1 Minimum Edit Distance

Given two strings $s_1 = \{a_1, a_2, \dots a_m\}$ and $s_2 = \{b_1, b_2, \dots b_n\}$. The **Minimum Edit Distance** is the number of mismatched in an alignment, for example, the edit distance between two strings sunny and snowy

s	u	n	n	_	y
				w	
0	1	0	1	1	0

1.1 Three kind of alignment

1	2	3
$\dots a_i$		$\dots a_i$
	$\dots b_j$	$\dots b_j$
pigs and pig	cat and cats	pig and pie or pig and pig

- First, dogs and dog
- Second, cat and cat.
- Third, piq and pie o