

sample modality feature

1	1	\vdots	
2	1	\vdots	
\vdots	\vdots	\vdots	
9	1	\vdots	
1	2	\vdots	
\vdots	\vdots	\vdots	
6	2	\vdots	
1	3	\vdots	
\vdots	\vdots	\vdots	
9	3	\vdots	

$\rightarrow X(\text{dummy-encoding})$

$= y$