

```
u_O = rlogN(2, 1, N) (-> mean = 12)
O = rpoisson(u_O, (T, N)).T
```

```
D = [u_O]
```

```
fixed_policy = rbin(1, 0.2, N)
```

```
-----
[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 0, 3, 0, 10, 1, 5, 672]
```

```
23:22, 03/13; num of cores:16
```

```
0 0 0 0 0
```

```
0 0 1 1 0
```

```
0 0 0 1 0
```

```
0 0 1 0 1
```

```
1 0 0 0 0
```

```
MC-based mean [average reward] and its std: [5.787 2.441]
```

```
DR, DR2, IS, Susan, DR_NS, No_IS_V
```

```
  bias: [0.172 0.146 0.16  0.157 0.187 0.162]
```

```
  std: [3.657 3.707 3.676 3.688 3.678 3.693]
```

```
 MSE: [3.661 3.71  3.679 3.691 3.683 3.697]
```

```
time spent until now: 6.3 mins
```

```
-----
[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 1, 3, 0, 10, 1, 5, 672]
```

```
23:28, 03/13; num of cores:16
```

```
0 0 0 0 0
```

```
0 0 0 0 0
```

```
0 0 0 1 0
```

```
0 0 0 0 0
```

```
1 1 0 0 1
```

```
MC-based mean [average reward] and its std: [5.862 2.716]
```

```
DR, DR2, IS, Susan, DR_NS, No_IS_V
```

```

bias: [0.237 0.231 0.235 0.232 0.251 0.237]
std: [3.673 3.678 3.663 3.688 3.683 3.693]
MSE: [3.681 3.685 3.671 3.695 3.692 3.701]
time spent until now: 12.3 mins

```

```

-----
[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 2, 3, 0, 10, 1, 5, 672]

```

```

23:34, 03/13; num of cores:16

```

```

0 0 0 0 0

```

```

0 0 0 0 0

```

```

0 0 0 0 0

```

```

0 1 0 1 0

```

```

0 0 0 0 0

```

```

MC-based mean [average reward] and its std: [5.896 2.71 ]

```

```

DR, DR2, IS, Susan, DR_NS, No_IS_V

```

```

bias: [0.269 0.265 0.268 0.266 0.296 0.271]

```

```

std: [3.685 3.681 3.678 3.688 3.684 3.693]

```

```

MSE: [3.695 3.691 3.688 3.698 3.696 3.703]

```

```

time spent until now: 18.3 mins

```

```

-----
[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 3, 3, 0, 10, 1, 5, 672]

```

```

23:40, 03/13; num of cores:16

```

```

0 0 0 0 1

```

```

1 0 0 0 0

```

```

0 0 0 0 0

```

```

0 0 0 0 0

```

```

0 0 0 0 0

```

```

MC-based mean [average reward] and its std: [5.899 2.776]

```

```

DR, DR2, IS, Susan, DR_NS, No_IS_V

```

```

bias: [0.279 0.266 0.276 0.269 0.299 0.274]

```

```

std: [3.679 3.683 3.674 3.688 3.679 3.693]

```

```

MSE: [3.69 3.693 3.684 3.698 3.691 3.703]

```

time spent until now: 24.3 mins

```
-----
[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 0, 3, 2, 10, 1, 5, 672]
23:46, 03/13; num of cores:16
0 0 0 0 0
```

```
0 0 1 1 0
```

```
0 0 0 1 0
```

```
0 0 1 0 1
```

```
1 0 0 0 0
```

MC-based mean [average reward] and its std: [5.788 2.44]

DR, DR2, IS, Susan, DR_NS, No_IS_V

bias: [0.171 0.15 0.162 0.16 0.199 0.165]

std: [3.65 3.71 3.672 3.688 3.642 3.694]

MSE: [3.654 3.713 3.676 3.691 3.647 3.698]

time spent until now: 30.4 mins

```
=====
=====
=====
=====
fixed_policy = rbin(1, 0.4, N)
```

```
-----
[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 0, 3, 0, 10, 1, 5, 672]
23:56, 03/13; num of cores:16
0 1 1 0 0
```

```
1 0 1 1 0
```

```
1 0 0 1 0
```

```
0 0 1 1 1
```

1 1 0 1 0

MC-based mean [average reward] and its std: [5.774 2.484]

DR, DR2, IS, Susan, DR_NS, No_IS_V

bias: [0.149 0.13 0.135 0.144 0.187 0.149]

std: [3.68 3.71 3.702 3.688 3.64 3.693]

MSE: [3.683 3.712 3.704 3.691 3.645 3.696]

time spent until now: 6.0 mins

[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 1, 3, 0, 10, 1, 5, 672]

00:02, 03/14; num of cores:16

0 1 0 0 0

0 0 0 0 0

0 1 0 1 0

1 0 0 0 0

1 1 0 1 1

MC-based mean [average reward] and its std: [5.776 2.677]

DR, DR2, IS, Susan, DR_NS, No_IS_V

bias: [0.164 0.143 0.161 0.146 0.177 0.151]

std: [3.678 3.681 3.671 3.688 3.675 3.693]

MSE: [3.682 3.684 3.675 3.691 3.679 3.696]

time spent until now: 12.1 mins

[lam, w_hidden, pattern_seed, sd_D, sd_R, u_0, w_spatial, l, T] =
[0.01, 30, 2, 3, 0, 10, 1, 5, 672]

00:08, 03/14; num of cores:16

0 0 0 0 0

0 0 1 0 0

1 0 0 0 0

1 1 0 1 0

0 0 0 0 0

MC-based mean [average reward] and its std: [5.812 2.498]

```
DR, DR2, IS, Susan, DR_NS, No_IS_V  
bias: [0.195 0.168 0.18 0.182 0.213 0.187]  
std: [3.704 3.709 3.725 3.688 3.675 3.693]  
MSE: [3.709 3.713 3.729 3.692 3.681 3.698]  
time spent until now: 18.1 mins
```