...
0.34132096 0.06557439 0.
                            ]]
[0 0 0 1 0 0 1 0
                       0 0 1 1 0 0
                                          0
1 0 0 0 0 1 0 1
 1 0 0 -1 0 0 0 0 0 0 1 0 0 0
                                          0
0 0 0 0 0 0 0 0 0 1
col 163
[[0.
           0.2879236 0.06708204 ...
0.09110434 0.083666 0.23216374]
 [0.2879236 0.
                     0.31968735 ...
0.26795522 0.22825424 0.51439285]
 [0.06708204 0.31968735 0.
0.15811388 0.1459452 0.20248457]
 [0.09110434 0.26795522 0.15811388 ... 0.
0.04582576 0.2912044 ]
 [0.083666 0.22825424 0.1459452
0.04582576 0. 0.30805844]
 [0.23216374 0.51439285 0.20248457 ... 0.2912044
0.30805844 0.
                  11
[000100-100011000
                                          0
1 0 0 0 0 1 0 1
 -1 0 0 -1 0 0 0 0 0 -1 -1 0 0 0 -1
                                          0
```

```
0 0 0 0 0 0 0 0 0 1
col 164
[[0. 0.53376025 0.29034462 ...
0.31336879 0.49244289 0.12206556]
[0.53376025 0. 0.29017236 ...
0.28618176 0.1811077 0.48682646]
[0.29034462 0.29017236 0.
0.19723083 0.32403703 0.21118712]
[0.31336879 0.28618176 0.19723083 ... 0.
0.19874607 0.27802878]
[0.49244289 0.1811077 0.32403703 ...
0.19874607 0. 0.46626173]
[0.12206556 0.48682646 0.21118712 ...
0.27802878 0.46626173 0.
                           ]]
[00010000011000
1 0 0 1 0 1 0 1
 1 0 0 1 0 0 0 0 0 0 -1 0 0 0 0
0 0 0 0 0 0 0]
col 165
[[0.
           1.89786722 1.94139125 ...
1.94807597 1.96265127 1.97436066]
[1.89786722 0. 0.22293497 ...
0.26248809 0.30116441 0.46151923]
[1.94139125 0.22293497 0.
0.16124515 0.11916375 0.26476405]
[1.94807597 0.26248809 0.16124515 ... 0.
0.09486833 0.228254241
[1.96265127 0.30116441 0.11916375 ...
0.09486833 0.
                  0.16401219]
[1.97436066 0.46151923 0.26476405 ...
0.22825424 0.16401219 0.
                           ]]
1
                                      1
                                        1
0 1 1 0 1 0 1 0
```

```
0 1 1 1 1 0 1 1 1 1 1 1 1 0
1 1 1 1 1 1 1]
col 166
[[0.
           1.03169763 1.00508706 ...
1.03121288 1.03116439 0.99126182]
                               ... 0.0244949
 [1.03169763 0.
                     0.2641969
0.04123106 0.50931326]
 [1.00508706 0.2641969 0.
0.24413111 0.27037012 0.27820855]
 [1.03121288 0.0244949 0.24413111 ... 0.
0.0591608 0.48641546]
[1.03116439 0.04123106 0.27037012 ... 0.0591608
     0.52697249]
0.
 [0.99126182 0.50931326 0.27820855 ...
0.48641546 0.52697249 0.
                             11
[-1 0 0 1 0 0 0 0 0 0 0 1 0 0 0
1 0 0 1 0 1 0 1
 0 0 0 0 0 1 0 0 0 0 -1 0 0 0 0
                                          1
0 0 0 0 0 0 0 0]
col 167
[[0.
           0.21 0.22045408 ...
0.51400389 0.14899664 0.55767374]
                     0.15
 [0.21
           0.
                               ... 0.5235456
0.0728011 0.47042534]
 [0.22045408 0.15
                     0.
0.65007692 0.17832555 0.35185224]
 [0.51400389 0.5235456 0.65007692 ... 0.
0.48124838 0.96041658]
 [0.14899664 0.0728011 0.17832555 ...
0.48124838 0.
                   0.52038447]
 [0.55767374 0.47042534 0.35185224 ...
0.96041658 0.52038447 0.
                             ]]
[0 0 0 1 0 0 0 0 0
                            0 1 0 0 0
```

