	x_1	...	x_p	y	$\hat{y}$
1	1.4			1	1
2	2			0	0
3	1.55			1	1
4	1.72			0	0
5	1.89			1	0
...					
n	2.01			1	1

$$R_m^{OOB} = \frac{1}{|OOB_m|} \sum_{i \in OOB_m} L\left(y^{(i)}, \hat{y}_m^{(i)}\right)$$

Tree 1

Tree M
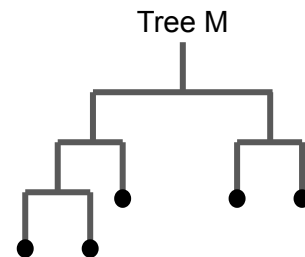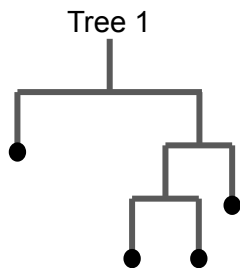
Permuted OOB of tree 1

	x_1	...	x_p	y	$\hat{y}$
1	1.4			1	
2	2			0	
3	2.01			1	0
4	1.55			0	0
5	1.89			1	
...					
n	1.72			1	0

OOB obs. of x_1

	x_1	...	x_p	y	$\hat{y}$
1	1.4			1	
2	2			0	
3	1.55			1	1
4	1.72			0	0
5	1.89			1	
...					
n	2.01			1	1

Permuted OOB of tree 1

	x_1	...	x_p	y	$\hat{y}$
1	1.89			1	0
2	2			0	
3	1.4			1	0
4	1.72			0	
5	1.55			1	1
...					
n	2.01			1	

OOB obs. of x_1

	x_1	...	x_p	y	$\hat{y}$
1	1.4			1	1
2	2			0	
3	1.55			1	0
4	1.72			0	
5	1.89			1	1
...					
n	2.01			1	

R_1^{OOB} with permutation $- R_1^{OOB}$ without permutation

ΔR_1^{OOB}

. . . .

R_M^{OOB} with permutation $- R_M^{OOB}$ without permutation

ΔR_m^{OOB}

variable importance for $x_1 = \dfrac{1}{M}\sum_{m=1}^{M}\Delta R_m^{OOB}$