

< Decision Tree - Using One-hot encoding of categorical features >

ex)

	Ear shape (x_1)	Face shape (x_2)	Whiskers (x_3)	cat (y)
①	Pointy	Round	Present	1
②	Oval	Not round	Present	1
③	Floppy	Not round	Absent	0
⋮	⋮	⋮	⋮	⋮

↓ one-hot encoding

	Pointy ears	Floppy ears	Oval ears	Face shape	Whiskers	cat
①	1	0	0	Round	Present	1
②	0	0	1	Not round	Present	1
③	0	1	0	Not round	Absent	0
⋮	⋮	⋮	⋮	⋮	⋮	⋮

* One-hot encoding

: If a categorical feature can take on k values, create k binary features (0 or 1 valued)