```
0 0 0 -1 0 1 0 1
 0 0 0 0 1 0 0 0 0 -1 0 0 0 0
0 0 0 0 0 0 0]
col 168
[[0.
         0.22226111 0.14456832 ...
0.66558245 0.2118962 0.49406477]
 [0.22226111 0. 0.10246951 ... 0.6503845
0.11445523 0.43874822]
 [0.14456832 0.10246951 0.
0.69949982 0.16673332 0.40099875]
 [0.66558245 0.6503845 0.69949982 ... 0.
0.54927225 1.04694795]
 [0.2118962 0.11445523 0.16673332 ...
0.54927225 0. 0.54644304]
 [0.49406477 0.43874822 0.40099875 ...
1.04694795 0.54644304 0.
                           ]]
[0 0 0 -1 0 0 0 0 -1 0 -1 0 0 0 0
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 -1 0 0 0
                                          0
0 0 0 0 0 0 0 0 0 1
col 169
[[0. 0.26095977 0.25159491 ...
0.10630146 0.31256999 0.59489495]
[0.26095977 0. 0.12884099 ...
0.17435596 0.34928498 0.42023803]
 [0.25159491 0.12884099 0.
0.21307276 0.44339599 0.35411862]
 [0.10630146 0.17435596 0.21307276 ... 0.
0.25377155 0.55910643]
 [0.31256999 0.34928498 0.44339599 ...
0.25377155 0. 0.75379042]
 [0.59489495 0.42023803 0.35411862 ...
0.55910643 0.75379042 0.
                            11
```

```
[000-10000-10-10000
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 -1 0 0 0
0 0 0 0 0 0 0]
col 170
[[0.
          0.25632011 0.22869193 ...
0.23280893 0.22869193 0.58
[0.25632011 0. 0.15937377 ...
0.15132746 0.05477226 0.41773197]
[0.22869193 0.15937377 0.
                            ... 0.01
0.1077033 0.35818989]
[0.23280893 0.15132746 0.01 ... 0.
0.10049876 0.35411862]
[0.22869193 0.05477226 0.1077033 ...
             0.40236799]
0.10049876 0.
0.35411862 0.40236799 0. ]]
0000000000100
0 0 0 0 0 0 0 0 0 0 0 0 1
col 171
[[0.
          0.22847319 0.2118962 ...
0.15165751 0.29017236 0.56302753]
[0.22847319 0. 0.18841444 ...
0.15937377 0.17720045 0.43863424]
[0.2118962 0.18841444 0.
0.06403124 0.09643651 0.35818989]
[0.15165751 0.15937377 0.06403124 ... 0.
0.14142136 0.41689327]
 [0.29017236 0.17720045 0.09643651 ...
0.14142136 0.
                 0.28530685]
[0.56302753 0.43863424 0.35818989 ...
0.41689327 0.28530685 0.
                          11
```

```
[0 0 0 -1 0 0 0 0 -1 0 0 0 0 0
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 -1 0 0 0
0 0 0 0 0 0 0]
col 172
[[0. 0.26851443 0.23280893 ...
0.14071247 0.37429935 0.58154965]
[0.26851443 0. 0.18841444 ...
0.28930952 0.22494444 0.43874822]
 [0.23280893 0.18841444 0.
0.33674916 0.1473092 0.35411862]
 [0.14071247 0.28930952 0.33674916 ... 0.
0.46010868 0.67527772]
 [0.37429935 0.22494444 0.1473092 ...
0.46010868 0. 0.22383029]
 [0.58154965 0.43874822 0.35411862 ...
0.67527772 0.22383029 0. ]]
[0 0 0 0 0 0 0 0 -1 0
                            0 0 0 0
                                          0
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 0 0 0 0
                                          0
0 -1 0 0 0 0 0 0]
col 173
         0.29799329 0.20420578 ...
[[0.
0.44922155 0.33075671 0.55181519]
[0.29799329 0. 0.23430749 ...
0.60942596 0.17029386 0.45
 [0.20420578 0.23430749 0.
0.64070274 0.1584298 0.35411862]
 [0.44922155 0.60942596 0.64070274 ... 0.
0.72374028 0.96483159]
 [0.33075671 0.17029386 0.1584298 ...
0.72374028 0.0.28442925][0.55181519 0.450.35411862 ...
```

