

```
thre_range = [100, 105, 110, 115]
sd_R_range = [0, 20, 40]
u_0_u_D = 10
for pattern_seed in range(2000, 2006):
```

```
[[ 2.59  2.79  3.29  3.37 61.62 10.2 ]
 [ 9.75  9.91  9.59 11.73 67.74 16.31]
 [ 9.52  9.66  9.2  11.98 66.36 14.93]
 [ 8.55  8.66  8.74 11.39 64.19 12.76]]
```

```
[[ 2.9   3.12  3.44  3.5  61.66 10.26]
 [10.22 10.39  9.79 11.77 67.77 16.37]
 [10.15 10.27  9.52 12.01 66.39 15.  ]
 [ 9.35  9.43  9.19 11.47 64.22 12.82]]
```

```
[[ 3.42  3.64  3.68  3.68 61.69 10.33]
 [10.68 10.92  9.97 11.82 67.8  16.43]
 [10.8  10.9  9.76 12.06 66.43 15.07]
 [10.15 10.26  9.66 11.54 64.25 12.89]]
```

```
[[ 1.89  2.13  3.86  2.3  68.3  12.1 ]
 [ 1.47  1.68  2.93  1.93 66.2  10.  ]
 [ 2.52  2.69  3.58  2.63 64.83  8.63]
 [ 9.42  9.5   9.58  9.84 69.32 13.12]]
```

```
[[ 2.13  2.38  4.01  2.48 68.33 12.16]
 [ 1.74  1.95  3.13  2.12 66.24 10.06]
 [ 2.84  3.04  3.78  2.78 64.86  8.69]
 [ 9.89  9.96  9.94  9.98 69.35 13.18]]
```

```
[[ 2.63  2.84  4.14  2.71 68.37 12.23]
 [ 2.2   2.39  3.43  2.35 66.27 10.13]
 [ 3.37  3.57  3.99  2.99 64.89  8.76]
 [10.46 10.57 10.29 10.13 69.38 13.25]]
```

```
[[ 5.07  5.44  7.66  4.01 76.  19.56]
 [ 6.88  7.23  9.2   6.53 76.6  20.16]
 [ 5.92  6.16  7.32  6.61 70.72 14.29]
 [ 5.63  5.78  5.96  7.93 66.58 10.14]]
```

```
[[ 5.47  5.87  7.78  4.18 76.03 19.62]
 [ 7.06  7.43  9.32  6.69 76.63 20.22]]
```

[6.09 6.39 7.5 6.73 70.75 14.35]
[5.65 5.89 6.02 8.08 66.61 10.2]]

[[6.07 6.46 7.97 4.39 76.06 19.68]
[7.39 7.74 9.49 6.87 76.66 20.28]
[6.48 6.76 7.8 6.84 70.78 14.42]
[5.92 6.22 6.12 8.26 66.64 10.27]]]

[[2.74 2.95 4.42 2.08 65.92 11.3]
[3.81 4. 4.94 3.6 64.17 9.55]
[5.44 5.51 5.42 7.05 61.2 6.58]
[14.58 14.6 13.82 18.63 67.23 12.61]]]

[[2.74 2.94 4.22 2.02 65.95 11.36]
[3.71 3.86 4.81 3.6 64.2 9.61]
[5.43 5.52 5.31 7.08 61.23 6.65]
[14.94 14.93 13.92 18.77 67.26 12.67]]]

[[3.01 3.1 4.18 2.03 65.98 11.43]
[3.63 3.78 4.67 3.63 64.23 9.68]
[5.52 5.6 5.33 7.11 61.26 6.72]
[15.29 15.26 14.01 18.93 67.29 12.74]]]