

```

thre_range = [100, 105, 110, 115]
sd_R_range = [0, 20, 40]
u_0_u_D = 10
for pattern_seed in range(1000, 1006):

```

```

[[ 2.48  2.83  4.31  1.15 74.28 18.28]
 [ 3.6   3.8   4.76  2.27 64.24  8.25]
 [ 1.56  1.6   2.31  4.05 56.1   0.23]
 [18.62 18.57 19.02 25.53 67.86 11.86]]

```

```

[[ 2.31  2.64  4.11  1.3  74.31 18.34]
 [ 3.64  3.83  4.87  2.3  64.28  8.31]
 [ 2.     2.05  2.35  4.13 56.13  0.31]
 [19.15 19.06 19.29 25.57 67.89 11.92]]

```

```

[[ 2.62  2.92  3.98  1.61 74.34 18.41]
 [ 3.86  4.03  5.     2.47 64.31  8.38]
 [ 2.59  2.61  2.58  4.26 56.16  0.49]
 [19.72 19.54 19.55 25.63 67.92 11.99]]

```

```

[[ 2.01  2.22  3.68  0.33 67.74 12.56]
 [ 5.03  5.11  5.98  3.69 61.28  6.11]
 [ 6.47  6.5   6.51  5.37 61.68  6.5 ]
 [ 5.77  5.77  5.72  6.5  59.5   4.33]]

```

```

[[ 2.56  2.73  3.89  0.67 67.77 12.62]
 [ 5.19  5.27  6.03  3.92 61.31  6.17]
 [ 6.47  6.53  6.65  5.57 61.71  6.57]
 [ 5.8   5.81  5.91  6.7  59.53  4.39]]

```

```

[[ 3.51  3.63  4.24  1.08 67.81 12.7 ]
 [ 5.42  5.53  6.05  4.21 61.34  6.24]
 [ 6.51  6.63  6.72  5.81 61.74  6.64]
 [ 5.92  5.93  6.17  6.96 59.56  4.46]]

```

```

[[ 0.82  0.62  1.49  1.59 63.81 10.93]
 [ 2.78  2.92  3.35  4.25 59.37  6.49]
 [10.08 10.13 10.26 16.05 64.31 11.42]
 [10.07 10.13 10.25 16.05 64.31 11.42]]

```

```

[[ 1.47  1.35  1.54  1.66 63.84 10.99]

```

```
[ 3.04  3.15  3.47  4.34 59.4   6.56]
[10.52 10.56 10.45 16.18 64.34 11.48]
[10.51 10.56 10.45 16.18 64.34 11.48]]
```

```
[[ 2.4   2.31  1.8   1.81 63.88 11.06]
 [ 3.61  3.71  3.65  4.49 59.44  6.62]
 [10.98 11.06 10.6   16.32 64.37 11.55]
 [11.03 11.06 10.67 16.31 64.37 11.55]]
```

```
[[ 4.56  4.78  5.83  4.81 60.91 12.39]
 [ 6.69  6.81  7.34  8.51 59.05 10.53]
 [ 8.89  8.96  8.4   12.48 57.88  9.37]
 [16.22 16.19 15.89 21.96 61.96 13.45]]
```

```
[[ 4.85  5.04  5.91  4.95 60.94 12.45]
 [ 7.2   7.36  7.17  8.61 59.08 10.6 ]
 [ 9.24  9.31  8.35 12.65 57.92  9.43]
 [16.59 16.54 15.89 22.2  62.   13.51]]
```

```
[[ 5.29  5.42  6.1   5.1  60.97 12.52]
 [ 7.88  8.03  7.14  8.75 59.11 10.67]
 [ 9.63  9.78  8.27 12.82 57.95  9.5 ]
 [17.   16.95 15.91 22.41 62.03 13.58]]
```

```
[[ 2.47  2.22  0.44  3.35 66.08  9.25]
 [ 1.24  1.06  0.5   1.62 64.05  7.22]
 [ 0.66  0.7   1.15  2.37 60.69  3.88]
 [ 0.82  0.83  0.44  2.5  54.46  2.38]]
```