```
0.96483159 0.28442925 0.
                           11
[00000000-1000000
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 0 0 0
                                        0
0-1 0 0 0 0 0 01
col 174
[[0.
           0.26944387 0.20615528 ...
0.19416488 0.3524202 0.5416641 ]
 [0.26944387 0. 0.24919872 ...
0.27586228 0.09486833 0.47370877]
 [0.20615528 0.24919872 0.
0.36578682 0.28337255 0.34014703]
 [0.19416488 0.27586228 0.36578682 ... 0.
0.36728735 0.68095521]
 [0.3524202 0.09486833 0.28337255 ...
0.36728735 0.
             0.430581
 [0.5416641 0.47370877 0.34014703 ...
0.68095521 0.430581 0. ]]
[00000000-10
                           0 0 0 0
                                      0
                                        0
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 0 0 0
                                      0
                                        0
0 -1 0 0 0 0 0 0]
col 175
[[0.
         0.33136083 0.20322401 ...
0.36359318 0.42731721 0.54653454]
 [0.33136083 0. 0.25357445 ...
0.03741657 0.11045361 0.47212287]
 [0.20322401 0.25357445 0.
0.26925824 0.31064449 0.35411862]
 [0.36359318 0.03741657 0.26925824 ... 0.
0.07348469 0.4570558 ]
 [0.42731721 0.11045361 0.31064449 ...
0.07348469 0.
                  0.43416587]
```

```
[0.54653454 0.47212287 0.35411862 ... 0.4570558
0.43416587 0.
                 ]]
[0 0 0 0 0 0 0 0 -1 0 0 0 0 0
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 0 0 0 0
                                          0
0-1 0 0 0 0 0 0]
col 176
[[0.
         0.44045431 0.34263683 ...
0.37603191 0.37456642 0.504579031
 [0.44045431 0. 0.17832555 ...
0.23194827 0.28757608 0.43289722]
 [0.34263683 0.17832555 0.
0.07071068 0.3726929 0.28495614]
 [0.37603191 0.23194827 0.07071068 ... 0.
0.4414748 0.21494185]
 [0.37456642 0.28757608 0.3726929 ... 0.4414748
    0.64784257]
0.
 [0.50457903 0.43289722 0.28495614 ...
0.21494185 0.64784257 0.
                            ]]
[0 0 0 0 0 0 0 0 -1 0 0 0 0 0
                                          0
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 0 0 0 0
                                          0
0 -1 0 0 0 0 0 0]
col 177
[[0. 0.28460499 0.23043437 ...
0.32878564 0.3744329 0.36796739]
 [0.28460499 0.
                     0.18788294 ... 0.4678675
0.57671483 0.51088159]
 [0.23043437 0.18788294 0.
0.28600699 0.59472683 0.32817678]
 [0.32878564 0.4678675 0.28600699 ... 0.
0.64521314 0.04358899]
 [0.3744329 0.57671483 0.59472683 ...
```

```
0.64521314 0. 0.67320131]
 [0.36796739 0.51088159 0.32817678 ...
0.04358899 0.67320131 0.
                           11
[00000000-1000000
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 0 0 0 0
                                         0
0-1 0 0 0 0 0 0]
col 178
[[0.
          0.17058722 0.20049938 ...
0.37376463 0.24372115 0.38691084]
 [0.17058722 0.
                     0.11
0.41545156 0.41146081 0.41303753]
[0.20049938 0.11
                     0.
0.32015621 0.4180909 0.31288976]
 [0.37376463 0.41545156 0.32015621 ... 0.
0.41629317 0.03741657]
 [0.24372115 0.41146081 0.4180909
0.41629317 0. 0.44665423]
 [0.38691084 0.41303753 0.31288976 ...
0.03741657 0.44665423 0.
                            ]]
[0 0 0 0 0 0 0 0 -1 0 0 0 0 -1
                                         0
0 0 0 0 0 -1 0 -1
 0 0 0 -1 0 0 0 0 0 0 0 0 0 0
0 -1 0 0 0 0 0 0]
col 179
    0.16431677 0.2034699
0.15811388 0.24939928 0.35284558]
 [0.16431677 0.
                    0.0969536
0.29597297 0.41231056 0.38794329]
 [0.2034699 0.0969536 0.
0.28879058 0.44249294 0.31288976]
 [0.15811388 0.29597297 0.28879058 ... 0.
0.19390719 0.26248809]
```

