

Just gibbs sampling <https://www.youtube.com/watch?v=mXgfRvRmDFI>

Solution MCMC Gibbs sampling seed=1

Observed Values -> These values are fixed, but not their probabilities if they have dependencies

Sample 0:

A	B	C	D	E
1	1	0	1	0

Based on Observed Values and Initial Values

*always same*

A	B A	C A	D B,C	E C	P_old	P_new	ratio	rand	Accepted?
1	1	0	1	0					
0.75	0.4	0.2	0.35	0.1	.0021				
1	0	0	1	0					
0.75	0.6	0.2	0.1	0.1	.0021	.0009	.429	.267	.429 > .267 -> Yes
1	0	0	1	0					
0.75	0.6	0.2	0.1	0.1	.0009				
1	0	1	1	0					
0.75	0.6	0.8	0.05	0.2	.0009	.0036	> 1		Yes
1	0	1	0	0					
0.75	0.6	0.8	0.95	0.2	.0036	.0684	> 1		Yes

Sample 1:

A	B	C	D	E
1	0	1	0	0

A	B A	C A	D B,C	E C	P_old	P_new	ratio	rand	Accepted?
1	0	1	0	0					
0.75	0.6	0.8	0.95	0.2	.0684				
1	1	1	0	0					
0.75	0.4	0.8	0.65	0.2	.0684	.0312	.4561	.386	Yes
1	1	1	0	0					
0.75	0.4	0.8	0.65	0.2	.0312				
1	1	0	0	0					
0.75	0.4	0.2	0.65	0.1	.0312	.0039	.125	.013	.125 > .013 -> yes
1	1	0	0	0					
0.75	0.4	0.2	0.65	0.1	.0039				
1	1	0	1	0					
0.75	0.4	0.2	0.35	0.1	.0039	.0021	.538	.382	.538 > .382 -> yes

Sample 2:

A	B	C	D	E
1	1	0	1	0