```
[0.24939928 0.41231056 0.44249294 ...
0.19390719 0.
                   0.445982061
 [0.35284558 0.38794329 0.31288976 ...
0.26248809 0.44598206 0. ]]
[0 0 0 0 0 0 0 0 -1 0 0 -1 0 -1 0
                                         0
0 0 0 0 0 -1 0 -1
 0 0 0 -1 0 0 0 0 0 0 0 0 0 0
0 -1 0 0 0 0 0 0]
col 180
        0.20615528 0.20856654 ...
[[0.
0.12409674 0.14456832 0.36986484]
 [0.20615528 0. 0.08124038 ...
0.32787193 0.34669872 0.39255573]
 [0.20856654 0.08124038 0.
                              ... 0.3207803
0.34899857 0.31543621]
 [0.12409674 0.32787193 0.3207803 ... 0.
0.04582576 0.3906405 ]
 [0.14456832 0.34669872 0.34899857 ...
0.04582576 0. 0.43462628]
 [0.36986484 0.39255573 0.31543621 ... 0.3906405
0.43462628 0. ]]
[000000--0-1000000
                                         0
0 0 0 0 0 -1 0 -1
 0 0 0 0 0 0 0 0 0 0 0 0 0
0-1 0 0 0 0 0 01
col 181
[[0.
          0.18439089 0.07874008 ...
0.10198039 0.09486833 0.38340579]
 [0.18439089 0. 0.12247449 ...
0.28495614 0.26038433 0.39217343]
 [0.07874008 0.12247449 0.
0.17029386 0.13928388 0.33970576]
 [0.10198039 0.28495614 0.17029386 ... 0.
```

```
0.05830952 0.39673669]
[0.09486833 0.26038433 0.13928388 ...
0.05830952 0.
                  0.34
[0.38340579 0.39217343 0.33970576 ...
0.39673669 0.34
                           ]]
                  0.
[00000000
                           0 0 0 0
                      1 0
                                        0
0 0 0 0 0 1 0 1
 1 0 -1 0 0 0 0 0 1 0 0 0 0 0
                                        0
0 0 0 0 0 0 0]
col 182
[[0.
          0.12083046 0.13928388 ... 0.2541653
0.49436828 0.43554563]
[0.12083046 0. 0.20832667 ...
0.35665109 0.43428102 0.41988094]
 [0.13928388 0.20832667 0.
0.16673332 0.42497059 0.32634338]
[0.2541653 0.35665109 0.16673332 ... 0.
0.54717456 0.4112177 ]
[0.49436828 0.43428102 0.42497059 ...
0.54717456 0.
                  0.17691806]
 [0.43554563 0.41988094 0.32634338 ... 0.4112177
                  ]]
0.17691806 0.
0 0 0 0 0 -1 0 1
 1 0 1 0 0 0 0 0 1 0 0 0 0 0
                                        0
0 0 0 0 0 0 0 0 0 1
col 183
[[0.
          0.287054 0.12688578 ...
0.19313208 0.46925473 0.47010637]
[0.287054 0.
                    0.31511903 ...
0.45044423 0.27892651 0.44698993]
[0.12688578 0.31511903 0.
0.15099669 0.41605288 0.35958309]
```

```
[0.19313208 0.45044423 0.15099669 ... 0.
0.55308227 0.44911023]
[0.46925473 0.27892651 0.41605288 ...
0.55308227 0.
                  0.2745906 ]
[0.47010637 0.44698993 0.35958309 ...
0.44911023 0.2745906 0.
                           ]]
0 0 0 0
0 0 0 0 0 -1 0 -1
 0 0 -1 0 0 0 0 0 -1 0 0 0 0 0
                                       0
0 0 0 0 0 0 0]
col 184
[[0. 0.26776856 0.18547237 ...
0.110453610.10.44788391][0.267768560.17117243
                   0.17117243 ... 0.1603122
0.19104973 0.45552168]
[0.18547237 0.17117243 0.
0.10488088 0.08717798 0.31843367]
[0.11045361 0.1603122 0.10488088 ... 0.
0.04242641 0.41448764]
[0.1
          0.19104973 0.08717798 ...
0.04242641 0. 0.38183766
[0.44788391 0.45552168 0.31843367 ...
0.41448764 0.38183766 0.
                          ]]
0 0 0 0 0 0 -1
 0 0 -1 0 0 0 0 0 -1 0 0 0 0 0
                                       0
0 0 0 0 0 0 0]
col 185
[[0.
          0.26925824 0.23515952 ...
0.08660254 0.3082207 0.32310989]
 [0.26925824 0. 0.14071247 ...
0.21213203 0.49244289 0.30479501]
[0.23515952 0.14071247 0.
0.15165751 0.51874849 0.16643317]
```

```
[0.08660254 0.21213203 0.15165751 ... 0.
0.38948684 0.24556058]
[0.3082207 0.49244289 0.51874849 ...
              0.62080593]
0.38948684 0.
[0.32310989 0.30479501 0.16643317 ...
0.24556058 0.62080593 0.
0 0 0 0
                                        0
                        0
0 0 0 0 0 0 -1
 0 0 -1 0 0 0 0 -1 -1 0 0 0 0
                                     0
                                        0
0 0 0 0 0 0 01
col 186
[[0.
           0.20904545 0.17720045 ...
0.12688578 0.86220647 0.26438608]
                    0.17972201 ... 0.2541653
[0.20904545 0.
1.02532922 0.19748418]
[0.17720045 0.17972201 0.
0.11532563 1.01024749 0.09219544]
[0.12688578 0.2541653 0.11532563 ... 0.
0.92103203 0.20248457]
 [0.86220647 1.02532922 1.01024749 ...
                  1.08742816]
0.92103203 0.
[0.26438608 0.19748418 0.09219544 ...
                           ]]
0.20248457 1.08742816 0.
0 0 0 0 0 0 0 -1
 0 0 -1 0 0 0 0 0 -1 0 0 0 0 0
0 0 0 0 0 0 0]
col 187
           0.24207437 0.24062419 ... 0.0591608
[[0.
0.66633325 0.26019224]
[0.24207437 0. 0.47212287 ...
0.26400758 0.67808554 0.19416488]
[0.24062419 0.47212287 0.
```

```
0.24494897 0.7628237 0.42544095]
 [0.0591608 0.26400758 0.24494897 ... 0.
0.61343296 0.31208973]
[0.66633325 0.67808554 0.7628237
0.61343296 0. 0.83695878]
[0.26019224 0.19416488 0.42544095 ...
0.31208973 0.83695878 0. ]]
0 0 0 0
                                       0
0 0 0 0 0 0 0
 0 0 -1 0 0 0 0 0 -1 0 0 0 0
                                    0
                                       0
0 0 0 0 0 0 0 0
col 188
[[0.
        0.40311289 0.20639767 ...
0.14491377 0.23727621 0.2541653 ]
[0.40311289 0. 0.60423505 ...
0.34539832 0.16792856 0.3923009 ]
[0.20639767 0.60423505 0.
0.30626786 0.4414748 0.38105118]
[0.14491377 0.34539832 0.30626786 ... 0.
0.19621417 0.35860842]
[0.23727621 0.16792856 0.4414748 ...
0.19621417 0. 0.28372522]
[0.2541653 0.3923009 0.38105118 ...
0.35860842 0.28372522 0.
                          11
0 0 0 0 0 -1 0 0
 0 0 -1 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 01
col 189
[[0. 0.41988094 0.21400935 ...
0.36124784 0.25039968 0.26776856]
[0.41988094 0. 0.62681736 ...
0.19748418 0.25377155 0.20736441]
```

```
[0.21400935 0.62681736 0.
0.56187187 0.43185646 0.46054316]
 [0.36124784 0.19748418 0.56187187 ... 0.
0.3283291 0.28913665]
 [0.25039968 0.25377155 0.43185646 ... 0.3283291
     0.04690416]
 [0.26776856 0.20736441 0.46054316 ...
0.28913665 0.04690416 0.
                           ]]
                      0 0
                           0 0 0 0
[0 0 0 0 0 0 0]
                                         0
0 0 0 0 0 -1 0 0
 0 0 -1 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0]
col 190
         0.40804412 0.18627936 ...
[[0.
0.42778499 0.28722813 0.29949958]
 [0.40804412 0.
                    0.58600341 ...
0.17916473 0.25884358 0.25768197]
 [0.18627936 0.58600341 0.
0.60440053 0.42684892 0.43749286]
 [0.42778499 0.17916473 0.60440053 ... 0.
0.39560081 0.39862263]
 [0.28722813 0.25884358 0.42684892 ...
0.39560081 0.
                  0.01414214]
 [0.29949958 0.25768197 0.43749286 ...
0.39862263 0.01414214 0.
                           11
0 0 0 0 0
0 0 0 0 0 -1 -1 0
 0 0 -1 0 0 0 0 0 0 -1 0 0 0 0 -1 -1
0-1 0 0 0 0 0 01
col 191
[[0. 0.54230987 0.18493242 ...
0.90216406 0.37496667 0.41701319]
 [0.54230987 0.
                   0.60241182 ...
```

```
0.94899947 0.28372522 0.32710854]
[0.18493242 0.60241182 0.
0.74195687 0.36221541 0.3726929 ]
[0.90216406 0.94899947 0.74195687 ... 0.
0.74357246 0.67557383]
[0.37496667 0.28372522 0.36221541 ...
0.74357246 0. 0.0728011 ]
[0.41701319 0.32710854 0.3726929
0.67557383 0.0728011 0.
                           ]]
0 0 0 0 0 -1 -1 0
 0 0 -1 0 0 0 0 0 0 -1 0 0 0 0 -1
0 0 0 0 0 0 0]
col 192
[[0. 0.48176758 0.24372115 ...
1.80149938 0.28195744 0.37656341]
[0.48176758 0. 0.58318093 ...
1.80828648 0.28106939 0.35679126]
[0.24372115 0.58318093 0.
1.86831475 0.31256999 0.31144823]
[1.80149938 1.80828648 1.86831475 ... 0.
1.86678869 1.90268232]
[0.28195744 0.28106939 0.31256999 ...
1.86678869 0. 0.13601471]
[0.37656341 0.35679126 0.31144823 ...
1.90268232 0.13601471 0.
                           ]]
[0 0 0 -1 0 0 0 0 0 0
                           0 0 -1 0 0 0
0 0 0 0 0 0 -1 0
 0 0 -1 0 0 0 0 0 0 0 0 0 0 -1
0 -1 0 0 0 -1 0 0]
col 193
[[0. 0.3992493 0.31016125 ...
1.84361059 0.23937418 0.13379088]
```

```
[0.3992493 0. 0.57445626 ...
1.95005128 0.20615528 0.35679126]
[0.31016125 0.57445626 0.
1.90249836 0.37960506 0.3132092 ]
 [1.84361059 1.95005128 1.90249836 ... 0.
1.95514705 1.9679939 ]
[0.23937418 0.20615528 0.37960506 ...
1.95514705 0. 0.17029386]
 [0.13379088 \ 0.35679126 \ 0.313209\bar{2} \ \dots \ 1.9679939
0.17029386 0. ]]
[00010000001-100
-1 0 0 0 0 -1 -1 0
0 0 1 0 0 0 0 0 0 0 0 0 0 1
0 -1 0 0 0 1 0 0]
col 194
[[0.
    1.87387299 1.87994681 ...
0.39974992 1.94167454 1.94157153]
[1.87387299 0. 0.88260977 ...
1.97641089 0.34423829 0.62136946]
 [1.87994681 0.88260977 0.
1.92888569 0.61424751 0.3132092 ]
 . . .
 [0.39974992 1.97641089 1.92888569 ... 0.
1.99887468 1.989045
                 1
[1.94167454 0.34423829 0.61424751 ...
1.99887468 0. 0.31304952]
 [1.94157153 0.62136946 0.3132092 ... 1.989045
0.31304952 0.
             11
[0 1 1 0 1 1 1 1 1 1 1 0 0 1 1
0 1 1 1 1 0 0 1
 0 1 0 1 1 1 1 1 1 1 1 0 1 0
                                         1
1 -1 1 1 -1 0 1 1]
col 195
[[0.
           1.74779862 1.90622664 ...
```

```
0.04242641 1.19134378 1.9745126 ]
 [1.74779862 0.
                    1.39817739 ...
1.75436598 1.46331815 1.18232821]
 [1.90622664 1.39817739 0.
                              ... 1.9294818
1.53081678 0.31208973]
 [0.04242641 1.75436598 1.9294818 ... 0.
1.22780292 1.99712293]
 [1.19134378 1.46331815 1.53081678 ...
1.22780292 0.
                   1.48761554]
 [1.9745126 1.18232821 0.31208973 ...
1.99712293 1.48761554 0.
                           ]]
[0 1 1 0 1 1 1 1 1 1 1 0 2
                                         1
0 2 1 1 1 0 0 2
 0 1 0 1 1 2 1 1 -1 1 1 1 -1 1 0
                                         0
1 -1 2 2 -1 0 -1 1]
col 196
[[0.
      1.93424404 1.88026594 ...
0.09848858 0.16613248 1.9532025 ]
 [1.93424404 0. 0.68665858 ...
1.96697738 1.97 0.46400431]
 [1.88026594 0.68665858 0.
1.90622664 1.93458006 0.31208973]
 [0.09848858 1.96697738 1.90622664 ... 0.
0.09433981 1.9745126 ]
               1.93458006 ...
 [0.16613248 1.97
0.09433981 0. 1.98861761]
 [1.9532025 0.46400431 0.31208973 ... 1.9745126
1.98861761 0.
[0 1 1 0 1 1 1 1 1 0 1 1 -1 0 1
                                         1
0 0 1 1 1 0 0 0
 0 1 0 1 -1 0 1 1 0 1 -1 1 -1 1 0 0
1 -1 0 0 -1 0 0 1]
col 197
```

```
[[0. 0.93818975 0.74572113 ...
1.80845238 1.85717527 0.66174013]
[0.93818975 0. 0.40459857 ...
1.99506892 1.99381544 0.30675723]
 [0.74572113 0.40459857 0.
1.96045913 1.9501282 0.31208973]
 [1.80845238 1.99506892 1.96045913 ... 0.
0.17832555 1.99784884]
 [1.85717527 1.99381544 1.9501282 ...
0.17832555 0. 2.01216302]
 [0.66174013 0.30675723 0.31208973 ...
1.99784884 2.01216302 0. ]]
[ 0 0 0 1 0 1 0 0 -1 1 0 0 0 0
1 1 0 0 0 1 -1 1
 1 0 -1 0 -1 1 0 0 1 0 1 0 1
                                         1
0 -1 1 1 -1 1 0]
col 198
[[0.
          0.84077345 0.61106464 ...
1.89773549 1.8574714 0.53347915]
[0.84077345 0. 0.38327536 ...
1.93961336 1.94589311 0.3324154 ]
 [0.61106464 0.38327536 0.
1.94211225 1.92046869 0.28879058]
 [1.89773549 1.93961336 1.94211225 ... 0.
0.14142136 1.97595547]
 [1.8574714 1.94589311 1.92046869 ...
0.14142136 0. 1.96540072]
 [0.53347915 0.3324154 0.28879058 ...
1.97595547 1.96540072 0.
                            ]]
[00010100110-10000
1 1 0 0 0 1 1 1
 1 0 1 0 -1 1 0 0 1 0 1 0 1
                                         1
0 -1 1 1 1 1 0]
```

```
col 199
[[0.
           1.69059161 1.78563714 ...
0.46583259 0.58017239 1.82934414]
 [1.69059161 0. 0.45387223 ...
1.23494939 1.97795349 0.4110961
 [1.78563714 0.45387223 0.
1.36334148 1.9588517 0.3082207 ]
 [0.46583259 1.23494939 1.36334148 ... 0.
0.86417591 1.38336546]
 [0.58017239 1.97795349 1.9588517
0.86417591 0.
                   2.00402096]
 [1.82934414 0.4110961 0.3082207
1.38336546 2.00402096 0.
                            11
[0 1 1 0 1 0 1 1 0 1 1 1 -1 1
                                       1 1
0 1 1 1 1 0 -1 0
 -1 1 0 1 1 0 1 1 0 1 0 1
                                          1
1 1 0 0 0 0 0 1]
col 200
[[0.
           1.93641421 1.95245999 ...
1.73798734 0.10677078 1.98522039]
 [1.93641421 0.
             0.30626786 ...
0.54927225 1.92605815 0.48764741]
 [1.95245999 0.30626786 0.
0.65061509 1.95783043 0.3082207 ]
 [1.73798734 0.54927225 0.65061509 ... 0.
1.7356843 0.53786615]
 [0.10677078 1.92605815 1.95783043 ... 1.7356843
         2.000025
0.
 [1.98522039 0.48764741 0.3082207
0.53786615 2.000025 0.
                            11
[0 1 1 0 1 0 1 0 1 1 1 1 0 1
                                       1
                                          1
0 1 1 1 1 0 -1 0
    1 0 1 1 0 1 1 0 1 0 1
 1
                                       0
                                          1
```

```
1 -1 0 0 0 1 0 1
col 201
[[0.
           1.92431806 1.94920497 ...
0.52630789 0.35749126 1.98708329]
 [1.92431806 0. 0.18547237 ...
1.74745529 1.92981864 0.38613469]
 [1.94920497 0.18547237 0.
1.81791089 1.92161391 0.27910571]
 [0.52630789 1.74745529 1.81791089 ... 0.
0.81498466 1.85825187]
 [0.35749126 1.92981864 1.92161391 ...
0.81498466 0.
                   1.929896371
 [1.98708329 0.38613469 0.27910571 ...
1.85825187 1.92989637 0.
                            ]]
[011010-1011110111
0 1 1 1 1 0 -1 0
 1 1 0 1 1 0 1 1 0 -1 0 1 1 1 0
1 -1 0 0 0 0 0 1]
col 202
    1.96252389 1.94779362 ...
[[0.
0.08306624 1.34977776 1.99807407]
 [1.96252389 0.
             0.4586938 ... 1.9800505
1.72927731 0.38209946]
 [1.94779362 0.4586938 0.
1.95821347 1.58164471 0.27349589]
 [0.08306624 1.9800505 1.95821347 ... 0.
1.28957357 2.00234862]
 [1.34977776 1.72927731 1.58164471 ...
1.28957357 0.
                   1.52433592]
 [1.99807407 0.38209946 0.27349589 ...
2.00234862 1.52433592 0.
                            ]]
[0 1 1 0 1 0 1 1 1 1 1 1 0 1 1 1
0 1 1 1 1 0 1 0
```

```
1 1 0 1 1 0 1 1 0 1 1 1 0 1
1 -1 1 0 0 0 -1 1]
col 203
[[0.
           1.91648115 1.92800415 ...
0.36262929 1.05782796 1.98295234]
              0.5654202
 [1.91648115 0.
1.78756818 1.88109011 0.61090097]
 [1.92800415 0.5654202 0.
1.87709883 1.69204019 0.36619667]
[0.36262929 1.78756818 1.87709883 ... 0.
1.34227419 1.96402648]
 [1.05782796 1.88109011 1.69204019 ...
1.34227419 0.
                   1.61657044]
 [1.98295234 0.61090097 0.36619667 ...
1.96402648 1.61657044 0.
                            11
[0 1 1 -1 1 0 1 1 1 1 1 1 -1 -1 1 1
-1 1 1 1 1 0 -1 0
 1 1 0 1 1 0 1 1 0 1 0 1 1 1 -1 1
1 1 1 0 0 0 -1 1]
In [69]:
```